



GASB 45 ACTUARIAL VALUATION

Fiscal Year Ending June 30, 2016

State of Indiana

Nyhart Actuary & Employee Benefits

8415 Allison Pointe Blvd., Ste. 300, Indianapolis, IN 46250
(317) 845-3500 - www.nyhart.com

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December 7, 2016

**Deanna Oware
State of Indiana
Indiana State Budget Agency
200 West Washington Street, Room 212
Indianapolis, IN 46204**

This report summarizes the GASB actuarial valuation for the State of Indiana FY 2015/16 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. 45 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions).

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

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

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

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- changes in plan provisions or applicable law.

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

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



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

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

A handwritten signature in black ink that reads "Randy Gomez".

Randy Gomez, FSA, MAAA
Consulting Actuary

A handwritten signature in black ink that reads "Evi Laksana".

Evi Laksana, ASA, MAAA
Valuation Actuary

SECTION A - EXECUTIVE SUMMARY



Actuary's Notes

Changes since last year's interim valuation, which was for the fiscal year ending June 30, 2015:

1. For Indiana State Police:
 - a. Several existing and future retirees have been identified as ineligible for Medicare. Separate non-Medicare eligible per capita costs have been calculated for these participants. All other participants are assumed to be eligible for Medicare. This created an increase in the ISP liabilities.
 - b. Active employees participating in the Deferred Retirement Option Program (DROP) have been valued as active employees with a set retirement date, which coincides with their DROP end dates. No future DROP participations are assumed for existing active employees. There were no DROP participants identified in prior valuations. This created an increase in the ISP liabilities.
2. For all groups, trend rates have been reset to an initial rate of 9.0% decreasing by 0.5% annually to an ultimate rate of 4.5% for medical and prescription drug benefits. This caused an increase in liabilities.

Future Changes

For fiscal year ending June 30, 2017, State of Indiana will be required to disclose its Other Post-Employment Benefit (OPEB) liabilities under GASB 74/75 accounting standard. Under this new accounting standard, the following changes will be made:

1. There will be separate discount rates used for accounting and funding disclosures:
 - a. Discount rates used for accounting disclosure purposes for all locations except for Legislatures will be based on the blended discount rate that takes into account (i) the source of money used to pay for retiree health benefits and its expected rate of return (or in other words, the ability of the OPEB Trust to pay for future benefit payments) and (ii) expectation of future pre-funding contributions. For legislatures, the discount rate used for accounting disclosure purposes will be based on the yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). This change is expected to increase the State's liabilities.
 - b. Discount rates used for funding purposes for all locations except for Legislatures will be based on the expected long-term rate of return of the OPEB Trust. This is expected to produce a lower Actuarially Determined Contribution (as compared to the current Annual Required Contribution).
2. Cost method used for both accounting and funding disclosure purposes will be based on Entry Age Normal Level % of Salary. This is expected to increase the State's liabilities.



Summary of Results

Presented below is the summary of GASB 45 results (for all employee groups) for the fiscal year ending June 30, 2016 compared to the prior fiscal years as shown in the State’s Notes to Financial Statement.

<i>As of June 30, 2016</i>	<i>Total</i>	<i>State Personnel</i>	<i>Legislature</i>	<i>Indiana State Police (ISP)</i>	<i>Conservation and Excise Police (CEP)</i>
Actuarial Accrued Liability	\$ 476,354,390	\$ 40,883,680	\$ 9,541,164	\$ 380,528,754	\$ 45,400,792
Actuarial Value of Assets	(137,007,125)	(44,320,907)	0	(79,798,509)	(12,887,709)
Unfunded Actuarial Accrued Liability	\$ 339,347,265	\$ (3,437,227)	\$ 9,541,164	\$ 300,730,245	\$ 32,513,083
Funded Ratio	28.8%	108.4%	0.0%	21.0%	28.4%
For FY 2015/16					
Annual Required Contribution	\$ 36,160,177	\$ 1,537,527	\$ 680,107	\$ 30,629,812	\$ 3,312,731
Annual OPEB Cost	\$ 34,468,609	\$ 2,087,981	\$ 648,396	\$ 28,589,627	\$ 3,142,605
Annual Employer Contribution	\$ 41,876,115	\$ 2,977,166	\$ 461,554	\$ 34,862,363	\$ 3,575,032
Net OPEB Obligation as of June 30, 2016	\$ 95,790,059	\$ (34,470,804)	\$ 2,121,391	\$ 118,192,970	\$ 9,946,502
As of June 30, 2015					
Actuarial Accrued Liability	\$ 439,277,128	\$ 44,263,140	\$ 11,963,994	\$ 341,219,112	\$ 41,830,882
Actuarial Value of Assets	(108,506,079)	(44,133,191)	0	(53,908,657)	(10,464,231)
Unfunded Actuarial Accrued Liability	\$ 330,771,049	\$ 129,949	\$ 11,963,994	\$ 287,310,455	\$ 31,366,651
Funded Ratio	24.7%	99.7%	0.0%	15.8%	25.0%
For FY 2014/15					
Annual Required Contribution	\$ 35,408,007	\$ 1,838,675	\$ 841,639	\$ 29,604,071	\$ 3,123,622
Annual OPEB Cost	\$ 33,747,081	\$ 2,369,496	\$ 814,195	\$ 27,601,284	\$ 2,962,106
Annual Employer Contribution	\$ 31,877,796	\$ 3,567,257	\$ 553,984	\$ 25,319,778	\$ 2,436,777
Net OPEB Obligation as of June 30, 2015	\$ 103,197,565	\$ (33,581,619)	\$ 1,934,549	\$ 124,465,706	\$ 10,378,929



Liabilities Breakdown

Below is a breakdown of total GASB 45 liabilities allocated to past, current, and future service as of July 1, 2015 compared to the prior year.

<i>As of July 1, 2015</i>	<i>Present Value of Future Benefits</i>	<i>Actuarial Accrued Liability (AAL)</i>	<i>Normal Cost</i>	<i>Future Normal Costs</i>
Total	\$ 627,101,709	\$ 452,146,607	\$ 15,314,751	\$ 159,640,351
State Personnel	58,653,854	40,341,422	1,694,076	16,618,356
Legislature	10,129,344	9,488,410	93,397	547,537
ISP	498,120,983	358,928,229	12,291,435	126,901,319
CEP	60,197,528	43,388,546	1,235,843	15,573,139

<i>As of July 1, 2014</i>	<i>Present Value of Future Benefits</i>	<i>Actuarial Accrued Liability (AAL)</i>	<i>Normal Cost</i>	<i>Future Normal Costs</i>
Total	\$ 566,930,307	\$ 417,219,156	\$ 15,623,877	\$ 134,087,274
State Personnel	63,592,137	44,088,432	1,758,245	17,745,460
Legislature	12,914,415	11,883,455	107,268	923,692
ISP	437,603,586	321,405,172	12,579,784	103,618,630
CEP	52,820,169	39,842,097	1,178,580	11,799,492

Present Value of Future Benefits (PVFB) is the amount needed as of July 1, 2014 and 2015 to fully fund the State's retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

Actuarial Accrued Liability is the portion of PVFB considered to be accrued or earned as of July 1, 2014 and 2015. This amount is a required disclosure in the Required Supplementary Information section.

Normal Cost is the portion of the total liability amount that is attributed and accrued for current year's active employee service by the actuarial cost method.

Future Normal Cost is the portion of the total liability amount that is attributed to the future employee by the actuarial cost method.

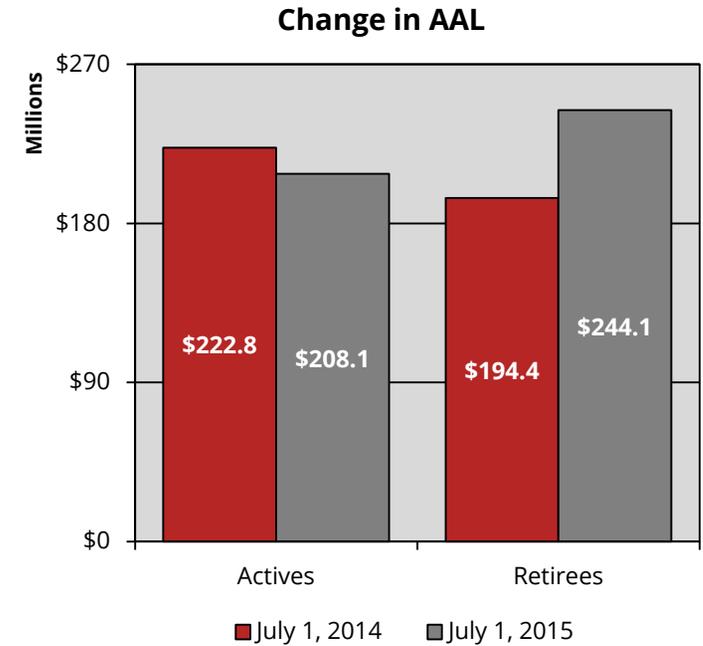


Liabilities Breakdown – Continued

Below is a breakdown of total GASB 45 Actuarial Accrued Liability (AAL) allocated to active employees and retirees. 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.

<i>As of July 1, 2015</i>	<i>Active Employees</i>	<i>Retirees</i>	<i>Total</i>
Total	\$ 208,075,682	\$ 244,070,925	\$ 452,146,607
State Personnel	26,238,992	14,102,430	40,341,422
Legislature	1,254,690	8,233,720	9,488,410
ISP	162,512,412	196,415,817	358,928,229
CEP	18,069,588	25,318,958	43,388,546

<i>As of July 1, 2014</i>	<i>Active Employees</i>	<i>Retirees</i>	<i>Total</i>
Total	\$ 222,824,175	\$ 194,394,981	\$ 417,219,156
State Personnel	29,028,546	15,059,886	44,088,432
Legislature	1,534,440	10,349,015	11,883,455
ISP	172,945,138	148,460,034	321,405,172
CEP	19,316,051	20,526,046	39,842,097



SECTION B – VALUATION RESULTS



For Fiscal Year Ending June 30, 2016¹

Discount Rate			4.50%			4.50%			4.50%			4.50%			
Required Supplementary Information			Total			State Personnel			Legislature			ISP			CEP
Actuarial Accrued Liability as of June 30, 2016	\$	476,354,390	\$	40,883,680	\$	9,541,164	\$	380,528,754	\$	45,400,792					
Actuarial Value of Assets as of June 30, 2016		(137,007,125)		(44,320,907)		0		(79,798,509)		(12,887,709)					
Unfunded Actuarial Accrued Liability (UAAL)	\$	339,347,265	\$	(3,437,227)	\$	9,541,164	\$	300,730,245	\$	32,513,083					
Funded Ratio		28.8%		108.4%		0.0%		21.0%		28.4%					

Annual Required Contribution			Total			State Personnel			Legislature			ISP			CEP
Normal cost	\$	14,414,885	\$	1,694,076	\$	93,397	\$	11,391,569 ²	\$	1,235,843					
Amortization of the UAAL over 30-year period		20,188,155		(222,758)		557,423		17,919,256		1,934,234					
Total normal cost and amortization payment	\$	34,603,040	\$	1,471,318	\$	650,820	\$	29,310,825	\$	3,170,077					
Interest to end of year		1,557,137		66,209		29,287		1,318,987		142,654					
Total Annual Required Contribution (ARC)	\$	36,160,177	\$	1,537,527	\$	680,107	\$	30,629,812	\$	3,312,731					

Annual OPEB Cost and Net OPEB Obligation			Total			State Personnel			Legislature			ISP			CEP
ARC for fiscal year 2015/16	\$	36,160,177	\$	1,537,527	\$	680,107	\$	30,629,812	\$	3,312,731					
Interest on Net OPEB Obligation (NOO) to end of year		4,643,890		(1,511,173)		87,054		5,600,957		467,052					
Amortization adjustment to the ARC for BOY NOO		(6,335,458)		2,061,627		(118,765)		(7,641,142)		(637,178)					
Annual OPEB cost	\$	34,468,609	\$	2,087,981	\$	648,396	\$	28,589,627	\$	3,142,605					
Annual employer contribution for pay-go cost in 2015/16		(4,643,603)		(2,977,166)		(461,554)				(1,204,883)					
Annual employer contribution for pre-funding in 2015/16		(37,232,512)						(34,862,363)		(2,370,149)					
Change in NOO for fiscal year 2015/16	\$	(7,407,506)	\$	(889,185)	\$	186,842	\$	(6,272,736)	\$	(432,427)					
NOO as of July 1, 2015		103,197,565		(33,581,619)		1,934,549		124,465,706		10,378,929					
NOO as of June 30, 2016	\$	95,790,059	\$	(34,470,804)	\$	2,121,391	\$	118,192,970	\$	9,946,502					

¹ GASB 45 regulations permit employers to use the most recently available actuarial information up to two years prior to the current period. Accordingly, the State has elected to use the actuarial liability results for the period ending June 30, 2015 for the period ending June 30, 2016. The value of assets is as reported for the current period. The date/year references below have been changed to 2015/16 for consistency.

² ISP normal cost for FY 2015/16 has been reduced for active employee contributions of \$899,866 (as provided by the Plan Sponsor).



For Fiscal Year Ending June 30, 2015³

Discount Rate		4.50%	4.50%	4.50%	4.50%
Required Supplementary Information	Total	State Personnel	Legislature	ISP	CEP
Actuarial Accrued Liability as of June 30, 2015	\$ 439,277,128	\$ 44,263,140	\$ 11,963,994	\$ 341,219,112	\$ 41,830,882
Actuarial Value of Assets as of June 30, 2015	(108,506,079)	(44,133,191)	0	(53,908,657)	(10,464,231)
Unfunded Actuarial Accrued Liability (UAAL)	\$ 330,771,049	\$ 129,949	\$ 11,963,994	\$ 287,310,455	\$ 31,366,651
Funded Ratio	24.7%	99.7%	0.0%	15.8%	25.0%

Annual Required Contribution	Total	State Personnel	Legislature	ISP	CEP
Normal cost	\$ 14,724,690	\$ 1,758,245	\$ 107,268	\$ 11,680,597 ⁴	\$ 1,178,580
Amortization of the UAAL over 30-year period	19,158,570	1,253	698,128	16,648,657	1,810,532
Total normal cost and amortization payment	\$ 33,883,260	\$ 1,759,498	\$ 805,396	\$ 28,329,254	\$ 2,989,112
Interest to end of year	1,524,747	79,177	36,243	1,274,817	134,510
Total Annual Required Contribution (ARC)	\$ 35,408,007	\$ 1,838,675	\$ 841,639	\$ 29,604,071	\$ 3,123,622

Annual OPEB Cost and Net OPEB Obligation	Total	State Personnel	Legislature	ISP	CEP
ARC for fiscal year 2014/15	\$ 35,408,007	\$ 1,838,675	\$ 841,639	\$ 29,604,071	\$ 3,123,622
Interest on Net OPEB Obligation (NOO) to end of year	4,559,773	(1,457,274)	75,346	5,498,289	443,412
Amortization adjustment to the ARC for BOY NOO	(6,220,699)	1,988,095	(102,790)	(7,501,076)	(604,928)
Annual OPEB cost	\$ 33,747,081	\$ 2,369,496	\$ 814,195	\$ 27,601,284	\$ 2,962,106
Annual employer contribution for pay-go cost in 2014/15	(5,134,421)	(3,567,257)	(553,984)	0	(1,013,180)
Annual employer contribution for pre-funding in 2014/15	(26,743,375)	0	0	(25,319,778)	(1,423,597)
Change in NOO for fiscal year 2014/15	\$ 1,869,285	\$ (1,197,761)	\$ 260,211	\$ 2,281,506	\$ 525,329
NOO as of July 1, 2014	101,328,280	(32,383,858)	1,674,338	122,184,200	9,853,600
NOO as of June 30, 2015	\$ 103,197,565	\$ (33,581,619)	\$ 1,934,549	\$ 124,465,706	\$ 10,378,929

³ GASB 45 regulations permit employers to use the most recently available actuarial information up to two years prior to the current period. Accordingly, the State has elected to use the actuarial liability results for the period ending June 30, 2014 for the period ending June 30, 2015. The value of assets is as reported for the current period. The date/year references below have been changed to 2014/15 for consistency.

⁴ ISP normal cost for FY 2014/15 has been reduced for active employee contributions of \$899,187 (as provided by the Plan Sponsor).



Summary of GASB 45 Financial Results

Schedule of Funding Progress

<i>As of</i>	<i>Actuarial Value of Assets (AVA)</i>	<i>Actuarial Accrued Liability (AAL)</i>	<i>Unfunded Actuarial Accrued Liability (UAAL)</i>	<i>AVA as a % of AAL</i>	<i>Covered Payroll</i>	<i>UAAL as % of Covered Payroll</i>
	<i>A</i>	<i>B</i>	<i>C = A + B</i>	<i>D = A / B</i>	<i>E</i>	<i>F = C / E</i>
June 30, 2016						
State Personnel	\$ (44,320,907)	\$ 40,883,680	\$ (3,437,227)	108.4%	\$ N/A	N/A
Legislature	\$ 0	\$ 9,541,164	\$ 9,541,164	0.0%	\$ N/A	N/A
ISP	\$ (79,798,509)	\$ 380,528,754	\$ 300,730,245	21.0%	\$ 89,733,315	335.1%
CEP	\$ (12,887,709)	\$ 45,400,792	\$ 32,513,083	28.4%	\$ N/A	N/A
Total	\$ (137,007,125)	\$ 476,354,390	\$ 339,347,265	28.8%	\$ N/A	N/A
June 30, 2015						
State Personnel	\$ (44,133,191)	\$ 44,263,140	\$ 129,949	99.7%	\$ 1,229,387,740	0.0%
Legislature	\$ 0	\$ 11,963,994	\$ 11,963,994	0.0%	\$ N/A	N/A
ISP	\$ (53,908,657)	\$ 341,219,112	\$ 287,310,455	15.8%	\$ 86,873,266	330.7%
CEP	\$ (10,464,231)	\$ 41,830,882	\$ 31,366,651	25.0%	\$ 13,940,757	225.0%
Total	\$ (108,506,079)	\$ 439,277,128	\$ 330,771,049	24.7%	\$ 1,330,201,763	24.9%
June 30, 2014						
State Personnel	\$ (44,067,103)	\$ 36,355,277	\$ (7,711,826)	121.2%	\$ 1,182,103,596	(0.7%)
Legislature	\$ 0	\$ 11,767,820	\$ 11,767,820	0.0%	\$ N/A	N/A
ISP	\$ (38,013,590)	\$ 294,839,940	\$ 256,826,350	12.9%	\$ 83,531,987	307.5%
CEP	\$ (9,023,422)	\$ 38,062,753	\$ 29,039,331	23.7%	\$ 13,404,573	216.6%
Total	\$ (91,104,115)	\$ 381,025,790	\$ 289,921,675	23.9%	\$ 1,279,040,156	22.7%



Summary of GASB 45 Financial Results – Continued

Schedule of Employer Contributions

<i>FYE</i>	<i>Employer Contributions</i>		<i>Annual Required Contribution (ARC)</i>	<i>% of ARC Contributed</i>
	<i>A</i>		<i>B</i>	<i>C = A / B</i>
June 30, 2016				
State Personnel	\$ 2,977,166	\$	1,537,527	193.6%
Legislature	\$ 461,554	\$	680,107	67.9%
ISP	\$ 34,862,363	\$	30,629,812	113.8%
CEP	\$ 3,575,032	\$	3,312,731	107.9%
Total	\$ 41,876,115	\$	36,160,177	115.8%
June 30, 2015				
State Personnel	\$ 3,567,257	\$	1,838,675	194.0%
Legislature	\$ 553,984	\$	841,639	65.8%
ISP	\$ 25,319,778	\$	29,604,071	85.5%
CEP	\$ 2,436,777	\$	3,123,622	78.0%
Total	\$ 31,877,796	\$	35,408,007	90.0%
June 30, 2014				
State Personnel	\$ 3,200,158	\$	1,009,935	316.9%
Legislature	\$ 508,242	\$	809,687	62.8%
ISP	\$ 24,834,550	\$	26,029,514	95.4%
CEP	\$ 2,482,148	\$	2,821,614	88.0%
Total	\$ 31,025,098	\$	30,670,750	101.2%



Summary of GASB 45 Financial Results – Continued

Historical Annual OPEB Cost

<i>As of</i>	<i>Annual OPEB Cost</i>	<i>% of Annual OPEB Cost Contributed</i>	<i>Net OPEB Obligation / (Asset)</i>
June 30, 2016			
State Personnel	\$ 2,087,981	142.6%	\$ (34,470,804)
Legislature	\$ 648,396	71.2%	\$ 2,121,391
ISP	\$ 28,589,627	121.9%	\$ 118,192,970
CEP	\$ 3,142,605	113.8%	\$ 9,946,502
Total	\$ 34,468,609	121.5%	\$ 95,790,059
June 30, 2015			
State Personnel	\$ 2,369,496	150.5%	\$ (33,581,619)
Legislature	\$ 814,195	68.0%	\$ 1,934,549
ISP	\$ 27,601,284	91.7%	\$ 124,465,706
CEP	\$ 2,962,106	82.3%	\$ 10,378,929
Total	\$ 33,747,081	94.5%	\$ 103,197,565
June 30, 2014			
State Personnel	\$ 1,513,103	211.5%	\$ (32,383,858)
Legislature	\$ 786,808	64.6%	\$ 1,674,338
ISP	\$ 24,013,265	103.4%	\$ 122,184,200
CEP	\$ 2,663,064	93.2%	\$ 9,853,600
Total	\$ 28,976,240	107.1%	\$ 101,328,280



Asset Information for FY 2015/16

<i>Summary of Assets</i>	<i>State Personnel</i>		<i>ISP</i>		<i>Conservation</i>		<i>Excise</i>		<i>All Groups</i>	
General investments										
Cash and cash equivalents	\$	630,195	\$	22,393,839 ⁵	\$	684,209	\$	690,494	\$	24,398,737
Fixed income / debt securities		43,600,873		57,273,671		8,995,143		2,501,435		112,371,122
Accrued interest receivable		89,840		106,255		13,627		2,800		212,522
Contributions receivable				27,744						24,744
Net assets	\$	44,320,907	\$	79,798,509	\$	9,692,979	\$	3,194,729	\$	137,007,125

<i>Reconciliation of Assets</i>	<i>State Personnel</i>		<i>ISP</i>		<i>Conservation</i>		<i>Excise</i>		<i>All Groups</i>	
Income										
Contributions received										
Employer	\$	0	\$	34,862,363	\$	1,758,188	\$	611,961	\$	37,232,512
Employee				899,866						899,866
Investment earnings										
Net appreciation in investment		12,965		71,282		1,693		1,193		87,133
Interest from investment		173,258		268,881		34,965		15,478		492,582
Securities lending income		8,928		5,757				2		14,686
Total income	\$	195,151	\$	36,108,149	\$	1,794,845	\$	628,634	\$	38,726,779
Disbursements										
Benefit payments to retirees	\$	0	\$	(10,196,138)	\$	0	\$	0	\$	(10,196,138)
Professional services fees				(17,106)						(17,106)
Securities lending expense		(7,435)		(5,053)				(1)		(12,489)
Total disbursements	\$	(7,435)	\$	(10,218,297)	\$	0	\$	(1)	\$	(10,225,733)
Net income	\$	187,716	\$	25,889,852	\$	1,749,845	\$	628,633	\$	28,501,046
Net asset at beginning of year		44,133,191		53,908,657		7,898,134		2,566,097		108,506,079
Net asset at end of year	\$	44,320,907	\$	79,798,509	\$	9,692,979	\$	3,194,730	\$	137,007,125

⁵ Net of accrued expense for securities lending



Asset Information for FY 2014/15

<i>Summary of Assets</i>	<i>State Personnel</i>		<i>ISP</i>		<i>Conservation</i>		<i>Excise</i>		<i>All Groups</i>	
General investments										
Cash and cash equivalents	\$	44,100,047	\$	26,706,584	\$	2,893,858	\$	1,565,116	\$	75,265,605
Fixed income / debt securities				27,118,963		5,000,750		1,000,150		33,119,863
Accrued interest receivable		33,144		27,113		3,526		831		64,614
Contributions receivable				55,997						55,997
Net assets	\$	44,133,191	\$	53,908,657	\$	7,898,134	\$	2,566,097	\$	108,506,079

<i>Reconciliation of Assets</i>	<i>State Personnel</i>		<i>ISP</i>		<i>Conservation</i>		<i>Excise</i>		<i>All Groups</i>	
Income										
Contributions received										
Employer	\$	0	\$	24,420,590	\$	1,061,537	\$	362,060	\$	25,844,187
Employee				899,187						899,187
Investment earnings										
Net appreciation in investment		(139)		(365)		1,208		242		946
Interest from investment		66,216		74,347		12,548		3,155		156,266
Securities lending income		121		1,342				513		1,976
Total income	\$	66,198	\$	25,395,101	\$	365,970	\$	365,970	\$	26,902,562
Disbursements										
Benefit payments to retirees	\$	0	\$	(9,492,688)	\$	0	\$	0	\$	(9,492,688)
Professional services fees				(6,149)						(6,149)
Securities lending expense		(110)		(1,197)				(454)		(1,761)
Total disbursements	\$	(110)	\$	(9,500,034)	\$	0	\$	(454)	\$	(9,500,598)
Net income	\$	66,088	\$	15,895,067	\$	1,075,293	\$	365,516	\$	17,401,964
Net asset at beginning of year		44,067,103		38,013,590		6,822,841		2,200,581		91,104,115
Net asset at end of year	\$	44,133,191	\$	53,908,657	\$	7,898,134	\$	2,566,097	\$	108,506,079



Reconciliation of Actuarial Accrued Liability

The Actuarial Accrued Liability (AAL) 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 AAL and whether they increase or decrease the liability.

Expected Events

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

Unexpected Events

- Increases in AAL when actual premium rates increase more than expected. A liability decrease occurs when premium rates increase less than expected.
- Increases in AAL 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 AAL depending on whether benefit provisions are improved or reduced.

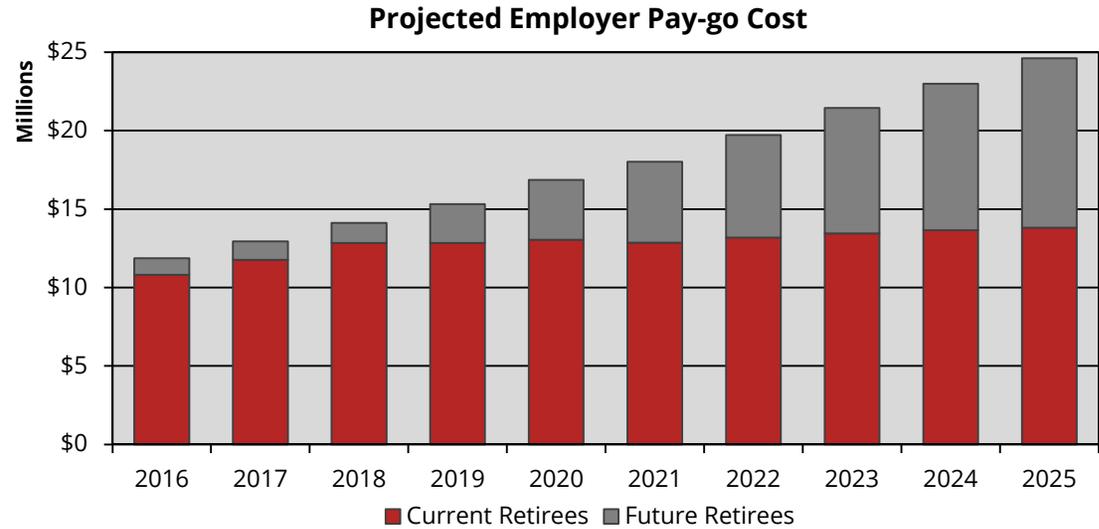
<i>FY 2014/15</i>	<i>Total</i>	<i>State Personnel</i>	<i>Legislature</i>	<i>ISP</i>	<i>CEP</i>
Actuarial Accrued Liability as of July 1, 2014	\$ 417,219,156	\$ 44,088,432	\$ 11,883,455	\$ 321,405,172	\$ 39,842,097
Normal cost as of beginning of year	15,623,877	1,758,245	107,268	12,579,784	1,178,580
Expected benefit payments for 2014/15	12,759,903	3,567,257	553,984	7,625,482	1,013,180
Interest adjustment to June 30, 2015	19,193,998	1,983,720	527,255	14,859,638	1,823,385
Expected Actuarial Accrued Liability as of June 30, 2015	\$ 439,277,128	\$ 44,263,140	\$ 11,963,994	\$ 341,219,112	\$ 41,830,882
Actuarial (gain) / loss due to experience	(58,876,738)	(3,069,880)	(2,665,418)	(53,985,130)	843,690
Actuarial (gain) / loss due to assumption changes	71,746,217	(851,838)	189,834	71,694,247	713,974
Actual Actuarial Accrued Liability as of June 30, 2015	\$ 452,146,607	\$ 40,341,422	\$ 9,488,410	\$ 358,928,229	\$ 43,388,546



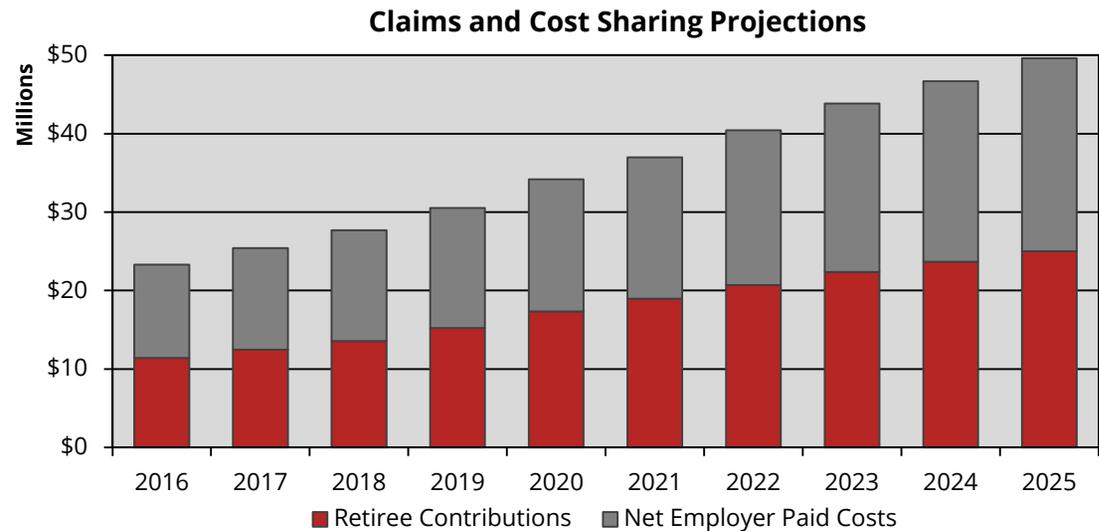
Employer Contribution Cash Flow Projections

The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next ten years.

ALL GROUPS			
FYE	Current Retirees	Future Retirees⁶	Total
2016	\$ 10,804,088	\$ 1,074,318	\$ 11,878,406
2017	\$ 11,776,460	\$ 1,171,007	\$ 12,947,467
2018	\$ 12,836,341	\$ 1,276,396	\$ 14,112,737
2019	\$ 12,836,005	\$ 2,488,157	\$ 15,324,162
2020	\$ 13,041,990	\$ 3,822,852	\$ 16,864,842
2021	\$ 12,870,769	\$ 5,143,209	\$ 18,013,978
2022	\$ 13,185,099	\$ 6,534,284	\$ 19,719,383
2023	\$ 13,455,633	\$ 7,995,518	\$ 21,451,151
2024	\$ 13,644,695	\$ 9,351,187	\$ 22,995,882
2025	\$ 13,827,130	\$ 10,783,067	\$ 24,610,197



FYE	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs
2016	\$ 23,306,469	\$ 11,428,063	\$ 11,878,406
2017	\$ 25,404,057	\$ 12,456,590	\$ 12,947,467
2018	\$ 27,690,420	\$ 13,577,683	\$ 14,112,737
2019	\$ 30,545,146	\$ 15,220,984	\$ 15,324,162
2020	\$ 34,197,737	\$ 17,332,895	\$ 16,864,842
2021	\$ 36,990,142	\$ 18,976,164	\$ 18,013,978
2022	\$ 40,408,458	\$ 20,689,075	\$ 19,719,383
2023	\$ 43,819,716	\$ 22,368,565	\$ 21,451,151
2024	\$ 46,678,152	\$ 23,682,270	\$ 22,995,882
2025	\$ 49,598,056	\$ 24,987,859	\$ 24,610,197



⁶ Projections for future retirees do not take into account future new hires.



Section B – Valuation Results

The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next ten years by group.

FYE	State Personnel			Legislature			Indiana State Police		
	Current Retirees	Future Retirees ⁷	Total	Current Retirees	Future Retirees ⁷	Total	Current Retirees	Future Retirees ⁷	Total
2016	\$ 2,462,768	\$ 514,398	\$ 2,977,166	\$ 431,982	\$ 29,572	\$ 461,554	\$ 6,761,561	\$ 473,242	\$ 7,234,803
2017	\$ 2,684,417	\$ 560,694	\$ 3,245,111	\$ 470,861	\$ 32,234	\$ 503,095	\$ 7,370,103	\$ 515,834	\$ 7,885,937
2018	\$ 2,926,014	\$ 611,156	\$ 3,537,170	\$ 513,238	\$ 35,135	\$ 548,373	\$ 8,033,412	\$ 562,259	\$ 8,595,671
2019	\$ 2,308,226	\$ 1,210,281	\$ 3,518,507	\$ 512,454	\$ 46,326	\$ 558,780	\$ 8,573,629	\$ 1,098,304	\$ 9,671,933
2020	\$ 1,914,513	\$ 1,819,889	\$ 3,734,402	\$ 512,996	\$ 52,733	\$ 565,729	\$ 9,103,214	\$ 1,739,758	\$ 10,842,972
2021	\$ 1,347,951	\$ 2,334,917	\$ 3,682,868	\$ 520,556	\$ 64,448	\$ 585,004	\$ 9,497,114	\$ 2,450,784	\$ 11,947,898
2022	\$ 1,014,065	\$ 2,798,693	\$ 3,812,758	\$ 508,477	\$ 76,660	\$ 585,137	\$ 10,095,563	\$ 3,268,841	\$ 13,364,404
2023	\$ 772,317	\$ 3,209,961	\$ 3,982,278	\$ 515,943	\$ 82,164	\$ 598,107	\$ 10,612,328	\$ 4,215,003	\$ 14,827,331
2024	\$ 485,549	\$ 3,432,600	\$ 3,918,149	\$ 527,261	\$ 95,170	\$ 622,431	\$ 11,096,722	\$ 5,205,714	\$ 16,302,436
2025	\$ 276,127	\$ 3,722,001	\$ 3,998,128	\$ 517,490	\$ 103,497	\$ 620,987	\$ 11,505,265	\$ 6,215,307	\$ 17,720,572

FYE	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs
2016	\$ 9,508,299	\$ 6,531,133	\$ 2,977,166	\$ 573,129	\$ 111,575	\$ 461,554	\$ 11,310,056	\$ 4,075,253	\$ 7,234,803
2017	\$ 10,364,046	\$ 7,118,935	\$ 3,245,111	\$ 624,712	\$ 121,617	\$ 503,095	\$ 12,327,963	\$ 4,442,026	\$ 7,885,937
2018	\$ 11,296,809	\$ 7,759,639	\$ 3,537,170	\$ 680,936	\$ 132,563	\$ 548,373	\$ 13,437,479	\$ 4,841,808	\$ 8,595,671
2019	\$ 12,200,002	\$ 8,681,495	\$ 3,518,507	\$ 705,493	\$ 146,713	\$ 558,780	\$ 15,150,527	\$ 5,478,594	\$ 9,671,933
2020	\$ 13,771,040	\$ 10,036,638	\$ 3,734,402	\$ 727,018	\$ 161,289	\$ 565,729	\$ 16,990,735	\$ 6,147,763	\$ 10,842,972
2021	\$ 14,656,704	\$ 10,973,836	\$ 3,682,868	\$ 753,186	\$ 168,182	\$ 585,004	\$ 18,746,573	\$ 6,798,675	\$ 11,947,898
2022	\$ 15,638,422	\$ 11,825,664	\$ 3,812,758	\$ 767,661	\$ 182,524	\$ 585,137	\$ 20,932,845	\$ 7,568,441	\$ 13,364,404
2023	\$ 16,668,747	\$ 12,686,469	\$ 3,982,278	\$ 787,762	\$ 189,655	\$ 598,107	\$ 23,152,968	\$ 8,325,637	\$ 14,827,331
2024	\$ 17,022,389	\$ 13,104,240	\$ 3,918,149	\$ 834,211	\$ 211,780	\$ 622,431	\$ 25,430,741	\$ 9,128,305	\$ 16,302,436
2025	\$ 17,613,284	\$ 13,615,156	\$ 3,998,128	\$ 838,490	\$ 217,503	\$ 620,987	\$ 27,571,148	\$ 9,850,576	\$ 17,720,572

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



The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next ten years by group.

FYE	Conservation			Excise		
	Current Retirees	Future Retirees ⁸	Total	Current Retirees	Future Retirees ⁸	Total
2016	\$ 990,145	\$ 32,860	\$ 1,023,005	\$ 157,632	\$ 24,246	\$ 181,878
2017	\$ 1,079,260	\$ 35,817	\$ 1,115,077	\$ 171,819	\$ 26,428	\$ 198,247
2018	\$ 1,176,394	\$ 39,040	\$ 1,215,434	\$ 187,283	\$ 28,806	\$ 216,089
2019	\$ 1,255,814	\$ 84,549	\$ 1,340,363	\$ 185,882	\$ 48,697	\$ 234,579
2020	\$ 1,328,471	\$ 141,710	\$ 1,470,181	\$ 182,796	\$ 68,762	\$ 251,558
2021	\$ 1,320,137	\$ 206,264	\$ 1,526,401	\$ 185,011	\$ 86,796	\$ 271,807
2022	\$ 1,375,883	\$ 289,570	\$ 1,665,453	\$ 191,111	\$ 100,520	\$ 291,631
2023	\$ 1,360,873	\$ 373,103	\$ 1,733,976	\$ 194,172	\$ 115,287	\$ 309,459
2024	\$ 1,331,524	\$ 470,791	\$ 1,802,315	\$ 203,639	\$ 146,912	\$ 350,551
2025	\$ 1,315,133	\$ 579,690	\$ 1,894,823	\$ 213,115	\$ 162,572	\$ 375,687

FYE	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs
2016	\$ 1,627,899	\$ 604,894	\$ 1,023,005	\$ 287,086	\$ 105,208	\$ 181,878
2017	\$ 1,774,412	\$ 659,335	\$ 1,115,077	\$ 312,924	\$ 114,677	\$ 198,247
2018	\$ 1,934,109	\$ 718,675	\$ 1,215,434	\$ 341,087	\$ 124,998	\$ 216,089
2019	\$ 2,116,416	\$ 776,053	\$ 1,340,363	\$ 372,708	\$ 138,129	\$ 234,579
2020	\$ 2,309,659	\$ 839,478	\$ 1,470,181	\$ 399,285	\$ 147,727	\$ 251,558
2021	\$ 2,402,594	\$ 876,193	\$ 1,526,401	\$ 431,085	\$ 159,278	\$ 271,807
2022	\$ 2,603,992	\$ 938,539	\$ 1,665,453	\$ 465,538	\$ 173,907	\$ 291,631
2023	\$ 2,718,153	\$ 984,177	\$ 1,733,976	\$ 492,086	\$ 182,627	\$ 309,459
2024	\$ 2,834,113	\$ 1,031,798	\$ 1,802,315	\$ 556,698	\$ 206,147	\$ 350,551
2025	\$ 2,977,632	\$ 1,082,809	\$ 1,894,823	\$ 597,502	\$ 221,815	\$ 375,687

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

**SECTION C - SUBSTANTIVE PLAN PROVISIONS AND
ACTUARIAL METHODS AND ASSUMPTIONS**

SECTION C1 - STATE PERSONNEL



Substantive Plan Provisions

Eligibility

State Employees

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

Judges

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. All health plans are self-insured. The 2017 monthly premium rates by plan for non-tobacco users are as shown below:

Plans	Single	Family
CDHP 1	\$ 507.39	\$ 1,516.06
CDHP 2	\$ 724.10	\$ 2,103.79
CDHP Wellness	\$ 456.69	\$ 1,387.10
Traditional PPO	\$ 1,234.87	\$ 3,503.24

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 – Continued

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).

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 – Continued

Senate Enrolled Act 501

GASB 45 Impact

The Senate Enrolled Act 501 plan is considered a defined contribution individual account for GASB 43 and 45 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 was increased to 40% (from historically lower level) 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 is 110% funded as of June 30, 2016, and is projected to remain more than 100% funded. The plan benefits satisfy the condition of being a defined contribution OPEB benefit and by definition, there is no unfunded liability.

For the fiscal year ending June 30, 2016, the annual required contribution to the plan was \$44.7 million. This required contribution was covered in full by a combination of (1) \$17.2 million contributed by state agencies that are funded by federal or dedicated funds, (2) \$601 thousand from quasi agencies, and (3) an accumulated General Fund balance held by the Trust.



Actuarial Assumptions and Methods

Measurement Date	June 30, 2016; results were actuarially rolled back to July 1, 2014 on a “no gain/loss” basis as the State has elected to use the actuarial liability results for the period ending on June 30, 2015 for the period ending June 30, 2016.
Discount Rate	4.50%
Salary Scale	N/A; benefits are not payroll-related
Inflation Rate	2.25%
Census Data	Census data was provided by the State and it was collected as of December 31, 2015. 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.
Contribution Funding Policy	The State contributes at least the Annual Required Contribution annually.
Cost Method	Projected Unit Credit
Amortization	Level dollar amount over thirty years based on an open group.
Mortality	Pre and post-retirement mortality rates are based on SS-2012 Employee and Annuitant Mortality Table fully generational using SSA scale
Disability	None expected



Actuarial Assumptions and Methods – Continued

Retirement Rate

Annual retirement rates follow the PERF, PARF, and Judges’ Retirement System rates as of June 30, 2016. Sample rates are as shown below:

State Personnel

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

Judges

Age	<22 YOS	22+ YOS
55 – 61	N/A	70%
62	25%	70%
63	15%	70%
64	10%	70%
65	50%	70%
66 – 74	30%	70%
75+	100%	100%

Attorneys

Age	<22 YOS	22+ YOS
55 – 61	0%	70%
62	20%	70%
63	20%	70%
64	20%	70%
65+	100%	100%



Actuarial Assumptions and Methods – Continued

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 as of June 30, 2016. Sample rates are as shown below:

State Personnel – Male

Age	0 YOS	2 YOS	5 YOS	7 YOS	9 YOS	10+ YOS
20	23%	23%	17%	12%	7%	7%
30	22%	19%	13%	12%	7%	7%
40	17%	14%	10%	9%	5%	5%
50	14%	9%	9%	7%	4%	4%
60	13%	7%	7%	7%	4%	4%

State Personnel – Female

Age	0 YOS	2 YOS	5 YOS	7 YOS	9 YOS	10+ YOS
20	23%	23%	17%	12%	8%	8%
30	21%	21%	14%	12%	8%	8%
40	18%	16%	12%	9%	8%	6%
50	16%	15%	9%	9%	6%	6%
60	16%	11%	9%	9%	6%	6%

Judges

Age	Rates
All ages	3%

Attorney

Age	Rates
All ages	10%



Actuarial Assumptions and Methods – Continued

Per Capita Costs

Annual per capita costs are based on claims and enrollment data for the 24-month period ending May 31, 2016 projected to 2016/17 plan year and includes administrative expenses effective on January 1, 2017. 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	CDHP Wellness
<55	\$ 14,600	\$ 6,300	\$ 12,400	\$ 7,200
55 – 59	\$ 17,600	\$ 7,600	\$ 14,000	\$ 8,700
60 – 64	\$ 21,800	\$ 9,400	\$ 17,300	\$ 10,800

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 as retirees pay the full cost of coverage.

Health Care Trend Rates

FYE	Medical/Rx Combined	FYE	Medical/Rx Combined
2017	9.0%	2022	6.5%
2018	8.5%	2023	6.0%
2019	8.0%	2024	5.5%
2020	7.5%	2025	5.0%
2021	7.0%	2026+	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

70% of male and 55% 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.



Actuarial Assumptions and Methods – Continued

Health Care Coverage Election Rate

Active Employees

Actives with Current Health Coverage

15% 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 40% 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

40% 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 with non-tobacco use incentive.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A - B
Retiree	\$ 507.39	\$ 507.39	\$ 0.00
Spouse	\$ 1,008.67	\$ 1,008.67	\$ 0.00



Actuarial Assumptions and Methods – Continued

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 60 enrolled in CDHP 1 plan with non-tobacco incentive.

	Per Capita Cost	Premium Rate*	Implicit Age Subsidy
	A	B	C = A - B
Retiree	\$ 783.33	\$ 507.39	\$ 275.94
Spouse	\$ 783.33	\$ 783.33	\$ 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.

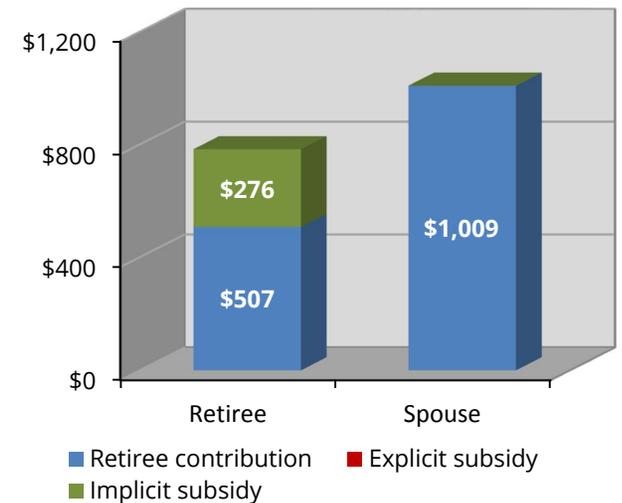
* Spouse premium rate has been limited to the per capita cost.

GASB Subsidy Breakdown

Below is a breakdown of the GASB 45 monthly total cost for a retiree age 60 and his spouse of the same age enrolled in CDHP 1 plan with non-tobacco incentive.

	Retiree		Spouse	
Retiree contribution	\$	507.39	\$	1,008.67
Explicit subsidy	\$	0.00	\$	0.00
Implicit subsidy	\$	275.94	\$	0.00
Total monthly cost	\$	783.33	\$	1,008.67

GASB Subsidy Breakdown (SOI and Legislature)



SECTION C2 – LEGISLATURE



Substantive Plan Provisions

Eligibility

Legislators are eligible for retiree health care coverage temporary to age 65 once they have 8 years of service (or 4 sessions). Current retired legislators are eligible for retiree health care coverage for lifetime.

Spouse Coverage

For future retirees, surviving spouse coverage continues after the death of the retiree until the spouse reaches age 65. Surviving spouse coverage continues for life after the death of the retiree for current retirees.

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. All health plans are self-insured. The 2017 monthly premium rates by plan for non-tobacco users are as shown below (for those enrolled in State plans only):

Plans	Single	Family
CDHP 1	\$ 507.39	\$ 1,516.06
CDHP 2	\$ 724.10	\$ 2,103.79
CDHP Wellness	\$ 456.69	\$ 1,387.10
Traditional PPO	\$ 1,234.87	\$ 3,503.24

Dental and Vision Benefits

There is no GASB liability generated for dental and vision benefits for future retirees as they pay the full cost for these benefits. Grandfathered retirees receive free dental benefits and subsidized vision benefits. The 2017 monthly premium rates for dental and vision benefits are as shown below:

Plans	Single	Family
Dental	\$ 25.35	\$ 66.56
Vision	\$ 3.55	\$ 9.01



Substantive Plan Provisions – Continued

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).

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 – Continued

Senate Enrolled Act 501

GASB 45 Impact

The Senate Enrolled Act 501 plan is considered a defined contribution individual account for GASB 43 and 45 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 was increased to 40% (from historically lower level) 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 is 110% funded as of June 30, 2016, and is projected to remain more than 100% funded. The plan benefits satisfy the condition of being a defined contribution OPEB benefit and by definition, there is no unfunded liability.

For the fiscal year ending June 30, 2016, the annual required contribution to the plan was \$44.7 million. This required contribution was covered in full by a combination of (1) \$17.2 million contributed by state agencies that are funded by federal or dedicated funds, (2) \$601 thousand from quasi agencies, and (3) an accumulated General Fund balance held by the Trust.



Actuarial Assumptions and Methods

Measurement Date	June 30, 2016; results were actuarially rolled back to July 1, 2014 on a “no gain/loss” basis as the State has elected to use the actuarial liability results for the period ending on June 30, 2015 for the period ending June 30, 2016.
Discount Rate	4.50%
Salary Scale	N/A; benefits are not payroll-related
Inflation Rate	2.25%
Census Data	Census data for was provided by the State and it was collected as of June 30, 2016. 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.
Contribution Funding Policy	Pay-as-you-go cash basis
Cost Method	Projected Unit Credit
Amortization	Level dollar amount over thirty years based on an open group
Mortality	Pre and post-retirement mortality rates are based on SS-2012 Employee and Annuitant Mortality Table fully generational using SSA scale
Withdrawal Rate	None
Disability	None



Actuarial Assumptions and Methods – Continued

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%

Health Care Coverage Election Rate

Active Employees

Actives with Current Health Coverage

15% 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 40% 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

40% of employees are assumed to elect coverage at retirement after meeting the PERF retirement eligibility.

Inactive Employees

Based on actual data.



Actuarial Assumptions and Methods – Continued

Spousal Coverage

100% of 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

For those enrolled in the State plans, annual per capita costs are based on claims and enrollment data for the 24-month period ending May 31, 2016 projected to 2016/17 plan year that includes administrative expenses effective on January 1, 2017. For those enrolled in the ISP plan, annual per capita costs are based on claims and enrollment data for the 24-month period ending May 31, 2016 projected to 2016/17 plan year and includes projected administrative expenses effective on January 1, 2017. 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
50 – 54	\$ 14,600	\$ 6,300	\$ 12,400
55 – 59	\$ 17,600	\$ 7,600	\$ 14,000
60 – 64	\$ 21,800	\$ 9,400	\$ 17,300
65 – 69	\$ 6,200	\$ 2,700	\$ 5,000
70 – 74	\$ 7,400	\$ 3,300	\$ 5,900
75+	\$ 8,600	\$ 3,800	\$ 6,800

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.

Age	CDHP Wellness	ISP*
50 – 54	\$ 7,200	\$ 7,300
55 – 59	\$ 8,700	\$ 8,800
60 – 64	\$ 10,800	\$ 10,900
65 – 69	\$ 3,100	\$ 3,600
70 – 74	\$ 3,700	\$ 4,300
75+	\$ 4,200	\$ 5,000

* ISP per capita costs above include dental and vision costs.



Actuarial Assumptions and Methods – Continued

Health Care Trend Rates

FYE	All Benefits
2017	9.0%
2018	8.5%
2019	8.0%
2020	7.5%
2021	7.0%
2022	6.5%
2023	6.0%
2024	5.5%
2025	5.0%
2026+	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.

Retiree Contributions

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

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 with non-tobacco use incentive.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A - B
Retiree	\$ 507.39	\$ 507.39	\$ 0.00
Spouse	\$ 1,008.67	\$ 1,008.67	\$ 0.00



Actuarial Assumptions and Methods – Continued

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 60 enrolled in CDHP 1 plan with non-tobacco incentive.

	Per Capita Cost	Premium Rate*	Implicit Age Subsidy
	A	B	C = A - B
Retiree	\$ 783.33	\$ 507.39	\$ 275.94
Spouse	\$ 783.33	\$ 783.33	\$ 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.

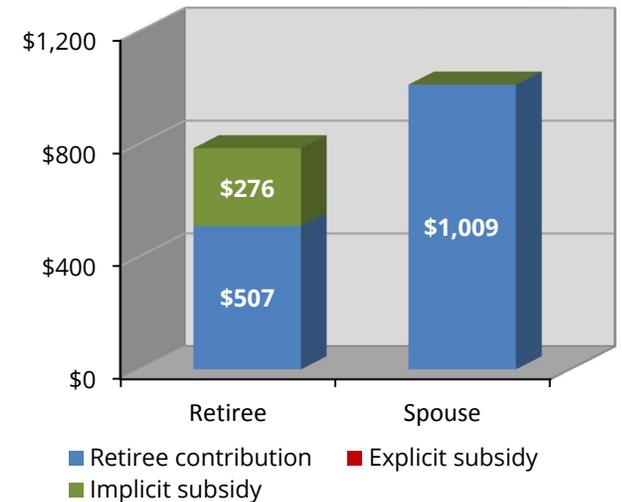
* Spouse premium rate has been limited to the per capita cost.

GASB Subsidy Breakdown

Below is a breakdown of the GASB 45 monthly total cost for a retiree age 60 and his spouse of the same age enrolled in CDHP 1 plan with non-tobacco incentive.

	Retiree		Spouse	
Retiree contribution	\$	507.39	\$	1,008.67
Explicit subsidy	\$	0.00	\$	0.00
Implicit subsidy	\$	275.94	\$	0.00
Total monthly cost	\$	783.33	\$	1,008.67

GASB Subsidy Breakdown (SOI and Legislature)



SECTION C3 - INDIANA STATE POLICE



Substantive Plan Provisions

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 (20 years of service requirement in prior valuations)
- 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.

Medical Benefit

The same benefit options are available to retirees as active employees. All health plans are self-insured. The plan coordinates with Medicare on a carve-out basis. The Indiana State Police plan is primary on prescription drug coverage for Medicare retirees.

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

The 2017 monthly premium rates effective on January 1, 2017 (as determined by the Indiana State Police) for the plans are as shown below:

	Retiree Only	Retiree plus One Dependent
<u>Without Medicare</u>		
Basic Plan	\$ 411.17	\$ 539.03
Optional Plan	\$ 480.80	\$ 669.55
<u>With Medicare</u>		
Basic Plan	\$ 150.97	\$ 185.25
Optional Plan	\$ 175.93	\$ 236.40



Substantive Plan Provisions – Continued

State Police Explicit Subsidy

None

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.

Optional Plan	Retiree Only	Retiree plus One Dependent	Spouse Increment
Without Medicare	\$ 480.80	\$ 669.55	\$ 188.75
With Medicare	\$ 175.93	\$ 236.40	\$ 60.47

Basic Plan	Retiree Only	Retiree plus One Dependent	Spouse Increment
Without Medicare	\$ 411.17	\$ 539.03	\$ 127.86
With Medicare	\$ 150.97	\$ 185.25	\$ 34.28

Life Insurance

Police officers are eligible for the following life insurance benefits depending on their hire date:

- Hired prior to July 1, 1986: \$10,000
- Hired on/after July 1, 1986: \$14,500

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.

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.



Actuarial Assumptions and Methods

Measurement Date	June 30, 2016; results were actuarially rolled back to July 1, 2014 on a “no gain/loss” basis because the State has elected to use the actuarial liability results for the period ending June 30, 2015 for the period ending June 30, 2016.
Discount Rate	4.50%
Salary Scale	N/A; benefits are not payroll-related
Inflation Rate	2.25%
Census Data	<p>Census data was provided by the State and it was collected as of June 30, 2016. We have reviewed it for reasonableness and have made the following adjustment to the census data:</p> <ul style="list-style-type: none">• Participants who were found in both State Personnel and ISP census data are included in the ISP census data for valuation purposes. These participants are eligible to receive retiree health care coverage through ISP once they meet the eligibility requirements.• Hire dates for employees hired after June 30, 2016 have been changed to June 30, 2016.• Only employees and retirees who were identified by the ISP as not being eligible for Medicare assumed to be ineligible for Medicare for life. All other participants are assumed to be eligible for Medicare.
Contribution Funding Policy	<p>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:</p> <ol style="list-style-type: none">1. Medicare Part D retiree drug subsidy reimbursement2. Excess Long-Term Disability (LTD) fund3. A percentage of retiree premiums according to the following schedule:<ol style="list-style-type: none">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 5015. Discretionary contributions from ISP Healthcare Fund up to \$1 million <p>Additionally, active employees will contribute \$20 per paycheck towards the 401(h) Trust account.</p>

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



Actuarial Assumptions and Methods – Continued

Cost Method

Projected Unit Credit

Amortization

Level dollar amount over thirty years based on an open group.

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

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.

Mortality

SS-2012 Total Dataset Mortality Table with blue collar adjustment fully generational using SSA scale

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.

Disability

Sample rates are as shown below.

Age	Male	Female
45	0.54%	0.54%
50	0.91%	0.91%
55	1.51%	1.51%
60	2.44%	2.44%



Actuarial Assumptions and Methods – Continued

Retirement Rate

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

<u>YOS</u>	<u>1987 Plan</u>	<u>Age</u>	<u>Pre-1987 Plan</u>
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

<u>FYE</u>	<u>Pre/Post-65</u>
2017	9.0%
2018	8.5%
2019	8.0%
2020	7.5%
2021	7.0%
2022	6.5%
2023	6.0%
2024	5.5%
2025	5.0%
2026+	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.



Actuarial Assumptions and Methods – Continued

Data Assumptions

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

Per Capita Costs

Annual per capita costs are based on claims and enrollment data for the 24-month period ending May 31, 2016 projected to 2016/17 plan year and includes projected administrative expenses effective on January 1, 2017. 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	Non-Disabled Retirees		Disabled Retirees with Medicare	
	Male	Female	Male	Female
<55	\$ 7,100	\$ 8,500	\$ 3,600	\$ 3,600
55 – 59	\$ 9,300	\$ 9,500	\$ 3,600	\$ 3,600
60 – 64	\$ 12,000	\$ 11,300	\$ 3,600	\$ 3,600

Age	Retirees with Medicare		Retirees without Medicare	
	Male	Female	Male	Female
65 – 69	\$ 3,600	\$ 3,600	\$ 11,900	\$ 11,900
70 – 74	\$ 4,300	\$ 4,300	\$ 12,900	\$ 12,900
75+	\$ 5,000	\$ 5,000	\$ 13,800	\$ 13,800

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.

Retiree Contributions

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



Actuarial Assumptions and Methods – Continued

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 65 enrolled in the Optional plan.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A - B
Retiree	\$ 480.80	\$ 480.80	\$ 0.00
Spouse	\$ 188.75	\$ 188.75	\$ 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 60 enrolled in the Optional plan.

	Per Capita Cost	Premium Rate	Implicit Subsidy
	A	B	C = A - B
Retiree	\$ 1,000.00	\$ 480.80	\$ 519.20
Spouse	\$ 941.67	\$ 188.75	\$ 752.92

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 45 monthly total cost for a male retiree age 60 and his spouse of the same age for medical benefits only.

	Retiree		Spouse	
Retiree contribution	\$	480.80	\$	188.75
Explicit subsidy	\$	0.00	\$	0.00
Implicit subsidy	\$	519.20	\$	752.92
Total monthly cost	\$	1,000.00	\$	941.67

GASB Subsidy Breakdown (ISP)



SECTION C4 – CONSERVATION AND EXCISE POLICE



Substantive Plan Provisions

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 24 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. The plan coordinates with Medicare on a COB basis. The Conservation and Excise Police plans are secondary on prescription drug coverage for Medicare retirees.

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

Life Insurance

None

CEP Explicit Subsidy

Post-Medicare medical benefits are explicitly subsidized.

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 – Continued

Retiree Contributions

2017 monthly retiree contributions effective on January 1, 2017 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, 2016 projected to 2016/17 plan year and includes projected administrative expenses effective on January 1, 2017. Contributions are allocated to vision benefit first, dental second, and medical last.

	Single	Family	Incremental Spouse Cost
<u>Pre-Medicare</u>			
Medical	\$ 313.93	\$ 514.06	\$ 227.13
Dental	\$ 32.21	\$ 64.42	\$ 32.21
Vision	\$ 5.32	\$ 10.64	\$ 5.32
Total	\$ 351.46	\$ 616.12	\$ 264.66
<u>Post-Medicare</u>			
Medical	\$ 102.84	\$ 126.38	\$ 23.54
Dental	\$ 32.21	\$ 64.42	\$ 32.21
Vision	\$ 5.32	\$ 10.64	\$ 5.32
Total	\$ 140.37	\$ 201.44	\$ 61.07



Actuarial Assumptions and Methods

Measurement Date	June 30, 2016; results were actuarially rolled back to July 1, 2014 on a “no gain/loss” basis as the State has elected to use the actuarial liability results for the period ending on June 30, 2015 for the period ending June 30, 2016.
Discount Rate	4.50%
Salary Scale	N/A; benefits are not payroll-related
Inflation Rate	2.25%
Census Data	<p>Census data was provided by the State and it was collected as of June 30, 2016. We have reviewed it for reasonableness and no material modifications were made to the census data except for the following:</p> <ul style="list-style-type: none">• There are quite a few employees who have different hire dates provided this year compared to the last full valuation. We have taken the earlier hire dates provided this year and last full valuation for this year’s valuation.
Data Assumptions	All employees are assumed to elect medical, dental, and vision coverage at retirement.
Contribution Funding Policy	<p>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.</p> <p>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.</p> <p>Starting in FYE June 30, 2012, the Conservation and Excise Police started pre-funding retiree health benefits.</p>



Actuarial Assumptions and Methods – Continued

Cost Method

Projected Unit Credit

Amortization

Level dollar amount over thirty years based on an open group.

Mortality

Pre and post-retirement mortality rates are based on SS-2012 Total Dataset Mortality Table with blue collar adjustment fully generational using SSA scale

Disability

None

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 actuarial valuation as of June 30, 2015. 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%

Retirement Rate

Annual retirement rates are as shown below.

Age	Rates
45	3%
46 – 49	2%
50	3%
51 – 59	15%
60 – 64	40%
65+	100%



Actuarial Assumptions and Methods – Continued

Per Capita Costs

Annual per capita costs are based on claims and enrollment data for the 24-month period ending May 31, 2016 projected to 2016/17 plan year and includes projected administrative expenses effective on January 1, 2017. 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	\$ 6,600	\$ 7,900
55 – 59	\$ 8,600	\$ 8,900
60 – 64	\$ 11,100	\$ 10,500
65 – 69	\$ 2,800	\$ 2,800
70 – 74	\$ 3,300	\$ 3,300
75+	\$ 3,800	\$ 3,800

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.

Annual dental and vision per capita costs are based on claims and enrollment data for the 24-month period ending May 31, 2016 projected to 2016/17 plan year and includes projected administrative expenses effective on January 1, 2017. The annual dental and vision per capita costs are \$387 and \$64 respectively and they are assumed to increase with dental and vision trend rates.

Retiree Contributions

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

Health Care Trend Rates

FYE	Medical / Rx	Dental	Vision
2017	9.00%	4.50%	4.00%
2018	8.50%	4.25%	3.75%
2019	8.00%	4.00%	3.50%
2020	7.50%	3.75%	3.25%
2021	7.00%	3.50%	3.00%
2022	6.50%	3.50%	3.00%
2023	6.00%	3.50%	3.00%
2024	5.50%	3.50%	3.00%
2025	5.00%	3.50%	3.00%
2026+	4.50%	3.50%	3.00%

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.



Actuarial Assumptions and Methods – Continued

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 25% 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.

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 60 with spousal coverage.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A - B
Retiree	\$ 447.95	\$ 313.93	\$ 134.02
Spouse	\$ 447.95	\$ 227.13	\$ 220.82

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 60 and his spouse of the same age.

	Per Capita Cost	Premium Rate	Implicit Subsidy
	A	B	C = A - B
Retiree	\$ 925.00	\$ 447.95	\$ 477.05
Spouse	\$ 875.00	\$ 447.95	\$ 427.05

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.



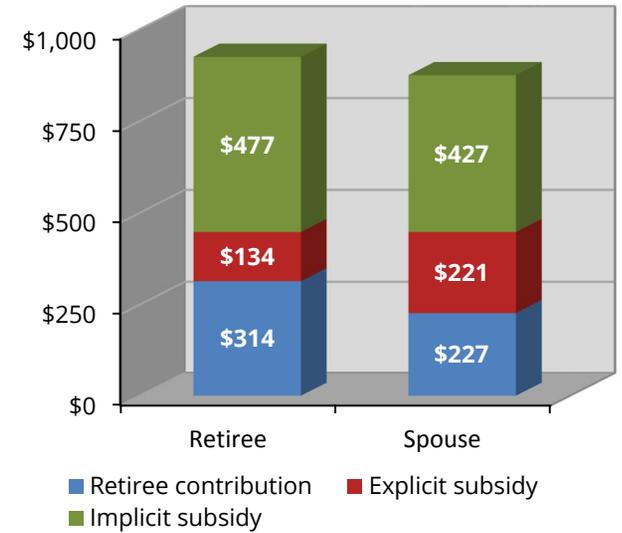
Actuarial Assumptions and Methods – Continued

GASB Subsidy Breakdown

Below is a breakdown of the GASB 45 monthly total cost for a male retiree age 60 and his spouse of the same age for medical benefits only.

	Retiree		Spouse	
Retiree contribution	\$	313.93	\$	227.13
Explicit subsidy	\$	134.02	\$	220.82
Implicit subsidy	\$	477.05	\$	427.05
Total monthly cost	\$	925.00	\$	875.00

GASB Subsidy Breakdown (DNR)



SECTION D – SUMMARY OF PLAN PARTICIPANTS



Active Participants with Coverage

<i>Actives with coverage</i>	<i>Single</i>	<i>Non-Single</i>	<i>Total</i>	<i>Avg. Age</i>	<i>Avg. Svc</i>	<i>Salary</i>
State Personnel⁹						
Traditional PPO	292	76	368	59.2	19.5	\$ N/A
CDHP 1	7,297	9,907	17,204	44.8	10.0	\$ N/A
CDHP 2	637	474	1,111	51.2	13.2	\$ N/A
CDHP Wellness	1,855	3,749	5,604	46.4	12.9	\$ N/A
Total with coverage	10,081	14,206	24,287	45.7	11.0	\$ N/A
Legislature						
CDHP 1	14	51	65	53.3	8.4	\$ N/A
CDHP 2		1	1	56.9	25.6	\$ N/A
CDHP Wellness	1	4	5	50.2	4.6	\$ N/A
Indiana State Police	12	35	47	65.3	14.7	\$ N/A
Total with coverage	27	91	118	58.0	10.9	\$ N/A
Indiana State Police¹⁰	451	1,262	1,713	42.5	14.2	\$ 89,733,315
Conservation and Excise Police	45	211	256	39.6	14.5	\$ N/A

Active Participants without Coverage

<i>Actives without coverage</i>	<i>Total</i>	<i>Avg. Age</i>	<i>Avg. Svc</i>	<i>Salary</i>
State Personnel	3,760	45.9	8.7	\$ N/A
Legislature	34	58.3	10.3	\$ N/A

For State Personnel and Legislatures who currently have no coverage, 40% of them are assumed to elect coverage after meeting PERF eligibility requirement. They have been included in the GASB valuation. There are no active employees without coverage reported for Indiana State Police or Conservation and Excise Police.

⁹ Including judges, prosecuting attorneys, and civilian employees of Indiana State Police enrolled in the State plans and legislative support staff.

¹⁰ Out of the 1,713 active employees with coverage, 84 of them are anticipated to never qualify for Medicare based on their hire dates.



Retired Participants

<i>Retirees with coverage</i>	<i>Single</i>	<i>Non-Single</i>	<i>Total</i>	<i>Avg. Age</i>
State Personnel				
Traditional PPO	28		28	63.0
CDHP 1	547	72	619	61.9
CDHP 2	74	3	77	62.5
CDHP Wellness	91	15	106	61.8
Total with coverage	740	90	830	62.0
Legislature¹¹				
Traditional PPO	7	15	22	74.6
CDHP 1		3	3	56.1
CDHP 2		3	3	63.7
Indiana State Police		5	5	70.4
Total with coverage	7	26	33	71.3
Indiana State Police¹²				
Basic without Medicare	13	27	40	63.0
Optional without Medicare	38	136	174	61.7
Basic with Medicare	59	63	122	74.7
Optional with Medicare	291	488	779	71.9
Total with coverage	401	714	1,115	70.3
Conservation and Excise Police	47	139	186	67.1

¹¹ Additionally, there is one retired Legislator who currently have no health coverage but he is receiving a subsidized dental and vision benefit. He has been included in the GASB valuation.

¹² Additionally, there are 242 retirees who currently have no health coverage with ISP but they have life insurance coverage. They have been included in the GASB valuation.



Active Age-Service Distribution for State Personnel

Age	Years of Service										Total
	< 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	
Under 25	516	713	9								1,238
25 to 29	515	1,983	274	8							2,780
30 to 34	350	1,487	930	217	4						2,988
35 to 39	229	1,151	812	571	179	6					2,948
40 to 44	204	961	647	517	423	156	5				2,913
45 to 49	189	859	720	548	400	500	174	11			3,401
50 to 54	144	814	681	503	456	436	459	296	24		3,813
55 to 59	111	656	607	560	466	461	469	377	263	19	3,989
60 to 64	49	430	484	405	331	313	255	196	234	140	2,837
65 to 69	11	104	195	153	102	88	58	55	51	79	896
70 & up	2	26	46	40	29	29	27	9	12	24	244
Total	2,320	9,184	5,405	3,522	2,390	1,989	1,447	944	584	262	28,047



Active Age-Service Distribution for Legislature

Age	Years of Service										Total
	< 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	
Under 25											0
25 to 29		1									1
30 to 34		3	1								4
35 to 39		4	1								5
40 to 44		6	4	2							12
45 to 49		6	9	2	3						20
50 to 54		6	6	2	2						16
55 to 59	1	11	6		1	1	1	1			22
60 to 64	1	5	4	1	4	4					19
65 to 69		5	10	4	3	3	3	2			30
70 & up		3	7		2	2	3	5		1	23
Total	2	50	48	11	15	10	7	8	0	1	152



Active Age-Service Distribution for Indiana State Police

Age	Years of Service										Total	
	< 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		
Under 25	60	21	1									82
25 to 29	44	101	20									165
30 to 34	17	42	144	29								232
35 to 39	7	24	76	66	37	1						211
40 to 44	7	17	44	34	164	50						316
45 to 49	2	3	26	18	71	127	21					268
50 to 54	2	10	11	9	15	39	82	22	1			191
55 to 59	2	12	9	6	10	12	37	37	23			148
60 to 64	1	13	6	10	9	5	7	13	18	4		86
65 to 69		1	1	2	1	1			1	4		11
70 & up					1		1	1				3
Total	142	244	338	174	308	235	148	73	43	8		1,713



Active Age-Service Distribution for Conservation and Excise Police

Age	Years of Service										Total	
	< 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		
Under 25	1	9										10
25 to 29	2	27	7									36
30 to 34	1	10	23	17	1							52
35 to 39		2	10	21	5							38
40 to 44	1	2	3	11	14	7						38
45 to 49			1	3	8	22	7					41
50 to 54					2	3	12	7				24
55 to 59					1		2	6	3			12
60 to 64								1	3	1		5
65 to 69												0
70 & up												0
Total	5	50	44	52	31	32	21	14	6	1		256

SECTION E – APPENDIX



Conservation and Excise Police GASB Results Breakdown

Below is the summary of the GASB results for fiscal year ending June 30, 2016 based on the Projected Unit Credit cost method with a discount rate of 4.5%.

<i>Union Groups</i>	<i>Actuarial Accrued Liability (AAL)</i>		<i>Actuarial Value of Assets</i>		<i>Unfunded AAL (UAAL)</i>		<i>Annual Required Contribution (ARC)</i>	
		<i>As of June 30, 2016</i>		<i>As of June 30, 2016</i>		<i>As of June 30, 2016</i>		<i>For 2015/16</i>
Conservation	\$	36,861,922	\$	(9,692,979)	\$	27,168,943	\$	2,674,622
Excise	\$	8,538,870	\$	(3,194,730)	\$	5,344,140	\$	638,109
Total	\$	45,400,792	\$	(12,887,709)	\$	32,513,083	\$	3,312,731



Comparison of Participant Demographic Information

The active participants' number below may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

	<i>As of June 30, 2014</i>				<i>As of June 30, 2016</i>			
	<i>State Personnel</i>	<i>Legislature</i>	<i>ISP</i>	<i>CEP</i>	<i>State Personnel</i>	<i>Legislature</i>	<i>ISP</i>	<i>CEP</i>
Active Participants ¹³	24,364	134	1,624	201	24,287	118	1,713	256
Retired Participants ¹⁴	1,145	45	1,097	167	830	33	1,115	186
Averages for Active								
Age	46.5	57.4	42.5	43.0	45.7	58.0	42.5	39.6
Service	11.9	11.4	14.8	17.9	11.0	10.9	14.2	14.5
Averages for Inactive								
Age	62.4	68.9	69.2	66.5	62.0	71.3	70.3	67.1

¹³ Only includes employees who have medical coverage. Refer to Summary of Plan Participants section for an accurate breakdown of active employees with and without medical coverage.

¹⁴ The retired enrollment figures above exclude spouses and those who currently have no health coverage. Legislator retired participants enrollment excludes one participant who has subsidized dental and vision benefits but no health 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 coverage.



Data Reconciliation by Group

	<i>State Personnel</i>	<i>Indiana State Police (ISP)</i>	<i>Conservation and Excise Police (CEP)</i>
Active employees with coverage			
Actives as of June 30, 2014	24,364	1,627	201
Terminated	(5,254)	(116)	(14)
New hires	5,732	266	49
Active employees who retired	(436)	(65)	(19)
Retirees who returned to active employment	6	1	
Other adjustment ¹⁵	(125)		40
Actives as of June 30, 2016	24,287	1,713	257
Retirees with coverage			
Retirees as of June 30, 2014	1,145	1,003	167
Active employees who retired	438	53	19
Retirees who returned to active employment	(6)	(1)	
Retirees who dropped coverage	(803)	(27)	
Retirees who passed away with beneficiaries		(21)	
New retirees ¹⁶	56	18	
Other adjustment ¹⁵		(18)	
Retirees as of June 30, 2016	830	1,007	186
Beneficiaries with coverage			
Beneficiaries as of June 30, 2014		94	
Active/retirees who passed away with beneficiaries		21	
Beneficiaries who dropped coverage		(7)	
New beneficiaries			
Beneficiaries as of June 30, 2016		108	

¹⁵ This line shows adjustments for participants who have changed health plan enrollment status from June 30, 2014 to June 30, 2016 (i.e. those who did not have coverage before but are currently enrolled, and vice versa).

¹⁶ This line shows new retirees who were not found as active employees in June 30, 2014 census data or those who were previously active in a different employee group.

SECTION F – GLOSSARY



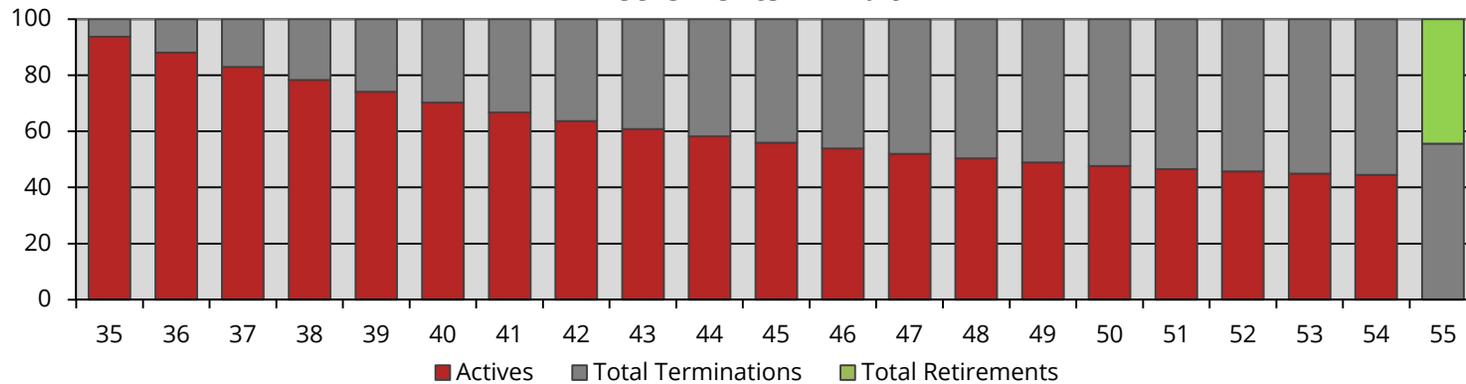
Decrements Exhibit

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 44.430 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*	# 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

Decrements Exhibit



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



Retirement Rates Exhibit

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.



Illustration of GASB Calculations

The purpose of the illustration is to familiarize non-actuaries with the GASB 45 actuarial calculation process.

I. Facts

1. The employer provides subsidized retiree health coverage worth \$100,000 to employees retiring at age 55 with 25 years of service. The employer funds for retiree health coverage on a pay-as-you-go basis.
2. Employee X is age 50 and has worked 20 years with the employer.
3. Retiree health subsidies are paid from the general fund assets which are expected to earn 4.5% per year on a long-term basis.
4. Based on Employee X's age and sex he has a 98.0% probability of living to age 55 and a 95.0% probability of continuing to work to age 55.

II. Calculation of Present Value of Future Benefits

Present Value of Future Benefits represents the cost to finance benefits payable in the future to current and future retirees and beneficiaries, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

	Value	Description
A.	\$100,000	Projected benefit at retirement
B.	80.2%	Interest discount for five years = $(1 / 1.045)^5$
C.	98.0%	Probability of living to retirement age
D.	95.0%	Probability of continuing to work to retirement age
E.	\$74,666	Present value of projected retirement benefit measured at employee's current age = $A \times B \times C \times D$



Illustration of GASB Calculations (continued)

III. Calculation of Actuarial Accrued Liability

Actuarial Accrued Liability represents the portion of the Present Value of Future Benefits which has been accrued recognizing the employee’s past service with the employer. The Actuarial Accrued Liability is a required disclosure in the Required Supplementary Information section of the employer’s financial statement.

	Value	Description
A.	\$74,666	Present value of projected retirement benefit measured at employee’s current age
B.	20	Current years of service with employer
C.	25	Projected years of service with employer at retirement
D.	\$59,733	Actuarial accrued liability measured at employee’s current age = $A \times B / C$

IV. Calculation of Normal Cost

Normal Cost represents the portion of the Present Value of Future Benefits allocated to the current year.

	Value	Description
A.	\$74,666	Present value of projected retirement benefit measured at employee’s current age
B.	25	Projected years of service with employer at retirement
C.	\$2,987	Normal cost measured at employee’s current age = A / B

V. Calculation of Annual Required Contribution

Annual Required Contribution is the total expense for the current year to be shown in the employer’s income statement.

	Value	Description
A.	\$2,987	Normal Cost for the current year
B.	\$3,509	30-year amortization (level dollar method) of Unfunded Actuarial Accrued Liability using a 4.5% interest rate discount factor
C.	\$292	Interest adjustment = $4.5\% \times (A + B)$
D.	\$6,788	Annual Required Contribution = $A + B + C$



Definitions

GASB 45 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 Accrued Liability** – That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of plan benefits and expenses which is not provided for by the future Normal Costs.
2. **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.
3. **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 Normal Cost and an Actuarial Accrued Liability.
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. **Annual OPEB Cost** – An accrual-basis measure of the periodic cost of an employer’s participation in a defined benefit OPEB plan.
6. **Annual Required Contribution (ARC)** – The employer’s periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.
7. **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.
8. **Funded Ratio** – The actuarial value of assets expressed as a percentage of the actuarial accrued liability.
9. **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.



Definitions (continued)

10. **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.
11. **Net OPEB Obligation** – The cumulative difference since the effective date of this Statement between annual OPEB cost and the employer’s contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.
12. **Normal Cost** – The portion of the Actuarial Present Value of plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.
13. **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.
14. **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.
15. **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.
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. **Substantive Plan** – The terms of an OPEB plan as understood by the employer(s) and plan members.