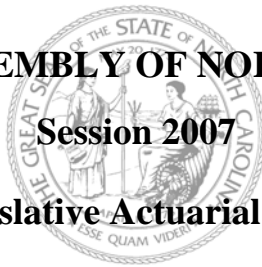


GENERAL ASSEMBLY OF NORTH CAROLINA



Session 2007

Legislative Actuarial Note

HEALTH BENEFITS

BILL NUMBER: House Bill 1593 (Second Edition)

SHORT TITLE: State Health Plan/Change to Calendar Year.

SPONSOR(S): Representatives Folwell, Coleman, Samuelson, and Avila

SYSTEM OR PROGRAM AFFECTED: Teachers' and State Employees' Comprehensive Major Medical Plan.

FUNDS AFFECTED: State General Fund, State Highway Fund, other State employer receipts, premium payments for dependents by active and retired teachers and State employees, premium payments for coverages selected by eligible former teachers and State employees, premium payments for coverages selected by firefighters, rescue squad workers, members of the National Guard, and certain authorized local governments.

BILL SUMMARY: Proposed Committee Substitute defines "plan year" to be an annual period established by the Plan's Executive Administrator and the Board of Trustees. Further authorizes the Executive Administrator and the Board of Trustees with discretionary authority to change the plan year to a calendar year basis, from the current fiscal year basis, by spending funds available in the Plan's fund balance, if sufficient, to support the additional cost of transitioning to a calendar year based plan year.

EFFECTIVE DATE: When it becomes law.

ESTIMATED IMPACT ON STATE: The consulting actuary for the Plan, Aon Consulting, estimates the proposed legislation would cost the Plan \$26.6 million over the 2007-2009 biennium assuming a January 1, 2009 implementation date by the Executive Administrator and Board of Trustees.

The consulting actuary for the General Assembly, Hartman & Associates, estimates the proposed change would cost the Plan \$11.0 million in the 2008-2009 fiscal year assuming a January 1, 2009 implementation date by the Executive Administrator and Board of Trustees.

Each consulting actuary noted that the timing of when claims are incurred could significantly impact whether the Plan experiences a gain or loss within any specified period of time. Aon Consulting states that an analysis "could demonstrate a cost or savings from this change, but over time, it is approximately budget neutral." Hartman & Associates analysis notes a financial impact is expected to occur in the 2008-2009 fiscal year, and that the impact to the Plan would vary based on the timing of payments within that fiscal year; otherwise the impact would be negligible after the 2008-2009 fiscal year.

The cost estimate by each consulting actuary varies significantly in amount of cost as measured by total dollars of impact. However, the impact as a percent of total projected net claims is much less, between 0.49% and 0.58%, based on the Plan's May 29, 2007 estimate of total projected net claims of \$2.284 billion for the 2008-2009 fiscal year. This estimate of total projected net claims are measured prior to any expected premium or benefit changes for the 2007-2009 biennium to keep the Plan funded adequately.

ASSUMPTIONS AND METHODOLOGY:

General Assumptions for HB 1593:

According to the Plan's staff, by changing from a fiscal year to calendar year basis, a 6 month "short" plan year will be required to transition from the current fiscal year basis to the proposed calendar year basis. That 6 month plan year is assumed to occur from July 1, 2008 to December 31, 2008. The Plan has stated that it will halve the out-of-pocket annual deductible and co-insurance maximum requirements for plan members during that transition period. The Plan's staff has also assumed a January 1, 2009 implementation date for purposes of the actuarial estimates conducted by each consulting actuary.

For purposes of actuarial estimation, it is normally assumed the Plan will require a premium increase in October 2007 for the 2007-2009 biennium, plus other changes affecting the Plan's financial condition, to carry out operations 3 months beyond the end of the biennium. For the 2007-2009 biennium, the projection period is through the end of September 2009. This projection of financial need beyond the end of the biennium is normally incorporated into the financial projections to fund the Plan until its next presumed premium increase in October 2009.

Under the proposed bill, the change to a calendar year basis for a benefit plan year requires the Plan to operate an additional 6 months beyond the end of the biennium, through the end of December 2009. This will require the Plan to operate 6 months beyond the end of the biennium based on its 2007-2009 biennium funding until the next presumed premium increase, plus other changes affecting the Plan's financial condition, become effective in January 2010.

Assumptions for HB 1593 by Consulting Actuary

Hartman and Associates: The information below reflects the verbatim assumptions of the General Assembly's consulting actuary with respect to the estimate of cost reduction:

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The change to a calendar plan year would affect the application of annual member cost sharing limits under the Plan. The Plan has indicated that if a change to a calendar year were made, the transition period would be six months from July through December, with one-half the applicable member deductible and out-of-pocket maximum applying for this period. They have also assumed the transition period would be July 1, 2008 through December 31, 2008, with full calendar year plan years beginning January 1, 2009.

Under these assumptions, the main financial impact on the Plan from this bill will occur during fiscal year 2009, the year containing the transition of the Plan year. Fiscal year 2009 will contain both a partial Plan year and the first half of a full Plan Year. Depending on when his claims occur during the fiscal year, a Plan member's maximum deductible and out-of-pocket maximum may be from 50% to 150% of the standard limits. This would create a loss or gain to the Plan.

Based on my analysis of the Plan claims data, I have estimated the cost for this bill at \$11.0 million for fiscal year 2009. For later fiscal years, this change would impact the timing of Plan payments, but the overall impact is expected to be negligible.

I note that if the change to a calendar year occurred at a later date than January 1, 2009, the cost would be greater than the above estimate due to a higher level of overall Plan expenses.

The above estimates are based on analysis of prior Plan claims experience, the change to a calendar year effective January 1, 2009, and pro-rated benefit limits for a partial Plan year prior to the change. I have not assumed any additional migration from the Indemnity Plan to the PPO's. The basic assumptions and data are included in Attachment #1. [below].

House Bill 1593 Actuarial Assumptions and Data

Data Sources: SHP Distribution of Claims Reports FY 2003-06
 SHP Charge Summary Reports FY 2005-06
 SHP Pharmacy Utilization Reports FY 2004-06

Data Summary:

Distribution of Claims FY2006	
Annual Eligible Charges	Percent of Plan Members
<\$150	13.8%
150-300	4.2%
300-500	4.5%
500-1,000	9.4%
1,000-5,000	34.0%
5,000-10,000	14.6%
10,000-20,000	10.0%
20,000-40,000	5.5%
>40,000	4.0%

Distribution of Deductible During Plan Year *		
Year	First Half	Second Half
FY 2006	61.8%	38.2%
FY 2005	64.8%	35.2%

* Percent of member deductible paid in selected period

Plan Members:	Indemnity	255,211
	PPO	363,477

Actuarial Assumptions:

Annual Claims Trend	10.0% on total claims
Membership Growth	0.0%
Pct. Elig. Charge Allowed	75.0%
Average Allowed Charge Subject to Ded/Coins	\$3,652

Plan Limits:

Member Annual Limit	Indemnity	PPO
Deductible	\$350	\$300
Coinsurance Max	\$2,000	\$1,750

Sample Costs:

Fiscal Year 2009 Cost for Average Member	
Occurrence of Member's Claims	Plan Cost
Only First Half	\$128.00
Only Second Half	\$ 0.00
Throughout Year	\$(128.00)

Total Plan Cost:

Fiscal Year 2009 Cost Cash Claims Paid Basis	
Time Period	Plan Cost
Jul – Dec, 2008	\$39,068,100
Jan – Jun, 2009	(27,981,200)
Total for Year	\$11,086,900

<End quote>

Aon Consulting: The information below reflects the verbatim comments and assumptions of the Plan’s consulting actuary with respect to the projection of funding need and estimate of cost reduction:

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PRICING APPROACH AND COMMENTS

The following information was compiled and utilized in determining the projected costs or savings of the benefit component addressed in this actuarial note:

- It was assumed that the plan will operate a short plan year, July 1, 2008 through December 31, 2008. The deductibles and out-of-pocket maximum would be 50% of the annual amounts. The plan has the option of having a long plan year but the cost would be excessive and not a viable alternative. The plan would then have a calendar year program effective January 1, 2009.
- Claims distributions were received from Aon’s Proprietary Rating Manual and Acclaim Data Reporting System. The distributions were reduced 19% to reflect the removal of pharmacy claims data and expected medical payments. Only Non-Medicare members were used in the distribution. This database was the source for splitting annual claims distributions into two unique 6-month periods. The claims distribution was normalized to be consistent with the seasonal claims experience anticipated for the SHP over the next biennium.
- Using the 6-month period distributions, Aon estimated claims using under the current plan provisions and then processed under the next calendar plan year with an initial short-plan year. Using the most recent enrollment, 66% of the members were processed using the NC Smartchoice PPO option benefit provisions and 34% were processed using the Indemnity plan provisions. The incurred results of the projection are displayed below:

Fiscal Year	6-month period	Baseline	Plan Year Change	Diff	%
FY09	July-Dec	\$ 753,233,110	\$ 818,407,820	\$ 65,174,711	8.7%
FY09	Jan-June	\$ 883,582,531	\$ 747,426,261	\$ (136,156,270)	-15.4%
FY10	July-Dec	\$ 826,055,028	\$ 972,353,222	\$ 146,298,194	17.7%
FY10	Jan-June	\$ 976,688,296	\$ 826,055,028	\$ (150,633,268)	-15.4%
FY11	July-Dec	\$ 912,476,804	\$ 1,067,201,848	\$ 154,725,044	17.0%
FY11	Jan-June	\$ 1,071,293,624	\$ 912,476,804	\$ (158,816,820)	-14.8%
FY09		\$ 1,636,815,641	\$ 1,565,834,081	\$ (70,981,560)	-4.3%
FY10		\$ 1,802,743,324	\$ 1,798,408,250	\$ (4,335,074)	-0.2%

- The plan operates on a paid basis and the above numbers would need to reflect two months of claims processing lag. These numbers were adjusted to a paid basis and are detailed below:

Fiscal Year	6-month period	Baseline	Plan Year Change	Diff	%
FY09	July-Dec	\$ 742,101,586	\$ 785,551,393	\$ 43,449,807	5.9%
FY09	Jan-June	\$ 870,524,661	\$ 801,478,718	\$ (69,045,943)	-7.9%
FY10	July-Dec	\$ 813,847,318	\$ 865,994,024	\$ 52,146,706	6.4%
FY10	Jan-June	\$ 962,254,479	\$ 910,598,365	\$ (51,656,114)	-5.4%
FY11	July-Dec	\$ 898,991,925	\$ 951,930,865	\$ 52,938,940	5.9%
FY11	Jan-June	\$ 1,055,461,698	\$ 1,001,158,833	\$ (54,302,865)	-5.1%
FY09		\$ 1,612,626,247	\$ 1,587,030,111	\$ (25,596,136)	-1.6%
FY10		\$ 1,776,101,798	\$ 1,776,592,389	\$ 490,592	0.0%
July,2008 to December 2009		\$ 2,426,473,565	\$ 2,453,024,135	\$ 26,550,570	1.1%

- Note that timing is an important issue in the savings reported in this actuarial note. Moving the plan year to January would require the plan to pre-fund through December 2009, when the next premium increase would occur. Although a \$26.6 million cost would be reported in the next biennium, it will be eliminated in the 3-month period January 1, 2010 through March 30, 2010. At any point in time you could demonstrate a cost or savings from this change, but over time, it is approximately budget neutral.
- In order to make this change budget neutral, the plan would need to have two premium increases instead of one every two-years. The premium increases were traditionally made in October in the first year of the biennium. Consistent with the private sector's annual increase, we would recommend a lower premium increase on October 2007, with an additional increase on January 2009. This would minimize pre-funding a portion of the 2009-2011 biennium within the 2007-2009 biennium period.
- The bill requires that the plan has sufficient funds available. If experience does not yield sufficient reserves, the plan will not be able to move the plan year. If this occurs, the cost of the actuarial note would be \$0.

<End quote>

General Plan Assumptions

The Plan currently operates on a self-insured basis funded through premium contributions, investment earnings and other receipts. As of October 1, 2006, the Plan operates an Indemnity plan and an optional Preferred Provider Option (PPO) program. Claim cost trends are expected to increase at a rate of 9% annually according to the Plan's consulting actuary. Investment earnings are based upon a 4.5% return on available cash balances.

Combined Financial Components of the Plan: For the fiscal year beginning July 1, 2006, the Plan started its operations with a beginning cash balance of \$246 million. Receipts for the year are estimated to be \$1.946 billion from premium collections, \$34 million from Medicare Part D subsidies and \$11 million from investment earnings for a total of \$1.991 billion in receipts for the year. Disbursements from the Plan are expected to be \$1.977 billion in claim payments and \$105

million in administration and claims processing expenses for a total of \$2.082 billion. For the fiscal year beginning July 1, 2006, the self-insured indemnity program is expected to have a net operating loss of approximately \$91 million for the year. The Plan is expected to have an available beginning cash balance of \$155 million for the fiscal year beginning July 1, 2007. The Plan program maintains a claim stabilization reserve for claim cost fluctuations equal to 7.5% of annual claim payments without reserving additional funds for incurred but unreported claims.

Indemnity Plan Component: For the fiscal year beginning July 1, 2006, the Indemnity plan started its operations with a beginning cash balance of \$246 million. Receipts for the year are estimated to be \$1.113 billion from premium collections, \$34 million from Medicare Part D subsidies and \$9.5 million from investment earnings for a total of \$1.156 billion in receipts for the year. Disbursements from the Indemnity plan are expected to be \$1.213 billion in claim payments and \$66 million in administration and claims processing expenses for a total of \$1.279 billion. For the fiscal year beginning July 1, 2006, the self-insured indemnity program is expected to have a net operating loss of approximately \$123 million for the year. The Indemnity plan is expected to have an available beginning cash balance of \$123 million for the fiscal year beginning July 1, 2007.

PPO Program Component: For the fiscal year beginning July 1, 2006, the PPO program started its operations with a beginning cash balance of \$0 million. Receipts for the year are estimated to be \$833 million from premium collections, \$0 million from Medicare Part D subsidies and \$1.5 million from investment earnings for a total of \$835 million in receipts for the year. Disbursements from the Indemnity plan are expected to be \$763 million in claim payments and \$39 million in administration and claims processing expenses for a total of \$803 million. For the fiscal year beginning July 1, 2006, the self-insured indemnity program is expected to have net operating income of approximately \$32 million for the year. The Plan is expected to have an available beginning cash balance of \$32 million for the fiscal year beginning July 1, 2007. The Plan program maintains a claim stabilization reserve for claim cost fluctuations equal to 7.5% of annual claim payments without reserving additional funds for incurred but unreported claims.

The Plan is consequently assumed to not be able to carry out its operations for the 2007-2009 biennium without increases in its current premium rates or a reduction in existing benefits or payments to health care providers or both. This assumption is further predicated upon the fact that the program's cost containment strategies (hospital DRG reimbursements, discounts on hospital outpatient services, pre-admission hospital testing, pre-admission hospital inpatient certification with length-of-stay approval, hospital bill audits, case and disease management for selected medical conditions, mental health case management, coordination of benefits with other payers, Medicare benefit "carve-outs", cost reduction contracts with participating physicians and other providers, a prescription drug benefit manager with manufacturer rebates from formularies, and fraud detection) are maintained and improved where possible.

Enrollment Data

<u>Percent Enrollment by Age</u>	Indemnity <u>Plan</u>	PPO <u>Options</u>	<u>Total</u>
29 & Under	16.6%	33.6%	26.6%
30 to 44	14.2%	24.7%	20.4%
45 to 54	16.0%	21.3%	19.1%
55 to 64	21.9%	16.4%	18.7%
65 & Over	31.3%	4.1%	15.3%

<u>Percent Enrollment by Sex</u>	Indemnity <u>Plan</u>	PPO <u>Options</u>	<u>Total</u>	Percent of <u>Total</u>
Female	62.4%	162,497	223,760	386,257
Male	<u>37.6%</u>	<u>92,714</u>	<u>139,717</u>	<u>232,431</u>
Total	100.0%	255,211	363,477	618,688

Plan Enrollment as of December 31, 2006

<u>No. of Participants</u>	Indemnity <u>Plan</u>	PPO <u>Options</u>	<u>Total</u>	Percent of <u>Total</u>
<u>Actives</u>				
Employees	100,405	211,349	311,754	50.4%
Dependents	<u>32,776</u>	<u>112,785</u>	<u>145,561</u>	<u>23.5%</u>
Sub-total	133,181	324,134	457,315	73.9%
<u>Retired</u>				
Employees	108,263	29,764	138,027	22.3%
Dependents	<u>11,876</u>	<u>7,700</u>	<u>19,576</u>	<u>3.2%</u>
Sub-total	120,139	37,464	157,603	25.5%
<u>Former Employees with Continuation Coverage</u>				
Employees	1,391	297	1,688	0.3%
Dependents	<u>478</u>	<u>154</u>	<u>632</u>	<u>0.1%</u>
Sub-total	1,869	451	2,320	0.4%
<u>Firefighters, Rescue Squad & National Guard</u>				
Employees	5	2	7	0.0%
Dependents	<u>-</u>	<u>2</u>	<u>2</u>	<u>0.0%</u>
Sub-total	5	4	9	0.0%
<u>Local Governments</u>				
Employees	16	1,045	1,061	0.1%
Dependents	<u>1</u>	<u>379</u>	<u>380</u>	<u>0.1%</u>
Sub-total	17	1,424	1,441	0.2%
<u>Total</u>	<u>255,211</u>	<u>363,477</u>	<u>618,688</u>	
Percent of Total	41.3%	58.7%	100.0%	100.0%

SOURCES OF DATA:

-Actuarial Note, Hartman & Associates, House Bill 1593 Proposed Committee Substitute, July 24, 2007, original of which is on file in the General Assembly's Fiscal Research Division.

-Actuarial Note, Aon Consulting, Proposed Committee Substitute H1593-CSLB-76 [v.2], July 24, 2007, original of which is on file with the Comprehensive Major Medical Plan for Teachers and State Employees and the General Assembly's Fiscal Research Division.

TECHNICAL CONSIDERATIONS: None

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Fiscal Research Division

DATE: July 31, 2007



Signed Copy Located in the NCGA Principal Clerk's Offices