

North Carolina State Health Plan

**Actuarial Valuation and Review of Other
Postemployment Benefits (OPEB) as of
December 31, 2012 in Accordance with GASB
Statements No. 43 and No. 45**





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October 9, 2013

*Committee on Actuarial Valuation
of Retired Employees' Health Benefits (OPEB)
State of North Carolina
4901 Glenwood Avenue Suite 300
Raleigh, North Carolina 27612*

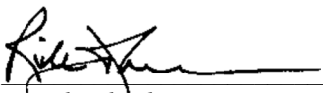
Dear Committee members:

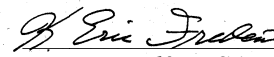
We are pleased to submit this Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of December 31, 2012 under Governmental Accounting Standards Board Statements 43 and 45. The report summarizes the actuarial data used in the valuation, discloses the Net OPEB obligation (NOO) as of June 30, 2013, establishes the Annual Required Contribution (ARC) for the coming year, and analyzes the preceding year's experience. This report was based on the census data provided by the Teachers' and State Employees' Retirement Systems (TSERS), the financial information provided by the Department of State Treasurer, and the terms of the Plan. Claims and enrollment data was received from the State Health Plan. The actuarial calculations were completed under the supervision of K. Eric Fredén, FSA, MAAA, FCA, Vice President & Actuary.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions used in this valuation and described in Exhibit II are reasonably related to the experience of and the expectations for the Plan. The actuarial projections are based on these assumptions and the plan of benefits as summarized in Exhibit III.

Sincerely,

Segal Consulting, a Member of the Segal Group, Inc.

By: 
J. Richard Johnson
Senior Vice President


K. Eric Fredén, FSA, MAAA, FCA
Vice President & Actuary

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PURPOSE

This report presents the results of our actuarial valuation of State of North Carolina (the “Employer”) OPEB plan as of December 31, 2012. The results are in accordance with the Governmental Accounting Standards, which prescribe an accrual methodology for accumulating the value of other postemployment benefits (OPEB) over participants’ active working lifetimes.

HIGHLIGHTS OF THE VALUATION

- The **unfunded actuarial accrued liability (UAAL)** as of December 31, 2012 is \$23,117,279,016 a decrease of \$6,492,972,881, from the prior valuation UAAL of \$29,610,251,897. Net unfunded plan obligations had been expected to increase to \$31,451,749,477, due to normal plan operations. The difference between actual and expected unfunded actuarial accrued liabilities was the net effect of several factors:
 - An **actuarial experience loss** increased the UAAL by \$1,095,628,265. This was the net result of gains and losses due to fund investment performance, demographic changes and actual 2013 contributions and benefit payments that were different from expected. We have taken these actuarial gains and losses into account in reviewing our assumptions for the current valuation.
 - **Valuation assumption changes** decreased the UAAL by \$4,796,182,632. This was the result of a decrease in obligations due to lowering the valuation-year per capita health costs and adjusting future trend on these costs.
 - **Plan changes** decreased the UAAL by \$4,633,916,093. This is the result of the expected transition to providing a new CDHP plan for non-Medicare participants and MA and MA+ benefits for Medicare participants beginning January 1, 2014. The current plan of benefits is summarized in Exhibit III of Section 4.
- As of December 31, 2012, the ratio of assets to the AAL (the funded ratio) is 3.21%.
- The **Net OPEB Obligation (NOO)** increased to \$12,817,536,127 for the year ending June 30, 2013. The NOO generally increases if the contributions in relation to the ARC are less than the ARC. The contributions in relation to the ARC during the year ending June 30, 2013 were \$844,452,283 compared to the ARC of \$2,021,026,309. Contributions in relation to the ARC totaled 41.78% of the ARC in the year ending June 30, 2013. Chart 6 shows the detailed derivation of the NOO as of June 30, 2013.
- The **Annual Required Contribution (ARC)** decreased to \$2,021,026,309 for the year ending June 30, 2013. The ARC was \$2,480,159,722 for the last year. As a percentage of payroll, the ARC decreased from 16.70% last year to 13.51% this year.
- The **Annual OPEB Cost (AOC)** decreased to \$2,085,390,268 for the year ending June 30, 2013. The AOC was \$2,535,167,544 last year.

SECTION 1: Executive Summary for North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

The key valuation results for the current and prior years are shown.

SUMMARY OF VALUATION RESULTS

	December 31, 2012	December 31, 2011
Actuarial Accrued Liability (AAL)	\$23,883,106,962	\$30,339,346,481
Actuarial Value of Assets	765,827,946	729,094,584
Unfunded Actuarial Accrued Liability	23,117,279,016	29,610,251,897
Funded Ratio	3.21%	2.40%
Market Value of Assets	\$765,827,946	\$729,094,584
Annual Required Contribution (ARC) for Fiscal Year Ending:	June 30, 2013	June 30, 2012
Normal cost	\$1,167,070,175	\$1,386,352,090
Amortization of the unfunded actuarial accrued liability	853,956,134	1,093,807,632
Total Annual Required Contribution, including adjustment for timing	\$2,021,026,309	\$2,480,159,722
Covered payroll	\$14,957,178,663	\$14,851,954,027
ARC as a percentage of pay	13.51%	16.70%
Total Participants	560,625	550,861
Annual OPEB Cost (AOC) for Fiscal Year Ending:	June 30, 2013	June 30, 2012
Annual Required Contributions	\$2,021,026,309	\$2,480,159,722
Interest on Net OPEB Obligations	492,005,421	420,486,046
ARC Adjustments	-427,641,462	-365,478,224
Total Annual OPEB Cost	\$2,085,390,268	\$2,535,167,544
AOC as a percent of pay	13.94%	17.07%

October 9, 2013

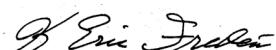
ACTUARIAL CERTIFICATION

This is to certify that Segal Consulting, a Member of the Segal Group, Inc. has conducted an actuarial valuation of certain benefit obligations of North Carolina State Health Plan's other postemployment benefit programs as of December 31, 2012, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements 43 and 45 for the determination of the liability for postemployment benefits other than pensions.

The actuarial valuation is based on the plan of benefits verified by the Employer and reliance on participant, premium, claims and expense data provided by the Employer or from vendors employed by the Employer. Segal Consulting does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal, however, does review the data for reasonableness and consistency.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination of the plan, or determining short-term cash flow requirements.

To the best of my knowledge, this report is complete and accurate and in my opinion presents the information necessary to comply with GASB Statements 43 and 45 with respect to the benefit obligations addressed. The signing actuary is a member of the Society of Actuaries, the American Academy of Actuaries, and other professional actuarial organizations and meets their "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.



K. Eric Fredén, FSA, MAAA, FCA
Vice President & Actuary

SECTION 2: Valuation Results for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

The actuarial present value of total projected benefits uses the actuarial assumptions disclosed in Section 4 to calculate the value today of all benefits expected to be paid to current actives and retired plan members. The actuarial balance sheet shows the expected breakdown of how these benefits will be financed.

CHART 1

Actuarial Present Value of Total Projected Benefits (APB) and Actuarial Balance Sheet

	Actuarial Present Value of Total Projected Benefits (APB)	
	December 31, 2012	December 31, 2011
Participant Category		
Current retirees, beneficiaries, and dependents	\$8,165,950,545	\$10,773,037,899
Current active members	29,886,993,329	36,383,714,978
Terminated members entitled but not yet eligible	<u>2,255,068,465</u>	<u>2,856,837,923</u>
Total	\$40,308,012,340	\$50,013,590,800
	December 31, 2012	December 31, 2011
Actuarial Balance Sheet		
The actuarial balance sheet as of the valuation date is as follows:		
Assets		
1. Actuarial value of assets	\$765,827,946	\$729,094,584
2. Present value of future normal costs	16,424,905,378	19,674,244,319
3. Unfunded actuarial accrued liability	<u>23,117,279,016</u>	<u>29,610,251,897</u>
4. Present value of current and future assets	\$40,308,012,340	\$50,013,590,800
Liabilities		
5. Actuarial present value of total projected benefits	\$40,308,012,340	\$50,013,590,800

SECTION 2: Valuation Results for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

The actuarial accrued liability shows that portion of the APB (Chart 1) allocated to periods prior to the valuation date by the actuarial cost method. The chart below shows the portion covered by retiree contributions, the portion

covered by accumulated plan assets, and reconciles the unfunded actuarial liability from last year to this year.

CHART 2

Actuarial Accrued Liability (AAL) and Unfunded AAL (UAAL)

	December 31, 2012	December 31, 2011
Participant Category		
Current retirees, beneficiaries, and dependents	\$8,165,950,545	\$10,773,037,899
Current active members	13,462,087,951	16,709,470,659
Terminated members entitled but not yet eligible	<u>2,255,068,465</u>	<u>2,856,837,923</u>
Total	\$23,883,106,962	\$30,339,346,481
Effect of Retiree Contributions		
Actuarial accrued liability before reduction for retiree contributions	\$26,680,709,258	\$36,178,053,049
Less projected retiree contributions	<u>2,797,602,296</u>	<u>5,838,706,568</u>
Net employer actuarial accrued liability	23,883,106,962	30,339,346,481
Actuarial value of assets	<u>765,827,946</u>	<u>729,094,584</u>
Unfunded actuarial accrued liability	\$23,117,279,016	\$29,610,251,897
Development of Unfunded Actuarial Accrued Liability		
1. Unfunded actuarial accrued liability as of December 31, 2011		\$29,610,251,897
2. Employer normal cost at beginning of year		1,386,352,090
3. Total employer contributions at beginning of year		-827,060,124
4. Interest		<u>1,282,205,614</u>
5. Expected unfunded actuarial accrued liability		\$31,451,749,477
6. Change due to the combined effect of experience gains, updated assumptions and methods and plan changes		<u>-8,334,470,460</u>
7. Unfunded actuarial accrued liability as of December 31, 2012		\$23,117,279,016

* Not available

SECTION 2: Valuation Results for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

The Annual Required Contribution (ARC) is the amount calculated to determine the annual cost of the OPEB plan for accounting purposes *as if* the plan were being funded through contributions to a trust fund. The GASB standards cannot require the contributions actually be made to a trust fund. The ARC is simply a device used to measure annual plan costs on an accrual basis. The calculation consists of adding the Normal Cost of the plan to an amortization payment. The resulting sum is then adjusted to the start of the accounting period and adjusted as if the annual cost were to be contributed in the middle of the year.

The amortization payment is based on a 30-year amortization of the Unfunded Actuarial Accrued Liability on an increasing payment basis at 3.50%.

CHART 3

Determination of Annual Required Contribution (ARC) – Payable Throughout Fiscal Year

Cost Element	Fiscal Year Beginning July 1, 2012 and Ending June 30, 2013		Fiscal Year Beginning July 1, 2011 and Ending June 30, 2012	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Normal cost	\$1,167,070,175	7.80%	\$1,386,352,090	9.33%
2. Amortization of the unfunded actuarial accrued liability (30 years)	853,956,134	5.71%	1,093,807,632	7.36%
3. Total Annual Required Contribution (ARC)	<u>\$2,021,026,309</u>	<u>13.51%</u>	<u>\$2,480,159,722</u>	<u>16.70%</u>
4. Total compensation	\$14,957,178,663		\$14,851,954,027	

SECTION 2: Valuation Results for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

The Annual OPEB Cost (AOC) adjusts the ARC for timing differences between the ARC and contributions in relation to the ARC. The AOC is the cost of OPEB actually booked as an expense for the Fiscal Year under GASB 45.

CHART 3 (continued)

Determination of Annual OPEB Cost (AOC) – Payable Throughout Fiscal Year

Cost Element	Fiscal Year Beginning July 1, 2012 and Ending June 30, 2013		Fiscal Year Beginning July 1, 2011 and Ending June 30, 2012	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Annual Required Contribution	\$2,021,026,309	13.51%	\$2,480,159,722	16.70%
2. Interest on beginning of year Net OPEB Obligation (NOO)	492,005,421	3.29%	420,486,046	2.83%
3. ARC adjustment	<u>-427,641,462</u>	<u>-2.86%</u>	<u>-365,478,224</u>	<u>-2.46%</u>
4. Annual OPEB cost	\$2,085,390,268	13.94%	\$2,535,167,544	17.07%

SECTION 2: Valuation Results for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

For GASB 43 (plan reporting) purposes, the schedule of employer contributions compares actual contributions to the ARC. For GASB 45 (employer reporting) purposes, the

schedule of employer contributions compares actual contributions to the AOC.

CHART 4

**Required Supplementary Information – Schedule of Employer Contributions
GASB 43**

Fiscal Year Ended June 30	Annual Required Contributions	Actual Contributions	Percentage Contributed
2007	\$2,389,583,000	\$550,942,204	23.06%
2008	2,714,184,000	825,081,155	30.40%
2009	2,674,416,000	635,675,084	23.77%
2010	3,018,959,000	677,827,218	22.45%
2011	2,910,615,707	868,263,454	29.83%
2012	2,480,159,722	852,358,729	34.37%
2013	2,021,026,309	844,452,283	41.78%

**Required Supplementary Information – Schedule of Employer Contributions
GASB 45**

Fiscal Year Ended June 30	Annual OPEB Cost	Actual Contributions	Percentage Contributed
2007	\$2,389,582,938	\$550,942,204	23.06%
2008	2,399,416,597	825,081,155	34.39%
2009	2,699,430,651	635,675,084	23.55%
2010	3,049,870,032	677,827,218	22.22%
2011	2,954,027,031	868,263,454	29.39%
2012	2,535,167,544	852,358,729	33.62%
2013	2,085,390,268	844,452,283	40.49%

SECTION 2: Valuation Results for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

This schedule of funding progress presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

CHART 5

Required Supplementary Information – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) – (a) / (c)]
12/31/2005	139,174,878	23,925,138,742	23,785,963,864	0.58%	12,359,975,359	192.44%
12/31/2007	296,500,252	28,890,229,747	28,593,729,495	1.03%	14,810,270,168	193.07%
12/31/2008	434,768,521	28,288,439,376	27,853,670,855	1.54%	15,295,559,646	182.10%
12/31/2009	556,303,039	33,321,783,854	32,765,480,815	1.67%	15,131,145,834	216.54%
12/31/2010	655,445,062	33,494,640,678	32,839,195,616	1.96%	15,098,336,130	217.50%
12/31/2011	729,094,584	30,339,346,481	29,610,251,897	2.40%	14,851,954,027	199.37%
12/31/2012	765,827,946	23,883,106,962	23,117,279,016	3.21%	14,957,178,663	154.56%

SECTION 2: Valuation Results for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

The Net OPEB obligation measures the accumulated differences between the annual OPEB cost and the actual contributions in relation to the ARC.

CHART 6

Required Supplementary Information – Net OPEB Obligation (NOO)

Actuarial Valuation Date	Fiscal Year End	Annual Required Contribution (a)	Interest on Existing NOO (b)	ARC Adjustment (c)	Annual OPEB Cost (a) + (b) + (c) (d)	Actual Contribution Amount (e)	Net Increase in NOO (d) – (e) (f)	NOO as of Fiscal Year (g)
12/31/2010	06/30/2011	\$2,910,615,707	331,841,094	(288,429,771)	\$2,954,027,031	868,263,454	2,085,763,576	\$9,893,789,327
12/31/2011	06/30/2012	2,480,159,722	420,486,046	(365,478,224)	2,535,167,544	852,358,729	1,682,808,815	11,576,598,142
12/31/2012	06/30/2013	2,021,026,309	492,005,421	(427,641,462)	2,085,390,268	844,452,283	1,240,937,985	12,817,536,127

SECTION 2: Valuation Results for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Employer contribution in relation to the ARC consist of benefits paid directly to or on behalf of a retiree or beneficiary, premiums paid to an insurer, or assets irrevocably transferred to OPEB trust.

CHART 7

Net Contribution In Relation to the ARC

Transaction	06/30/2013	Source of information	06/30/2012	Source of information
Claims paid net of refunds	\$853,623,268	SAS claims database	\$888,515,705	SAS claims database
Administrative load	46,671,747	Segal FYE 2013 Q4 financial updates	44,391,787	Aon 3/6/12 financial projection
Retiree/Dependent premiums	<u>(116,948,276)</u>	Enrollment & retiree contribution rates	<u>(109,199,098)</u>	Enrollment & retiree contribution rates
Net benefits paid	783,346,739	Sum of above	823,708,394	Sum of above
Employer contribution to trust	813,222,689	Retiree health reserve statement 06/30/2013	721,060,756	Retiree health reserve statement 06/30/2012
Transfer to SHP from trust	(752,117,145)	Retiree health reserve statement 06/30/2013	(692,410,421)	Retiree health reserve statement 06/30/2012
Net contribution in relation to the ARC	\$844,452,283	P. 15 Exh D Col [e]	\$852,358,729	P. 15 Exh D Col [e]

**SECTION 3: Supplemental Valuation Details for the North Carolina State Health Plan December 31, 2012
Measurement Under GASB 43 and 45**

This exhibit summarizes the participant data used for the current and prior valuations.

EXHIBIT A

Summary of Participant Data

	December 31, 2012	December 31, 2011
Retirees		
Number of retirees	170,070	163,171
Average age of retirees	69.3	69.1
Number of spouses	12,745	13,263
Average age of spouses	66.6	66.3
Surviving Spouses		
Number	2,566	2,686
Average age	80.4	79.9
Inactive Vesteds		
Number of inactive vested	32,511	30,241
Average age of inactive vested	48.0	48.0
Average expected retirement age	62.97	62.96
Active Participants		
Number	342,733	341,500
Average age	44.9	45.0
Average years of service	11.3	10.3
Average expected retirement age	58.5	58.7

**SECTION 3: Supplemental Valuation Details for the North Carolina State Health Plan December 31, 2012
Measurement Under GASB 43 and 45**

EXHIBIT B

Members in Active Service as of December 31, 2012 By Age and Service

Age	Service									
	Total	0-4	5-9	10-14	15-19	20-24	25 – 29	30 – 34	35 – 39	40 & Over
Under 25	11,179	11,113	64	1	1	-	-	-	-	-
25 - 29	31,481	24,099	7,334	46	1	-	1	-	-	-
30 - 34	37,596	15,420	17,654	4,482	40	-	-	-	-	-
35 - 39	39,798	12,517	12,478	11,439	3,334	29	-	-	1	-
40 - 44	49,080	12,665	13,282	10,054	10,070	2,959	49	-	-	1
45 - 49	47,913	10,256	11,789	9,137	6,903	7,049	2,752	27	-	-
50 - 54	48,846	8,640	10,828	9,196	7,210	5,701	6,155	1,099	17	-
55 - 59	43,226	6,483	9,170	7,768	6,830	5,910	4,546	1,991	520	8
60 - 64	24,856	3,588	5,601	4,534	3,820	3,451	2,043	1,005	678	136
65 - 69	6,771	907	1,689	1,327	885	752	496	349	243	123
70 & over	1,987	317	419	362	268	221	131	80	78	111
Total	342,733	106,005	90,308	58,346	39,362	26,072	16,173	4,551	1,537	379

**SECTION 3: Supplemental Valuation Details for the North Carolina State Health Plan December 31, 2012
Measurement Under GASB 43 and 45**

EXHIBIT C

Cash Flow Projections

The ARC generally exceeds the current pay-as-you-go (“paygo”) cost of an OPEB plan. Over time the paygo cost will tend to grow and may even eventually exceed the ARC in a well funded plan. The following table projects the paygo cost as the projected net fund payment over the next ten years.

Year Ending December 31	Projected Number of Retirees*			Projected Benefit Payments			Projected Retiree Contributions	Projected Net Fund Payment	Contribution Ratio
	Current	Future	Total	Current	Future	Total			
2013	185,381	17,529	202,910	771,059,294	61,551,069	832,610,363	115,930,036	716,680,327	13.92%
2014	180,351	32,301	212,652	645,731,874	164,312,219	810,044,093	84,407,283	725,636,810	10.42%
2015	175,229	46,267	221,496	625,479,789	271,423,025	896,902,814	94,256,516	802,646,298	10.51%
2016	170,029	60,125	230,154	606,157,497	378,255,428	984,412,925	105,916,923	878,496,002	10.76%
2017	164,745	73,691	238,436	585,630,858	485,107,623	1,070,738,481	119,323,856	951,414,625	11.14%
2018	159,400	87,019	246,419	569,410,345	587,006,799	1,156,417,144	134,439,250	1,021,977,894	11.63%
2019	153,982	99,643	253,625	554,133,111	686,647,827	1,240,780,938	149,347,432	1,091,433,506	12.04%
2020	148,499	111,828	260,327	538,672,014	787,023,991	1,325,696,005	162,662,560	1,163,033,445	12.27%
2021	142,956	123,736	266,692	523,644,771	887,905,423	1,411,550,194	175,482,648	1,236,067,546	12.43%
2022	137,364	135,420	272,784	507,190,025	987,499,868	1,494,689,893	187,204,986	1,307,484,907	12.52%

* Includes spouses of retirees.

**SECTION 3: Supplemental Valuation Details for the North Carolina State Health Plan December 31, 2012
Measurement Under GASB 43 and 45**

EXHIBIT D

ARC and NOO Projection

The following charts project the ARC and NOO through June 30, 2023 assuming a stable active population and that State contributions to the trust fund follow the current percent of pay methodology through the 2014 fiscal year and remain at 5.3% of pay thereafter. These contributions are expected to exceed transfers to the SHP by amounts similar to recent experience.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Normal Cost (c)	Unfunded AAL (b) - (a)	30-Year Amortization (d)	Annual Required Contribution (c) + (d)
12/31/2013	805,229,152	25,383,058,343	1,155,502,091	24,577,829,191	\$907,909,100	2,063,411,191
12/31/2014	846,965,985	26,929,537,536	1,161,279,601	26,082,571,551	963,494,533	2,124,774,134
12/31/2015	889,573,905	28,465,372,413	1,172,892,397	27,575,798,507	1,018,654,586	2,191,546,983
12/31/2016	933,219,846	30,001,151,869	1,190,485,783	29,067,932,023	1,073,774,246	2,264,260,029
12/31/2017	978,038,325	31,546,100,799	1,214,295,499	30,568,062,474	1,129,189,315	2,343,484,814
12/31/2018	1,024,158,439	33,109,492,072	1,244,652,887	32,085,333,634	1,185,237,564	2,429,890,451
12/31/2019	1,071,689,629	34,700,066,908	1,281,992,473	33,628,377,279	1,242,237,853	2,524,230,326
12/31/2020	1,120,678,645	36,324,068,882	1,326,862,210	35,203,390,237	1,300,419,094	2,627,281,304
12/31/2021	1,171,190,302	37,989,304,530	1,379,936,698	36,818,114,227	1,360,067,266	2,740,003,964
12/31/2022	1,223,357,473	39,707,730,048	1,442,033,850	38,484,372,575	1,421,619,127	2,863,652,977
Fiscal Year End	Annual Required Contribution (a)	Interest on Existing NOO (b)	Adjustment (c)	Annual OPEB Cost (a) + (b) + (c) (d)	Projected Contribution Amount (e)	NOO as of Fiscal Year (f)
06/30/2014	2,063,411,191	544,745,285	(473,481,917)	2,134,674,559	741,131,896	14,211,078,790
06/30/2015	2,124,774,134	603,970,849	(524,959,615)	2,203,785,368	784,774,207	15,630,089,951
06/30/2016	2,191,546,983	664,278,823	(577,378,124)	2,278,447,682	863,836,276	17,044,701,358
06/30/2017	2,264,260,029	724,399,808	(629,634,105)	2,359,025,732	939,032,776	18,464,694,314
06/30/2018	2,343,484,814	784,749,508	(682,088,881)	2,446,145,441	1,011,616,041	19,899,223,715
06/30/2019	2,429,890,451	845,717,008	(735,080,635)	2,540,526,823	1,082,498,420	21,357,252,118
06/30/2020	2,524,230,326	907,683,215	(788,940,447)	2,642,973,094	1,153,930,310	22,846,294,902
06/30/2021	2,627,281,304	970,967,533	(843,945,936)	2,754,302,901	1,227,183,943	24,373,413,861
06/30/2022	2,740,003,964	1,035,870,089	(900,357,964)	2,875,516,089	1,300,379,500	25,948,550,450
06/30/2023	2,863,652,977	1,102,813,394	(958,543,772)	3,007,922,599	1,374,883,884	27,581,589,165

**SECTION 3: Supplemental Valuation Details for the North Carolina State Health Plan December 31, 2012
Measurement Under GASB 43 and 45**

EXHIBIT E

Financial Information

Employers may accumulate assets to pay for future OPEB. In order to be treated as plan assets, the funds must be set aside in a trust fund or equivalent arrangement that has the following characteristics:

- a. Employer contributions are irrevocable
- b. Plan assets are dedicated to OPEB only
- c. Plan assets are legally protected from the creditors of the employer and the plan administrator.

North Carolina State Health Plan has an arrangement that meets those requirements.

Statement of Plan Net Assets

	Year Ended December 31, 2012	Year Ended December 31, 2011
Assets		
Cash equivalents	\$771,261,531	\$738,104,874
Investment income	282,486	377,214
Contributions receivable	<u>56,922,023</u>	<u>48,024,589</u>
Total assets	\$828,466,040	\$786,506,677
Liabilities		
Less accounts payable:	<u>-62,638,094</u>	<u>-57,412,093</u>
Net assets held in trust for other postemployment benefits	\$765,827,946	\$729,094,584

**SECTION 3: Supplemental Valuation Details for the North Carolina State Health Plan December 31, 2012
Measurement Under GASB 43 and 45**

EXHIBIT F

Statement of Changes in Plan Net Assets

	Year Ended December 31, 2012	Year Ended December 31, 2011
Additions		
Employer contributions*	\$756,750,625	\$739,410,330
Interest credited	<u>3,752,161</u>	<u>6,378,761</u>
Total additions:	\$760,502,786	\$745,789,091
Deductions		
Benefit Payments	\$723,429,964	\$671,786,854
Expenses	<u>339,460</u>	<u>352,715</u>
Total deductions	\$723,769,424	\$672,139,569
Net increase	\$36,733,362	\$73,649,522
Net assets held in trust for other postemployment benefits		
Beginning of year	\$729,094,584	\$655,445,062
End of year	\$765,827,946	\$729,094,584

** Employer contributions include both implicit and explicit subsidies for the retirees' cost of OPEB. These are the contributions in relation to the ARC.*

**SECTION 3: Supplemental Valuation Details for the North Carolina State Health Plan December 31, 2012
Measurement Under GASB 43 and 45**

EXHIBIT G

Detailed Actuarial Gain and Loss Analysis

If all actuarial assumptions had been exactly realized the ARC would have been expected to be \$2,548,184,950 this year. The actual ARC for this year is \$2,021,026,309, a difference of -\$527,158,641. The following chart identifies the sources of this difference.

Actuarial Gain and Loss

Item	Amount
Expected ARC	\$2,548,184,950
Experience loss	225,043,128
Assumption changes	-421,233,465
Plan changes	<u>-330,968,304</u>
Total change	-\$527,158,641
Actual ARC	<u>\$2,021,026,309</u>

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

EXHIBIT I

Summary of Required Supplementary Information

Valuation date	December 31, 2012	
Actuarial cost method	Projected Unit Credit. Service from hire date to full eligibility was used to allocate costs. Full eligibility in this context refers to the date when an employee retires, according to the valuation assumptions.	
Amortization method	Open 30-Year Amortization	
Remaining amortization period	30 years as of December 31, 2012	
Asset valuation method	Market Value	
Actuarial assumptions:		
Investment rate of return	4.25%	
Inflation rate	3.50%	
Projected salary increases	Vary by group and years of service	
Medical cost trend rate	8.00% graded to 5.00% over 8 years	
Plan membership:	December 31, 2012	December 31, 2011
Current retirees, beneficiaries, and dependents	185,381	179,120
Current active participants	342,733	341,500
Terminated participants entitled but not yet eligible	<u>32,511</u>	<u>30,241</u>
Total	560,625	550,861

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

EXHIBIT II

Actuarial Assumptions and Actuarial Cost Method

Data:	Detailed census data, premium data and/or claim experience, and summary plan descriptions for OPEB were provided by the State.
Actuarial Cost Method:	Projected Unit Credit. Service from hire date to full eligibility was used to allocate costs. Full eligibility in this context refers to the date when an employee retires, according to the valuation assumptions.
Asset Valuation Method:	Market Value
Measurement Date:	December 31, 2012
Discount Rate:	4.25%
Salary Increases:	Vary by group and years of service
Mortality Rates:	<p>RP-2000 Non-Annuitant and Annuitant Mortality Tables, with the following adjustments:</p> <p>Male teachers (healthy): one-year set back Female teachers (healthy): no adjustment Male general employee (healthy): one-year set forward Female general employees (healthy): one-year set forward Male law-enforcement officer (healthy): no adjustment Female law-enforcement officer (healthy): no adjustment Male beneficiaries of deceased members: one-year set forward Female beneficiaries of deceased members: two-year set forward Male retirees (disabled): six-year set back Female retirees (disabled): one-year set forward</p> <p>All mortality rates for employees and healthy annuitants are projected from December 31, 2003 using Scale AA. No mortality improvements are projected for disabled retirees.</p>

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Termination before retirement:

General Employees:

Age	Rate (%)					
	Mortality		Disability		Turnover*	
	Male	Female	Male	Female	Male	Female
25	0.0004	0.0002	0.0002	0.0002	0.0650	0.0900
30	0.0005	0.0003	0.0004	0.0004	0.0650	0.0800
35	0.0008	0.0005	0.0010	0.0010	0.0500	0.0600
40	0.0011	0.0008	0.0030	0.0018	0.0400	0.0400
45	0.0016	0.0012	0.0050	0.0032	0.0350	0.0400
50	0.0023	0.0018	0.0084	0.0050	0.0350	0.0400
55	0.0033	0.0028	0.0144	0.0088	0.0350	0.0400
60	0.0054	0.0043	0.0240	0.0138	0.0000	0.0000
65	0.0081	0.0062	0.0000	0.0000	0.0000	0.0000
69	0.0099	0.0076	0.0000	0.0000	0.0000	0.0000

Teachers:

Age	Rate (%)					
	Mortality		Disability		Turnover*	
	Male	Female	Male	Female	Male	Female
25	0.0004	0.0002	0.0001	0.0002	0.0600	0.0700
30	0.0004	0.0003	0.0001	0.0003	0.0550	0.0600
35	0.0007	0.0005	0.0003	0.0006	0.0400	0.0450
40	0.0010	0.0007	0.0007	0.0010	0.0350	0.0300
45	0.0014	0.0011	0.0014	0.0018	0.0350	0.0300
50	0.0020	0.0017	0.0023	0.0032	0.0350	0.0300
55	0.0028	0.0025	0.0047	0.0055	0.0350	0.0300
60	0.0044	0.0039	0.0077	0.0102	0.0000	0.0000
65	0.0070	0.0058	0.0000	0.0000	0.0000	0.0000
69	0.0091	0.0073	0.0000	0.0000	0.0000	0.0000

* Higher rates are used during the first five years of service.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Law Enforcement Officers:

	Rate (%)			
	Mortality		Disability	Turnover
	Male	Female		
25	0.0004	0.0002	0.0033	0.0400
30	0.0004	0.0003	0.0043	0.0350
35	0.0008	0.0005	0.0060	0.0300
40	0.0011	0.0007	0.0079	0.0300
45	0.0015	0.0011	0.0110	0.0300
50	0.0021	0.0017	0.0176	0.0300
55	0.0030	0.0025	0.0307	0.0000
60	0.0049	0.0039	0.0601	0.0000
65	0.0076	0.0058	0.0000	0.0000
69	0.0095	0.0073	0.0000	0.0000

** Higher rates are used during the first five years of service.*

Actives' Retirement Rates:

Age	General Employees		Teachers		Law Enforcement Officers
	Rate (%)		Rate (%)		Rate (%)
	Male	Female	Male	Female	Male Female
50	0.3500	0.3500	0.3000	0.3000	0.5000
55	0.2000	0.2250	0.3000	0.2750	0.5000
60	0.2250	0.2500	0.3000	0.2750	0.5000
65	0.3500	0.3500	0.3500	0.5000	0.4000
70	0.2250	0.2500	0.2500	0.2750	0.3000
75	1.0000	1.0000	1.0000	1.0000	1.0000

**Special rates are used for early service retirement.*

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Inactive Vested Retirement Rates: Age 55 with 20 or more years of service; age 63 with 5 or more years of service, but less than 20 years of service.

Actives and terminated vested who do not have plan code are assumed to be enrolled in the Standard PPO.

Missing date of birth or invalid date of birth are assumed an average value of the group. Invalid gender codes are replaced with the default of male.

Missing Participant Data: Any other missing census item for a given participant was assumed to equal the average value of that item over all other participants of the same status for whom the item is known.

Participation and Coverage Election: 100% of employees eligible to retire and receive subsidized postretirement welfare coverage were assumed to elect medical and prescription drug coverage. All participants are assumed to stay in the same plan in which they are currently enrolled.

Dependents: Demographic data was available for spouses of current retirees. For future retirees, husbands were assumed to be four years older than their wives. 10% of future retirees who elect to continue their health coverage at retirement were assumed to have an eligible spouse who also opts for health coverage at that time.

Per Capita Cost Development:

*Medical and Prescription
Drug*

Per capita claims costs were based on actual paid claim experience for the periods January 1, 2012 through December 31, 2012. Claims were separated by Medicare and Non-Medicare participants, then adjusted as follows:

- paid claims were multiplied by a factor to yield an estimate of incurred claims,
- total claims were divided by the number of adult members to yield a per capita claim,
- the per capita claim was trended to the midpoint of the valuation year at assumed trend rates, and the per capita claim was adjusted for the effect of any plan changes

Actuarial factors were then applied to the per capita claims to estimate individual retiree and spouse costs by age and by gender.

Medicare Basic claims costs include a 2% anti-selection load.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Administrative Expenses Medicare Advantage plans were valued by actuarially adjusting the insured premium rates by age and gender.
Administrative expenses were based on projection furnished by Segal for the period July 1, 2013 through June 30, 2014.

Per Capita Health Costs:

2013 medical and prescription drug claims costs, excluding assumed expenses, are shown in the table below for retirees and for spouses at selected ages. These costs are net of deductibles and other benefit plan cost sharing provisions. Health costs shown here are for the plan of benefits in effect for 2014 and later. Health costs for the 2013 plan design are not shown.

Non-Medicare Medical Basic					Non-Medicare Medical CDHP*			
Age	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
40	\$2,929	\$ 3,767	\$1,821	\$3,026	\$3,017	\$3,881	\$1,876	\$3,117
45	3,483	4,370	2,161	3,262	3,588	4,501	2,226	3,360
50	4,134	4,709	2,888	3,781	4,259	4,851	2,975	3,895
55	4,910	5,069	3,864	4,377	5,058	5,222	3,980	4,508
60	5,831	5,464	5,173	5,076	6,006	5,628	5,329	5,229
64	6,690	5,797	6,531	5,713	6,891	5,971	6,727	5,885
65	6,925	5,887	6,925	5,887	7,133	6,063	7,133	6,063
70	8,027	6,344	8,027	6,344	8,268	6,534	8,268	6,534
75	8,650	6,828	8,650	6,828	8,910	7,034	8,910	7,034
80	9,315	7,362	9,315	7,362	9,594	7,583	9,594	7,583

* Effective January 1, 2014

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Non-Medicare Medical Standard					Non-Medicare Rx			
Age	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
40	\$3,463	\$4,453	\$2,153	\$3,577	\$799	\$1,028	\$497	\$826
45	4,118	5,165	2,554	3,856	950	1,192	589	890
50	4,887	5,566	3,414	4,470	1,128	1,285	788	1,031
55	5,804	5,992	4,568	5,174	1,339	1,383	1,054	1,194
60	6,893	6,459	6,115	6,000	1,591	1,490	1,411	1,385
64	7,908	6,852	7,719	6,753	1,825	1,581	1,781	1,558
65	8,186	6,958	8,186	6,958	1,889	1,606	1,889	1,606
70	9,488	7,498	9,488	7,498	2,189	1,730	2,189	1,730
75	10,224	8,071	10,224	8,071	2,359	1,863	2,359	1,863
80	11,010	8,702	11,010	8,702	2,541	2,008	2,541	2,008

Medicare Advantage*					Medicare Basic			
Age	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
40	\$611	\$785	\$380	\$631	\$296	\$381	\$184	\$306
45	726	911	450	680	352	442	218	330
50	862	982	602	788	418	476	292	382
55	1,024	1,057	806	912	496	513	391	443
60	1,216	1,139	1,078	1,058	590	553	523	513
64	1,395	1,208	1,361	1,191	675	586	660	578
65	1,444	1,227	1,444	1,227	700	595	700	595
70	1,673	1,322	1,673	1,322	812	641	812	641
75	1,803	1,424	1,803	1,424	875	690	875	690
80	1,942	1,535	1,942	1,535	942	744	942	744

* Effective January 1, 2014

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Health Care Cost Trend Rates: *Health care trend measures the anticipated overall rate at which health plan costs are expected to increase in future years. The rates shown below are “net” and are applied to the net per capita costs shown above. The trend shown for a particular plan year is the rate that is applied to that year’s cost to yield the next year’s projected cost.*

Year Ending December 31,	Rate (%)	
	Medical and Prescription Drug	Admin
2013	8.00%	3.0%
2014	7.75%	3.0%
2015	7.50%	3.0%
2016	7.25%	3.0%
2017	7.00%	3.0%
2018	6.50%	3.0%
2019	6.00%	3.0%
2020	5.50%	3.0%
2021 & Later	5.00%	3.0%

**Medicare Part D Subsidy
Assumption:**

The State no longer participates in the Retiree Drug Subsidy (RDS) program. Subsidies implicit in lower costs for programs applicable to Medicare eligible participants are recognized in this valuation.

Retiree Contribution Increase Rate: Retiree contributions for medical and prescription drugs was assumed to increase at the same trend rate as medical and prescription drug cost.

Administrative Expenses: An administrative expense load of \$256 per participant increasing at 3.0% per year was added to projected incurred claims cost in developing the benefit obligations.

Plan Design: Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit III.

Annual Maximum Benefits: There are no annual maximum benefits assumed.

Lifetime Maximum Benefits: There are no lifetime maximum benefits assumed.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Migration Assumptions:

All participants are assumed to stay in the same plan in which they are currently enrolled prior to 2014. Starting in 2014, 3% of current non-Medicare Basic plan participants are assumed to be enrolled in the CDHP plan, 97% of current non-Medicare Basic Plan participants are assumed to stay in the Basic plan; 1.5% of current non-Medicare Standard plan participants are assumed to enroll in the CDHP plan, 98.5% of current non-Medicare Standard plan participants are assumed to stay in the Standard plan; 85% of Medicare participants are assumed to enroll in MA or MA+ plans, 15% of Medicare participants are assumed to enroll in the Medicare Basic plan. Note that before the 2014 plan change, we assumed 85% of Medicare eligible retirees would participate in the EGWP.

**Assumption Changes
since Prior Valuation:**

Medical and prescription drug claims cost were changed based on most recent experience.

Medical and prescription drug trend rates were changed to current schedule.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

EXHIBIT III

Summary of Plan

This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

Eligibility: Participants in the North Carolina State Health Plan for Teachers and State Employees who retire from the State, the University of North Carolina System, community colleges, local school systems, and certain other component units are eligible to continue to participate in the State Health Plan in retirement if they meet certain criteria. Former employees who are eligible to receive medical benefits are long-term disability beneficiaries of the Disability Income Plan of North Carolina (DIPNC) and retirees of the Teachers' and State Employees' Retirement System (TSERS), the Consolidated Judicial Retirement system (CJRS), the Legislative Retirement System (LRS), the University Employees' Optional Retirement Program (UEORP), and a small number of local governments. General retirement requirements are as follows:

Law Enforcement Officer:

- age 50 and 15 years of service;
- age 55 and 5 years of service; or
- any age with 30 or more years of service.

All Others:

- age 50 and 20 years of service;
 - age 60 and 5 years of service; or
 - any age with 30 or more years of service.
-

Benefit Types: Prior to 2014, Medical and prescription drug benefits are provided to all eligible retirees through two PPO plans. Starting 1/1/2014, Basic, Standard and CDHP will be offered to non-Medicare participants, and Basic, MA and MA+ will be offered to Medicare eligible participants.

Duration of Coverage: Lifetime for retirees and dependents

Dependent Benefits: Same as retirees

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Retiree Contributions:

Monthly contributions, effective January 1, 2014, are shown below.

For Retirees hired prior to October 1, 2006 (February 1, 2007 for legislators):

	Non-Medicare			Medicare		
	Basic	Standard	CDHP	Basic	MA	MA+
Retiree	\$0.00	\$63.56*	\$40.00*	\$0.00	\$0.00	\$33.00
Spouse	528.52	628.54	475.68	383.72	114.50	147.50

* Reduced by Wellness incentive credits for those who participate.

For Retirees hired after October 1, 2006 (February 1, 2007 for legislators), contributions are defined as a percentage of the total premium costs based on the following service based schedule:

Years of Service at Retirement	Retiree Contribution Percentage
5 – 9.99	100%
10 – 19.99	50%
20 or more	0%

100% of the total premium costs are show below:

	Non-Medicare			Medicare		
	Basic	Standard	CDHP	Basic	MA	MA+
Retiree	\$448.11	\$511.67*	\$488.11*	\$348.25	\$114.50	\$147.50
Spouse	528.52	628.54	475.68	383.72	114.50	147.50

* Reduced by Wellness incentive credits for those who participate.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Benefit Descriptions:

PPO Basic	In-Network	Out-Of-Network
Medical		
<i>Annual Deductible</i>	\$933/\$2,799	\$1,866/\$5,598
<i>Coinsurance</i>	70%	50%
<i>Coinsurance Maximum</i>	\$3,793/\$11,379	\$7,586/\$22,758
<i>Lifetime Maximum</i>	Unlimited	Unlimited
<i>Office Visit copay</i>		
<i>Primary Care</i>	\$35	Ded. & coins.
<i>Specialist</i>	\$81	Ded. & coins.
<i>Urgent Care</i>	\$87	\$87
<i>Inpatient Hospitalization</i>	\$291 + ded. & coins.	Same as in-network
<i>Outpatient Hospitalization</i>	ded. & coins.	ded. & coins.
<i>Emergency Room</i>	\$291 + ded. & coins.	Same as in-network
<i>Chiropractic</i>	\$64	Ded. & coins.
<i>Physical, Occupational or Speech Therapy</i>	\$64	Ded. & coins.
<i>Mental Health, Chemical Dependency</i>	\$35	coins.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Prescription Drugs (up to 30 day supply)	
<i>Tier 1</i>	\$12
<i>Tier 2</i>	\$40
<i>Tier 3</i>	\$64
<i>Tier 4 (Preferred Specialty)</i>	25% coins., \$100 max.
<i>Tier 5 (Non-Preferred Specialty)</i>	25% coins., \$150 max.
<i>Brand drug with a generic equivalent</i>	Tier 1 copay plus the difference in the cost to the Plan between the generic and brand name drug, not to exceed \$100 per 30-day supply of the brand name medication.
<i>Preferred diabetic testing supplies</i>	\$10
<i>Non-Preferred diabetic testing supplies</i>	\$25
<i>Out-of-Pocket Maximum</i>	\$2500

Coverage becomes secondary when former employees become eligible for Medicare.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

PPO Standard	In-Network	Out-Of-Network
Medical		
<i>Annual Deductible</i>	\$700/\$2,100	\$1,400/\$4,200
<i>Coinsurance</i>	80%	60%
<i>Coinsurance Maximum</i>	\$3,210/\$9,630	\$6,420/\$19,260
<i>Lifetime Maximum</i>	Unlimited	Unlimited
<i>Office Visit copay</i>		
<i>Primary Care</i>	\$30	Ded. & coins.
<i>Specialist</i>	\$70	Ded. & coins.
<i>Urgent Care</i>	\$87	\$87
<i>Inpatient Hospitalization</i>	\$233 + ded. & coins.	Same as in-network
<i>Outpatient Hospitalization</i>	ded. & coins.	ded. & coins.
<i>Emergency Room</i>	\$233 + ded. & coins.	Same as in-network
<i>Chiropractic</i>	\$52	Ded. & coins.
<i>Physical, Occupational or Speech Therapy</i>	\$52	Ded. & coins.
<i>Mental Health, Chemical Dependency</i>	\$30	coins.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Prescription Drugs (up to 30 day supply)	
<i>Tier 1</i>	\$12
<i>Tier 2</i>	\$40
<i>Tier 3</i>	\$64
<i>Tier 4 (Preferred Specialty)</i>	25% coins., \$100 max.
<i>Tier 5 (Non-Specialty)</i>	25% coins., 150 max
<i>Brand drug with a generic equivalent</i>	Tier 1 copay plus the difference in the cost to the Plan between the generic and brand name drug, not to exceed \$100 per 30-day supply of the brand name medication.
<i>Preferred diabetic testing supplies</i>	\$10
<i>Non-Preferred testing supplies</i>	\$25
<i>Out-of-Pocket Maximum</i>	\$2500

Coverage becomes secondary when former employees become eligible for Medicare.

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CDHP (Effective 1/1/2014)	In-Network	Out-Of-Network
Medical & Prescription Drug		
<i>Annual Deductible</i>	\$1,500/4,500	\$3,000/9,000
<i>Coinsurance</i>	85%	65%
<i>Lifetime Maximum</i>	Unlimited	Unlimited
<i>HRA</i>	\$500/\$1,500	\$500/\$1,500

MA (Effective 1/1/2014)	MA-PDP Basic	Humana MA-PDP Enhanced	UHC MA-PDP Enhanced
Medical			
<i>Annual Deductible</i>	\$0	\$0	\$0
<i>Coinsurance</i>	80%	80%	80%
<i>Coinsurance Maximum</i>	\$4,000	\$2,600	\$2,600
<i>Office Visit copay</i>			
<i>Primary Care</i>	\$20	\$10	\$10
<i>Specialist</i>	\$40	\$30	\$35
<i>Emergency Room</i>	\$65	\$50	\$50
<i>Lifetime Maximum</i>	Unlimited	Unlimited	Unlimited
<i>Office Visit copay</i>			
<i>Primary Care</i>	\$20	\$10	\$10
<i>Specialist</i>	\$40	\$30	\$35
<i>Preventive Care</i>	\$0	\$0	\$0
<i>Emergency Room</i>	\$65	\$50	\$50

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Prescription Drugs			
<i>Retail (up to 31 day supply)</i>			
<i>Tier 1</i>	\$10	\$7	\$5
<i>Tier 2</i>	\$40	\$35	\$30
<i>Tier 3</i>	\$64	\$50	\$40
<i>Tier 4</i>	25% coins., \$100 max.	25% coins., \$95 max.	25% coins., \$95 max.
<i>Out-of-Pocket Maximum</i>	\$2,500	\$2,500	\$2,500
<i>Mail Order (up to 90 day supply)</i>			
<i>Tier 1</i>	\$24	\$14	\$10
<i>Tier 2</i>	\$80	\$70	\$60
<i>Tier 3</i>	\$128	\$100	\$80
<i>Tier 4</i>	25% coins., \$300 max.	25% coins., \$190 max.	25% coins., \$200 max.
<i>Out-of-Pocket Maximum</i>	\$2,500	\$2,500	\$2,500

Plan Changes:

Effective January 1, 2014, a new CDHP plan for non-Medicare and MA, MA+ for Medicare participants will be added. Standard 80/20 plan for Medicare participants will be removed.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

EXHIBIT IV

Definitions of Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial

Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;
- (b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) Retirement rates — the rate or probability of retirement at a given age;
- (d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

**Actuarial Present Value of Total
Projected Benefits (APB):**

Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.

Normal Cost:

The amount of contributions required to fund the benefit allocated to the current year of service.

**Actuarial Accrued Liability
For Actives:**

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

**Actuarial Accrued Liability
For Retirees:**

The single sum value of lifetime benefits to existing retirees. This sum takes account of life expectancies appropriate to the ages of the retirees and of the interest which the sum is expected to earn before it is entirely paid out in benefits.

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

Actuarial Value of Assets (AVA):	The value of assets used by the actuary in the valuation. These may be at market value or some other method used to smooth variations in market value from one valuation to the next.
Funded Ratio:	The ratio AVA/AAL.
Unfunded Actuarial Accrued Liability (UAAL):	The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.
Amortization of the Unfunded Actuarial Accrued Liability:	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
Investment Return (discount rate):	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next. If the plan is funded on a pay-as-you-go basis, the discount rate is tied to the expected rate of return on day-to-day employer funds.
Covered Payroll:	Annual reported salaries for all active participants on the valuation date.
ARC as a Percentage of Covered Payroll:	The ratio of the annual required contribution to covered payroll.
Health Care Cost Trend Rates:	The annual rate of increase in net claims costs per individual benefiting from the Plan.
Annual Required Contribution (ARC):	The ARC is equal to the sum of the normal cost and the amortization of the unfunded actuarial accrued liability.

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Net OPEB Obligation (NOO):

The NOO is the cumulative difference between the ARC and actual contributions made. If the plan is not pre-funded, the actual contribution would be equal to the annual benefit payments less retiree contributions. There are additional adjustments in the NOO calculations to adjust for timing differences between cash and accrual accounting, and to prevent double counting of OPEB plan costs.

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EXHIBIT V

Accounting Requirements

The Governmental Accounting Standards Board (GASB) issued Statement Number 43 – *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, and Statement Number 45 – *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. Under these statements, all state and local government entities that provide other post employment benefits (OPEB) are required to report the cost of these benefits on their financial statements. The accounting standards supplement cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (*i.e.*, a pay-as-you-go basis).

The statements cover postemployment benefits of health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. The benefits valued in this report are limited to those described in Exhibit III of Section 4, which are based on those provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits is not limited by legal or contractual limits on funding the plan unless those limits clearly translate into benefit limits on the substantive plan being valued.

The new standards introduce an accrual-basis accounting requirement, thereby recognizing the employer cost of postemployment benefits over an employee's career. The standards also introduce a consistent accounting requirement for both pension and non-pension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions. These assumptions are summarized in Exhibit II of Section 4. This amount is then discounted to determine the actuarial present value of the total projected benefits (APB). The actuarial accrued liability (AAL) is the portion of the present value of the total projected benefits allocated to years of employment prior to the measurement date. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and actuarial value of assets in the Plan.

Once the UAAL is determined, the Annual Required Contribution (ARC) is determined as the normal cost (the APB allocated to the current year of service) and the amortization of the UAAL. This ARC is compared to actual contributions made and any difference is reported as the Net OPEB Obligation (NOO). In addition, Required Supplementary Information (RSI) must be reported, including historical information about the UAAL and the progress in funding the Plan. Exhibits IV and VI of Section

SECTION 4: Supporting Information for the North Carolina State Health Plan December 31, 2012 Measurement Under GASB 43 and 45

4 contain a definition of terms as well as more information about GASB 43/45 concepts.

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short term volatility in accrued liabilities and the actuarial value of assets, if any.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

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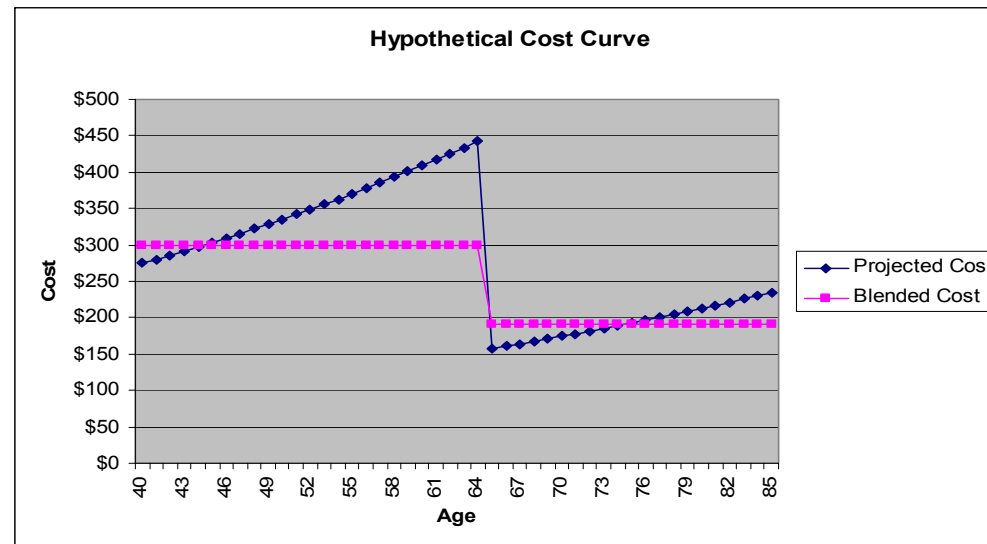
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EXHIBIT VI

GASB 43/45 Concepts

The following graph illustrates why a significant accounting obligation may exist even though the retiree contributes most or all of the blended premium cost of the plan. The average cost for retirees is likely to exceed the average cost for the whole group, leading to an implicit

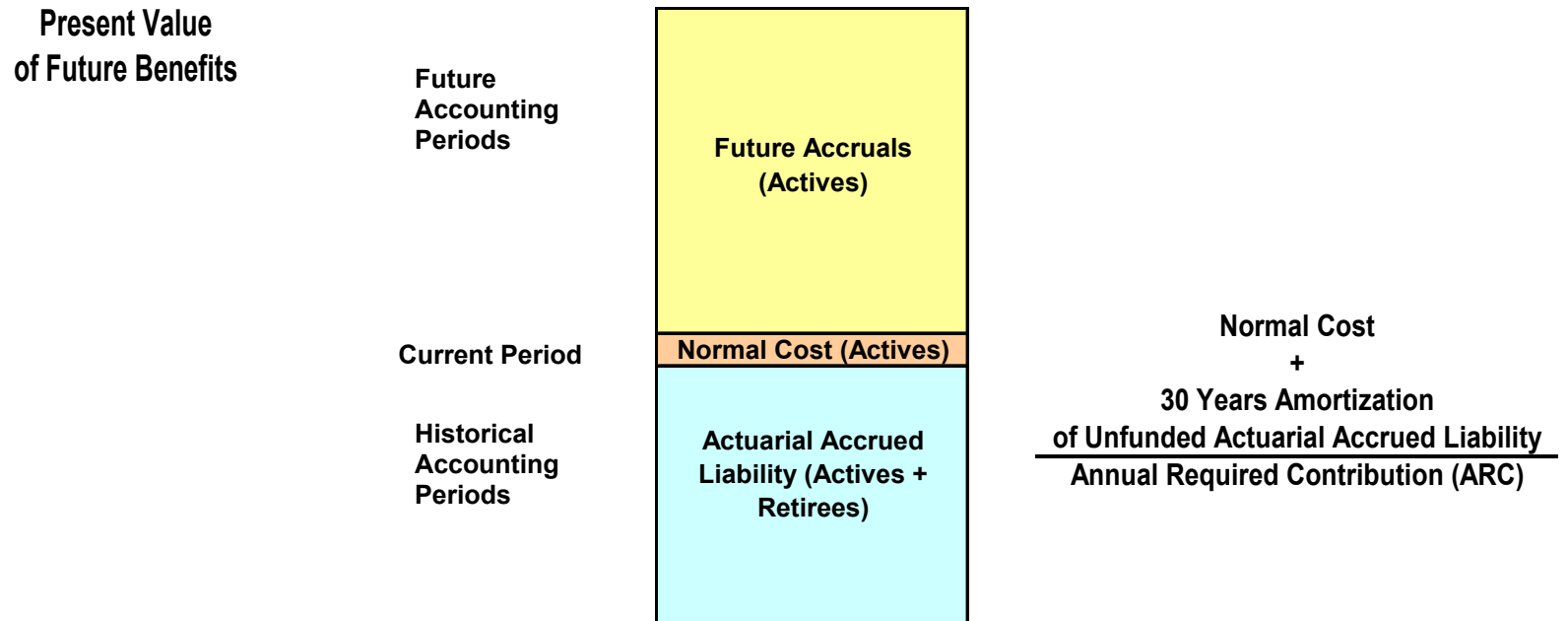
subsidy for these retirees. The accounting standard requires the employer to identify and account for this implicit subsidy as well as any explicit subsidies the employer may provide.



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This graph shows how the actuarial present value of the total projected benefits (APB) is broken down and allocated to various accounting periods. The exact breakdown depends on the actuarial cost method and amortization methods selected by the employer.

GASB 43/45 Measurement Elements Using Actuarial Cost Methods



$$\begin{aligned} \text{Net OPEB Obligation} &= \text{ARC}_1 + \text{ARC}_2 + \text{ARC}_3 + \dots \\ &\quad - \text{Contribution}_1 - \text{Contribution}_2 - \text{Contribution}_3 - \dots \end{aligned}$$