

**REPORT ON THE ACTUARIAL VALUATION OF THE
DISABILITY INCOME PLAN OF NORTH CAROLINA
PREPARED AS OF DECEMBER 31, 2009**

January 4, 2011

Board of Trustees
Teachers' and State Employees'
Retirement System of North Carolina
325 North Salisbury Street
Raleigh, NC 27603

Members of the Board:

This report presents the results of the valuation of the Disability Income Plan of North Carolina, prepared as of December 31, 2009.

An investigation of the demographic, economic and other assumptions for the Teachers' and State Employees' Retirement System of North Carolina (TSERS) was made during 2010. This valuation includes all assumption changes approved by the Board of Trustees as a result of this investigation.

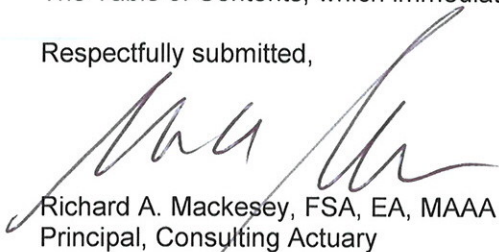
An audit of the "Report on the Actuarial Valuation of the Disability Income Plan of North Carolina prepared as of December 31, 2007" was completed during 2010. Buck reviewed the findings of the audit report with the Retirement Systems Division and agreed to make certain changes to the valuation report. These changes have been included in this valuation.

The plan sponsor selected the assumptions used for the results in this report. I believe that these assumptions are reasonable and comply with the requirements of GASB Nos. 43 and 45. I prepared this report in accordance with the requirements of these standards.

I am an Enrolled Actuary, a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions about it.

The Table of Contents, which immediately follows, outlines the material contained in this report.

Respectfully submitted,



Richard A. Mackesey, FSA, EA, MAAA
Principal, Consulting Actuary

RAM:km
\\NC\VAL\2009\DISABILITY.DOC

Table of Contents

Section	Item	Page
I	Introduction	1
II	Summary of Principal Results	1
III	Membership Data	3
IV	Assets	4
V	Condition of the Plan	5
VI	Experience	6
VII	Accounting Information	7
Schedule		
A	Detailed Tabulations of the Active Member Data	11
B	Detailed Tabulations of the Disabled Member Data	16
C	Development of Actuarial Value of Assets	20
D	Statement of Actuarial Assumptions and Methods	21
E	Summary of Main Benefit Provisions as Interpreted for Valuation Purposes	29

**REPORT ON THE ACTUARIAL VALUATION OF THE
DISABILITY INCOME PLAN OF NORTH CAROLINA
PREPARED AS OF DECEMBER 31, 2009**

SECTION I - INTRODUCTION

1. This report presents the results of the actuarial valuation of the Disability Income Plan of North Carolina, prepared as of December 31, 2009. The purpose of the valuation is to determine the present value of future payments to disabled members as of December 31, 2009, to determine the expected cost of new claims for 2010, and to provide the Annual Required Contribution under GASB Statements 43 and 45 for postemployment benefits.
2. Schedule A of this report presents detailed tabulations of the active membership of the plan as of the valuation date.
3. Schedule B of this report presents detailed tabulations of the disabled membership of the plan as of the valuation date.
4. Schedule C of this report presents the development of the actuarial value of assets.
5. Schedule D outlines the full set of actuarial assumptions and methods employed.
6. The valuation was based on provisions of the Plan as amended through December 31, 2009. A summary of the main Plan provisions used for valuation purposes appears in Schedule E.

SECTION II - SUMMARY OF PRINCIPAL RESULTS

For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized on the following page.

TABLE I
SUMMARY OF PRINCIPAL RESULTS

	12/31/2009	12/31/2008
Valuation Data		
Number of active members		
Teachers' and State Employees'		
Retirement System	316,647	325,618
Optional Retirement Program	<u>13,346</u>	<u>13,333</u>
Total	329,993	338,951
Reported compensation		
Teachers' and State Employees'		
Retirement System	\$ 13,253,029,516	\$ 13,267,554,255
Optional Retirement Program	<u>1,281,631,887</u>	<u>1,225,511,773</u>
Total	\$ 14,534,661,403	\$ 14,493,066,028
Valuation compensation		
Teachers' and State Employees'		
Retirement System	\$ 13,940,920,882	\$ 14,187,881,569
Optional Retirement Program	<u>1,320,707,193</u>	<u>1,280,694,403</u>
Total	\$ 15,261,628,075	\$ 15,468,575,972
Number of disabled members receiving		
Long term disability benefits	6,089	6,214
Annual reported benefits	\$ 74,017,284	\$ 79,155,058
Assets and Liabilities		
Assets		
Actuarial Value	\$ 352,627,921	\$ 350,145,153
Market Value	342,424,419	341,487,657
Liability for currently disabled members	\$ 341,453,498	\$ 357,201,848
Deficit/(Surplus)	\$ (11,174,423)	\$ 7,056,695
GASB 43/45		
Annual required contribution (ARC)		
Normal cost	0.46%	0.46%
Accrued liability	<u>-</u>	<u>-</u>
Total	0.46%	0.46%

TABLE II
RECONCILIATION OF CHANGE IN ANNUAL REQUIRED CONTRIBUTION

Prior Year's Preliminary ARC (based on 12/31/08 valuation)	0.46%
Impact of Legislative Changes	<u>0.00%</u>
Prior Year's Final ARC	0.46%
Change Due to Demographic (Gain)/Loss	(0.02%)
Change Due to Investment (Gain)/Loss	0.00%
Assumption Changes and Method Changes	<u>0.02%</u>
Current Year's Preliminary ARC (based on 12/31/09 valuation)	0.46%

SECTION III - MEMBERSHIP DATA

1. Data for 316,647 active members of the Teachers' and State Employees' Retirement System with reported compensation of \$13,253,029,516 and 13,346 members of the Optional Retirement Program with reported compensation of \$1,281,631,887 were furnished by the Director as of December 31, 2009. The reported compensation includes annual longevity payments. The number and reported compensation of active members, distributed by age, as of December 31, 2009 are shown in Schedule A.
2. The membership service requirement for short term disability benefits under the Plan is one year and the membership service requirement for long term disability benefits under the Plan is five years.
3. The Director also supplied data for 6,089 disabled employees in receipt of annual long-term disability benefits totaling \$74,017,284 as of the valuation date. Of this number, 172 disabled employees are grandfathered under all provisions of the old Disability Salary Continuation Plan and 5,917 are receiving long-term disability benefits under the provisions of this Plan. Schedule B presents a comparison of the number and annual amount of benefits payable as of the current and previous valuation dates.

SECTION IV - ASSETS

1. Asset information taken into account in this valuation is based principally on information reported by the Director. The market value of assets was \$342,424,419 as of December 31, 2009.
2. For valuation purposes, the assets were valued at market related actuarial value. The market related actuarial value as of the valuation date was \$352,627,921. The development of this amount is shown in Schedule C.
3. The following table shows an allocation of investments by category as of December 31, 2009.

TABLE III

**ALLOCATION OF INVESTMENTS BY CATEGORY
AS OF DECEMBER 31, 2009**

Cash and Receivables	10.1%
Fixed Income (LTIF)	89.9
Public Equity	0.0
Other*	<u>0.0</u>
Total	100.0%

* Real Estate, Alternatives, Inflation and Credit.

SECTION V - CONDITION OF THE PLAN

1. The following table shows the assets and liabilities of the Plan as of the current valuation date of December 31, 2009. The items shown in the table, other than the current assets, are present values actuarially determined as of the valuation date.

**TABLE IV
STATEMENT OF CONDITION OF THE PLAN
AS OF DECEMBER 31, 2009**

Present value of prospective benefits payable to all disabled members on LTD as of the valuation date for:	
LTD approved claims	\$ 272,043,594
LTD incurred but not reported claims	58,227,106
STD incurred but not reported claims	11,182,798
Total claim liability	\$ 341,453,498
Valuation assets	352,627,921
Deficit/(Surplus)	\$ (11,174,423)
Prospective present value of benefits for current active members	\$ 622,787,038
Present value of benefits not covered by current assets	\$ 611,612,615
Present value of compensation for active members	\$135,771,592,700
Level contribution as a percentage of compensation to fund present value of benefits not covered by current assets	0.46%

2. Claim liabilities are equal to the present value of future claim payments the Plan is obligated to make to members disabled as of the valuation date. The claim liabilities are separated into three classifications, which reflect the status of each claim as of the valuation date.
 - (a) Approved claim liabilities are for long term disabilities which have occurred, have been approved, and are in long term payment status as of the valuation date.

- (b) LTD incurred but not reported liabilities are for disabilities which have occurred but are not in payment status as of the valuation date. These liabilities are estimated based on the number of expected disabilities for prior years.
- (c) STD incurred but not reported liabilities are for disabilities which have occurred but are not in payment status as of the valuation date. These liabilities are estimated based on the number of expected disabilities for prior years.

The method of determining claim liabilities and the assumptions used are described in Schedule D.

3. The total claim liability as of December 31, 2009 was \$341,453,498 of which \$272,043,594 was on account of claimants receiving benefits, and \$69,409,904 was on account of claimants assumed to be in the waiting period or receiving short-term payments. Against these liabilities the Plan had actuarial value of assets of \$352,627,921. The difference between the total claim liability and the assets represents a deficit/(surplus) as of the valuation date of \$(11,174,423). This compares with a deficit/(surplus) of \$7,056,695 as of the previous valuation date.
4. Statements 43 and 45 of the Governmental Accounting Standards Board (GASB) require that an annual required contribution be calculated that will fund any deficit and the present value of prospective benefits for active members. The present value of prospective benefits for active members is \$622,787,038. After adding the deficit/(surplus) of \$(11,174,423), the present value of benefits not covered by current assets is \$611,612,615. The present value of compensation for active members is \$135,771,592,700. The normal cost is equal to the present value of benefits not covered by current assets divided by the present value of compensation for active members, or 0.46% of compensation.

SECTION VI - EXPERIENCE

1. Section V shows that the deficit/(surplus) under the Plan has decreased by \$18,231,118 from \$7,056,695 to \$(11,174,423) since the previous valuation date.

2. The following table shows a detailed reconciliation of the change in deficit/(surplus) since the prior valuation.

TABLE V
RECONCILIATION OF CHANGE IN DEFICIT/(SURPLUS) SINCE THE PRIOR VALUATION

Prior Year Deficit/(Surplus)	\$ 7,056,695
Prior Year Term Cost	65,439,185
Actual Contributions	(78,614,900)
Interest Adjustment	33,990
STD Experience*	13,533,105
LTD Experience	(14,296,111)
Asset Loss	2,550,875
Change in Economic, Demographic and Other Assumptions	<u>(6,877,262)</u>
Current Deficit/(Surplus)	\$(11,174,423)

* Includes adjustment for employer reimbursement paid during current year as a payment of amounts owed in prior years.

SECTION VII - ACCOUNTING INFORMATION

1. Statement Nos. 43 and 45 of the Governmental Accounting Standards Board (GASB) set forth certain items of information to be disclosed in the financial statements of the Plan. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND DISABLED PARTICIPANTS AS OF DECEMBER 31, 2009

GROUP	NUMBER
Disabled participants receiving long-term disability benefits	6,089
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active participants	<u>329,993</u>
Total	336,082

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
12/31/05	\$279,285,517	\$438,185,536	\$158,900,019	63.7%	\$11,928,557,821	1.33%
12/31/06	302,631,878	459,284,494	156,652,616	65.9	12,736,914,993	1.23
12/31/07	326,674,352	474,614,167	147,939,815	68.8	13,849,158,462	1.07
12/31/08	350,145,153	477,574,565	127,429,412	73.3	14,493,066,028	0.88
12/31/09	352,627,921	492,731,413	140,103,492	71.6	14,534,661,403	0.96

The aggregate cost method does not identify or separately amortize unfunded liabilities. Information about the plan's funded status and funding progress have been prepared using the entry age actuarial cost method as an approximation and as required by GASB Statements 43 and 45.

3. Following is a reconciliation of the preliminary employer annual required contribution rate to the final employer annual required contribution for fiscal year ending June 30, 2010.

	Fiscal Year Ending June 30, 2010
Preliminary Annual Required Contribution Rate	
Normal	0.49%
Accrued Liability	0.00
Total	0.49%
Impact of Legislative Changes	0.00
Final Annual Required Contribution Rate	0.49%
Payroll	\$ 14,781,323,600
Annual Required Contribution	\$ 72,428,486

4. Following is the calculation of the annual OPEB cost and net OPEB obligation for the fiscal year ending June 30, 2010.

Annual OPEB Cost and Net OPEB Obligation for Fiscal Year Ending 6/30/2010

(a)	Employer annual required contribution	\$ 72,428,486
(b)	Interest on net OPEB obligation	(303,960)
(c)	Adjustment to annual required contribution	<u>463,956</u>
(d)	Annual OPEB cost: (a) + (b) + (c)	\$ 72,588,482
(e)	Employer contributions made for fiscal year ending 6/30/2010	<u>76,862,883</u>
(f)	Increase (decrease) in net OPEB obligation: (d) – (e)	\$ (4,274,401)
(g)	Net OPEB obligation beginning of fiscal year	<u>(4,192,550)</u>
(h)	Net OPEB obligation end of fiscal year: (f) + (g)	\$ (8,466,951)

TREND INFORMATION

<u>Year Ending</u>	<u>Annual OPEB Cost (AOC)</u>	<u>Percentage of AOC Contributed</u>	<u>Net OPEB Obligation</u>
June 30, 2008	\$73,522,282	101.9%	\$(2,762,934)
June 30, 2009	78,420,002	101.8	(4,192,550)
June 30, 2010	72,588,482	105.9	(8,466,951)

5. The annual required contribution (ARC) of the employer as a percentage of payroll, determined in accordance with the parameters of GASB 43/45, is shown below.

**2011/2012 FISCAL YEAR
ANNUAL REQUIRED CONTRIBUTION (ARC)
BASED ON THE VALUATION AS OF DECEMBER 31, 2009**

ANNUAL REQUIRED CONTRIBUTION (ARC)	RATE
Normal	0.46%
Accrued liability	<u>—</u>
Total	0.46%

6. Additional information as of December 31, 2009 follows.

Valuation date	12/31/09
Actuarial cost method	Aggregate
Amortization method	Level percent
Remaining amortization period	The aggregate cost method does not identify or separately amortize unfunded liabilities
Asset valuation method	20% of market value plus 80% of expected actuarial value (not greater than 120% of market value and not less than 80% of market value)
Actuarial assumptions:	
Investment rate of return*	5.75%
Projected salary increases**	4.25% - 9.10%
* Includes inflation of	3.00%
** Includes inflation and productivity of	3.50%
Cost-of-living adjustments	3.50% for gross long term disability benefits
Total Claim Liability	\$ 341,453,498
Market Related Value of Assets	<u>352,627,921</u>
Deficit	\$ (11,174,423)

SCHEDULE A**TABLE 1**

**THE NUMBER AND AVERAGE REPORTED COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE
AS OF DECEMBER 31, 2009**

AGE	YEARS OF SERVICE										Total
	Under 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	2,237	4,889	62	0	0	0	0	0	0	0	7,188
	12,284	29,153	28,169	0	0	0	0	0	0	0	23,895
25 to 29	1,943	19,733	7,460	85	0	0	0	0	0	0	29,221
	11,856	33,116	37,182	31,464	0	0	0	0	0	0	32,736
30 to 34	1,326	13,415	14,512	4,693	20	0	0	0	0	0	33,966
	14,358	37,613	40,925	43,884	38,774	0	0	0	0	0	38,987
35 to 39	1,224	12,566	11,717	11,670	3,471	47	0	0	0	0	40,695
	13,612	39,732	42,729	46,607	48,877	44,124	0	0	0	0	42,566
40 to 44	1,081	11,868	11,496	8,953	8,174	2,949	89	0	0	0	44,610
	12,325	38,530	42,930	45,959	51,540	51,650	48,352	0	0	0	43,791
45 to 49	938	10,345	11,074	8,985	6,222	7,062	3,167	77	0	0	47,870
	11,649	37,521	41,379	44,214	50,211	54,585	55,626	50,429	0	0	44,548
50 to 54	698	8,741	9,837	8,943	6,709	6,036	6,109	2,244	26	0	49,343
	12,227	39,107	41,859	44,439	50,886	54,775	59,745	60,123	55,721	0	47,279
55 to 59	600	7,034	8,228	7,161	6,243	6,116	4,342	3,015	677	7	43,423
	18,086	42,050	42,923	45,496	50,726	55,670	62,409	67,051	68,098	47,899	49,797
60 to 64	281	3,934	5,316	4,306	3,727	3,634	2,276	1,443	676	117	25,710
	20,447	43,214	44,662	47,282	52,495	56,449	64,676	72,157	78,984	72,103	51,758
65 to 69	68	890	1,478	1,081	813	729	416	320	238	118	6,151
	18,813	40,683	45,283	49,382	57,768	65,918	69,500	90,452	99,843	94,325	56,181
70 & up	25	304	398	328	224	186	112	84	71	84	1,816
	24,192	34,477	40,081	40,819	51,230	57,961	73,154	71,914	97,999	100,943	50,856
Total	10,421	93,719	81,578	56,205	35,603	26,759	16,511	7,183	1,688	326	329,993
	13,193	37,341	41,809	45,456	51,015	55,119	60,611	66,834	78,001	87,058	44,045

SCHEDULE A**TABLE 2**

**THE NUMBER AND REPORTED COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY AGE
AS OF DECEMBER 31, 2009**

Age	Men		Women	
	Number	Amount	Number	Amount
17			1	\$ 20,263
18			1	37,444
19	3	\$ 21,780	11	105,097
20	39	680,685	43	620,158
21	112	2,107,474	123	2,230,956
22	273	6,014,521	551	9,265,644
23	584	12,984,052	1,663	34,503,185
24	969	25,865,078	2,815	77,298,575
25	1,310	38,202,548	3,557	104,982,114
26	1,413	44,024,960	4,043	126,727,839
27	1,711	55,870,605	4,255	137,696,428
28	1,807	61,869,295	4,583	155,067,713
29	1,949	69,828,704	4,593	162,295,177
30	1,998	75,526,643	4,654	169,292,026
31	2,042	80,450,017	4,742	177,247,836
32	2,166	87,961,401	4,640	177,402,570
33	2,184	94,344,590	4,714	183,202,889
34	2,192	96,984,594	4,634	181,823,886
35	2,384	109,263,288	5,043	201,302,794
36	2,430	112,162,251	5,013	203,057,598
37	2,527	119,039,259	5,272	214,030,321
38	2,759	132,340,475	5,756	231,336,515
39	3,083	149,027,572	6,428	260,656,768
40	2,956	149,933,488	6,369	261,021,789
41	2,876	144,167,614	6,239	256,100,073
42	2,779	140,592,521	5,899	237,178,690
43	2,704	138,655,576	6,006	241,646,662
44	2,865	146,813,633	5,917	237,393,670
45	2,872	145,197,113	6,226	253,031,567
46	2,999	156,710,965	6,346	258,528,315
47	3,072	160,775,211	6,550	267,966,266
48	2,990	155,270,111	6,837	284,046,643
49	3,073	162,448,889	6,905	288,539,080
50	3,002	160,929,900	6,890	297,221,661
51	3,015	163,257,942	6,860	293,988,374
52	3,081	169,367,234	6,994	311,046,488
53	3,037	163,059,333	6,953	313,436,188
54	2,878	157,814,368	6,633	302,789,998
55	2,837	160,255,778	6,412	293,158,685
56	2,898	161,921,820	6,305	291,155,156

TABLE 2
THE NUMBER AND REPORTED COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY AGE
AS OF DECEMBER 31, 2009

CONTINUED

Age	Men		Women	
	Number	Amount	Number	Amount
57	2,782	\$ 159,537,379	5,991	\$ 278,562,067
58	2,780	161,849,604	5,632	262,903,911
59	2,624	150,384,782	5,162	242,599,269
60	2,392	135,090,839	4,636	215,590,995
61	2,235	132,145,696	3,970	183,615,936
62	2,017	121,768,442	3,408	158,214,968
63	1,721	108,199,438	2,740	131,818,146
64	1,026	69,736,040	1,565	74,528,665
65	913	59,239,746	1,197	57,567,958
66	670	46,154,164	882	42,148,828
67	567	40,774,333	600	26,586,582
68	373	26,415,942	373	17,048,270
69	293	18,764,441	283	10,866,494
70	240	14,469,355	204	9,028,166
71	179	10,735,392	151	6,120,690
72	133	8,069,493	122	4,202,581
73	104	7,526,001	97	3,848,605
74	74	3,307,596	60	2,293,607
75	70	4,516,401	71	2,582,434
76	56	3,174,357	33	1,350,403
77	39	2,065,021	33	1,076,584
78	33	1,835,997	13	536,871
79	19	1,368,425	17	536,352
80	17	1,081,969	5	161,826
81	8	385,444	1	90,938
82	7	474,981	4	146,809
83	2	326,219	4	120,506
84			3	70,309
85	6	418,052		
86	1	15,585	2	76,507
87	3	80,542	1	69,339
88	1	49,054	1	27,776
91	1	97,872		
93			1	16,020
	105,255	\$ 5,301,799,890	224,738	\$ 9,232,861,513

SCHEDULE A**TABLE 3**

**THE NUMBER AND REPORTED COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY SERVICE
AS OF DECEMBER 31, 2009**

Years of Service	Number	Men	Amount	Number	Women	Amount
0	3,311	\$	45,149,675	7,110	\$	92,331,251
1	6,081		246,304,791	11,027		354,089,216
2	9,399		382,631,168	18,976		657,827,175
3	7,700		334,656,338	16,734		597,355,361
4	7,278		322,390,826	16,524		604,333,077
5	6,456		287,871,888	14,006		525,843,386
6	5,813		267,574,626	12,392		474,832,538
7	4,914		235,069,426	10,564		417,839,084
8	4,070		206,221,534	9,233		375,542,634
9	4,232		216,792,084	9,898		403,089,010
10	4,086		210,373,401	9,441		383,955,205
11	3,760		194,199,463	8,799		365,958,915
12	3,313		175,709,075	7,749		331,064,103
13	3,028		160,736,499	6,881		298,731,067
14	2,875		156,575,977	6,272		277,516,530
15	2,656		146,044,693	5,785		264,360,772
16	2,780		154,320,222	5,301		247,628,811
17	2,230		135,372,348	4,872		232,872,467
18	2,216		132,720,818	4,437		215,784,805
19	1,717		106,143,352	3,609		181,009,306
20	2,068		124,102,606	4,050		203,724,496
21	1,854		110,816,603	4,114		206,886,242
22	1,764		110,483,096	3,983		202,583,110
23	1,578		103,470,665	3,195		171,625,719
24	1,276		84,270,844	2,876		156,897,034
25	1,445		95,734,883	2,851		153,660,016
26	1,478		97,645,450	2,663		149,891,559
27	1,088		74,853,452	1,917		110,600,319
28	906		64,104,662	1,742		103,266,564
29	723		52,299,600	1,698		98,691,736
30	656		48,598,017	1,630		93,700,499
31	554		44,622,540	1,270		74,895,562
32	411		35,575,292	950		57,724,560
33	376		32,199,448	657		41,945,206
34	259		23,056,220	418		27,604,089
35	212		18,530,298	327		23,349,188
36	187		16,584,014	274		17,803,024
37	160		14,523,403	181		12,511,235
38	109		10,012,898	110		7,610,630
39	61		5,551,311	69		5,362,902

TABLE 3
THE NUMBER AND REPORTED COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY SERVICE
AS OF DECEMBER 31, 2009

CONTINUED

Years of Service	Number	Men	Amount	Number	Women	Amount
40	55	\$	5,388,696	52	\$	3,622,468
41	30		2,857,297	30		2,337,617
42	37		4,037,147	21		1,297,949
43	13		1,215,853	15		1,057,365
44	8		1,094,951	7		432,883
45	7		747,387	8		583,509
46	9		860,971	4		215,564
47	6		781,343	7		536,903
48	2		170,262	3		141,740
49	4		507,416	1		50,978
50	2		145,955	1		63,911
51	1		57,374			
52				1		43,261
53				1		45,630
54				2		133,332
57	1		41,732			
Total	105,255	\$	5,301,799,890	224,738	\$	9,232,861,513

SCHEDULE B**TABLE I****NUMBER AND ANNUAL AMOUNT OF
LONG TERM DISABILITY BENEFITS PAYABLE**

GROUP	As of December 31, 2009		As of December 31, 2008	
	NUMBER	ANNUAL BENEFITS PAYABLE	NUMBER	ANNUAL BENEFITS PAYABLE
Disabled prior to January 1, 1988	172	\$ 323,044	199	\$ 367,460
Disabled after January 1, 1988	<u>5,917</u>	<u>73,694,240</u>	<u>6,015</u>	<u>78,787,598</u>
Total	6,089	\$ 74,017,284	6,214	\$ 79,155,058

SCHEDULE B**TABLE 2**

**THE NUMBER AND ANNUAL LONG TERM DISABILITY BENEFITS
OF DISABLED MEMBERS DISTRIBUTED BY AGE
AS OF DECEMBER 31, 2009**

DISABLED PRIOR TO JANUARY 1, 1988

Age	Men		Women	
	Number	Amount	Number	Amount
48			1	\$ 4,973
52			1	4,478
53			3	6,048
54			5	15,292
55	1	\$ 471	3	10,488
56	1	1,078		
57	1	2,315	5	11,380
58	2	4,351	1	176
59	2	3,621	1	472
60	2	4,081	1	3,078
61	2	6,256	3	3,960
62	3	5,184	6	18,589
63	2	5,539	2	2,244
64	1	2,140	2	3,023
65	1	2,090	2	7,770
66	1	2,203	3	4,921
67	1	1,127	4	5,620
68	4	11,299	3	7,225
69	2	5,959	2	3,946
70	1	3,275		
71	1	307	1	2,298
72			1	1,764
73	1	2,717	2	2,114
74			1	6,443
75			3	2,269
76	4	14,563	2	2,925
77			2	3,342
78			4	5,562
79			3	1,104
80	1	2,114	4	7,579
81			6	13,884
82	1	489	4	3,477
83	2	8,120	2	5,322
84			10	16,014
85	1	3,315	3	3,420
86	1	1,144	7	6,427
87			6	6,834
88	2	5,649	1	319
89	1	121	1	1,052
90	1	855	2	3,069

TABLE 2
THE NUMBER AND ANNUAL LONG TERM DISABILITY BENEFITS
OF DISABLED MEMBERS DISTRIBUTED BY AGE
AS OF DECEMBER 31, 2009

DISABLED PRIOR TO JANUARY 1, 1988

CONTINUED

Age	Men		Women	
	Number	Amount	Number	Amount
91	1	\$ 1,259	4	\$ 5,141
92			3	3,182
93			2	835
94			2	540
95	1	623	3	2,180
Total	45	\$ 102,265	127	\$ 220,779

SCHEDULE B**TABLE 3**

**THE NUMBER AND ANNUAL LONG TERM DISABILITY BENEFITS
OF DISABLED MEMBERS DISTRIBUTED BY AGE
AS OF DECEMBER 31, 2009**

DISABLED AFTER JANUARY 1, 1988

Age	Men		Women	
	Number	Amount	Number	Amount
26			2	\$ 17,134
28			2	33,981
29			1	19,681
30			4	71,018
31	2	\$ 13,544	2	36,805
32			4	55,621
33			7	112,912
34	5	65,061	10	150,424
35	4	85,821	13	236,315
36	8	137,154	5	80,713
37	7	123,607	18	314,502
38	11	122,359	25	382,568
39	7	115,206	30	369,708
40	12	111,447	47	635,468
41	24	336,583	31	522,238
42	32	436,591	54	926,618
43	26	361,667	54	654,895
44	34	508,411	46	553,158
45	48	657,585	83	1,143,442
46	43	664,138	86	1,038,998
47	59	875,532	84	1,265,508
48	58	710,432	97	1,445,672
49	60	905,337	129	1,709,438
50	72	937,937	133	1,843,377
51	73	1,070,542	155	1,947,383
52	87	1,245,418	161	2,179,550
53	98	1,256,167	177	2,293,090
54	86	1,001,259	190	2,575,385
55	89	1,151,461	214	2,919,299
56	102	1,376,503	219	2,767,946
57	108	1,369,666	204	2,446,017
58	112	1,309,121	244	3,001,681
59	129	1,367,564	256	3,319,807
60	114	1,227,917	227	2,664,116
61	122	1,040,102	195	2,129,704
62	132	1,412,914	220	2,602,806
63	122	1,178,912	215	2,266,226
64	102	805,893	167	1,724,754
65	42	334,892	72	827,265
66	1	20,340	1	27,366
67	1	29,833		
70	1	14,735		
Total	2,033	\$ 24,381,651	3,884	\$ 49,312,589

SCHEDULE C**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS
FOR THE YEAR ENDING DECEMBER 31, 2009**

1.	Actuarial Value of Assets as of December 31, 2008	\$ 350,145,153
2.	2009 Net Cash Flow	
a.	Contributions	78,614,900
b.	Disbursements	<u>98,254,834</u>
c.	Net Cash Flow: (a) - (b)	(19,639,933)
3.	Expected Investment Return: [(1) x .0725] + [(2)c x .03625]	24,673,576
4.	Expected Actuarial Value of Assets as of December 31, 2009: (1) + (2)c + (3)	355,178,796
5.	Market Value of Assets as of December 31, 2009	342,424,419
6.	Excess of Market Value over Expected Actuarial Value of Assets: (5) - (4)	(12,754,377)
7.	20% Adjustment towards Market Value: (6) * .20	(2,550,875)
8.	Preliminary Actuarial Value of Assets as of December 31, 2009 (4) + (7)	\$ 352,627,921
9.	Final Actuarial Value of Assets as of December 31, 2009 [(8) not less than 80% of (5) and not greater than 120% of (5)]	\$ 352,627,921
10.	Rate of investment return on actuarial value	6.50%
11.	Rate of investment return on market value	6.20%

SCHEDULE D**STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS**

Assumptions are based on the experience investigation prepared as of December 31, 2009 and adopted by the Board of Trustees on October 21, 2010.

INTEREST RATE: 5.75% per annum, compounded annually.

INFLATION: Both general and wage inflation are assumed to be 3.00% per annum.

PRODUCTIVITY INCREASE: 0.50% per annum.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed rates of separation from active service are as follows:

Service	ANNUAL RATES OF WITHDRAWAL					
	General Employees and Other Education		Classroom Teachers		Law Enforcement Officers	
	Male	Female	Male	Female	Male	Female
0	.270	.270	.260	.220	.180	.180
1	.180	.185	.180	.170	.090	.090
2	.120	.120	.130	.130	.070	.070
3	.080	.100	.100	.100	.070	.070
4	.070	.090	.080	.080	.060	.060

Age	GENERAL EMPLOYEES AND OTHER EDUCATION					
	Annual Rates of					
	Withdrawal and Vesting*		Base Mortality**		Disability	
	Male	Female	Male	Female	Male	Female
25	.0650	.0900	.0004	.0002	.0001	.0001
30	.0650	.0800	.0005	.0003	.0004	.0004
35	.0500	.0600	.0008	.0005	.0010	.0010
40	.0400	.0400	.0011	.0008	.0029	.0018
45	.0350	.0400	.0016	.0012	.0049	.0033
50	.0350	.0400	.0023	.0018	.0084	.0050
55	.0350	.0400	.0033	.0028	.0144	.0088
60	.0350	.0400	.0054	.0043	.0240	.0138
65			.0081	.0062		
69			.0099	.0076		

* These rates apply only after five years of membership in the system.

** Base mortality rates as of December 31, 2003.

CLASSROOM TEACHERS

Annual Rates of

Age	Withdrawal and Vesting*		Base Mortality**		Disability	
	Male	Female	Male	Female	Male	Female
25	.0600	.0700	.0004	.0002	.0001	.0002
30	.0550	.0600	.0004	.0003	.0001	.0003
35	.0400	.0450	.0007	.0005	.0003	.0006
40	.0350	.0300	.0010	.0007	.0007	.0010
45	.0350	.0300	.0014	.0011	.0014	.0018
50	.0350	.0300	.0020	.0017	.0023	.0032
55	.0350	.0300	.0028	.0025	.0047	.0055
60	.0350	.0300	.0044	.0039	.0077	.0102
65			.0070	.0058		
69			.0091	.0073		

* These rates apply only after five years of membership in the system.

** Base mortality rates as of December 31, 2003.

LAW ENFORCEMENT OFFICERS

Annual Rates of

Age	Withdrawal and Vesting*		Base Mortality**		Disability	
	Male	Female	Male	Female	Male	Female
25	.0400	.0400	.0004	.0002	.0029	.0003
30	.0350	.0350	.0004	.0003	.0036	.0004
35	.0350	.0350	.0008	.0005	.0047	.0005
40	.0350	.0350	.0011	.0007	.0061	.0007
45	.0350	.0350	.0015	.0011	.0090	.0010
50	.0350	.0350	.0021	.0017	.0151	.0017
55	.0350	.0350	.0030	.0025		
60	.0350	.0350	.0049	.0039		
65			.0076	.0058		
69			.0095	.0073		

* These rates apply only after five years of membership in the system.

** Base mortality rates as of December 31, 2003. In addition, 90% of all deaths in active service for law enforcement officers are assumed to be ordinary and 10% assumed to be accidental.

RETIREMENTS: Representative values of the assumed rates of retirement from active service are as follows:

GENERAL EMPLOYEES AND OTHER EDUCATION - MALES

Age	Service						
	5	10	15	20	25	30	35
50				0.0370	0.1000	0.3500	0.3500
55				0.0550	0.1000	0.3000	0.2000
60	0.1000	0.1000	0.1000	0.1000	0.3500	0.3000	0.2250
65	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500
70	0.2250	0.2250	0.2250	0.2250	0.2250	0.2250	0.2250
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

GENERAL EMPLOYEES AND OTHER EDUCATION - FEMALES

Age	Service						
	5	10	15	20	25	30	35
50				0.0400	0.0350	0.3500	0.3500
55				0.0550	0.0900	0.3500	0.2250
60	0.1400	0.1400	0.1400	0.1400	0.4500	0.3500	0.2500
65	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500
70	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

CLASSROOM TEACHERS - MALES

Age	Service						
	5	10	15	20	25	30	35
50				0.0300	0.0900	0.3000	0.3000
55				0.0450	0.0900	0.3750	0.3000
60	0.1200	0.1200	0.1200	0.1200	0.4000	0.3750	0.3000
65	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500
70	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

CLASSROOM TEACHERS - FEMALES

Age	Service						
	5	10	15	20	25	30	35
50				0.0350	0.0900	0.3000	0.3000
55				0.0550	0.1000	0.4500	0.2750
60	0.1500	0.1500	0.1500	0.1500	0.5000	0.4500	0.2750
65	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000
70	0.2750	0.2750	0.2750	0.2750	0.2750	0.2750	0.2750
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAW ENFORCEMENT OFFICERS

Age	Service						
	5	10	15	20	25	30	35
50			0.0600	0.0600	0.0600	0.5000	0.5000
55	0.3000	0.3000	0.3000	0.3000	0.3000	0.5000	0.5000
60	0.2500	0.2500	0.2500	0.2500	0.2500	0.5000	0.5000
65	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
70	0.3000	0.3000	0.3000	0.3000	0.3000	0.3000	0.3000
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Annual Rate of Salary Increase			
<u>Service</u>	<u>Teachers</u>	<u>General Employees</u>	<u>Law Enforcement Officers</u>
0	7.55%	5.50%	9.10%
5	6.55	5.50	7.10
10	5.70	5.45	5.40
15	5.45	5.25	4.95
20	5.25	5.25	4.65
25	5.25	5.25	4.25
30	5.25	5.25	4.25
35	5.25	5.25	4.25
40	4.75	4.75	4.25
45	4.25	4.25	4.25
50	4.25	4.25	4.25

Representative values of the assumed post-retirement mortality rates as of December 31, 2003 prior to any mortality improvements:

Annual Rate of Death after Retirement (Healthy Retirees)						
<u>Age</u>	<u>Classroom Teachers</u>		<u>General Employees</u>		<u>Law Enforcement Officers</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
55	.0058	.0035	.0061	.0039	.0059	.0035
60	.0075	.0062	.0090	.0069	.0082	.0062
65	.0121	.0104	.0149	.0114	.0134	.0104
70	.0201	.0167	.0246	.0186	.0222	.0167
75	.0339	.0281	.0422	.0310	.0378	.0281
80	.0579	.0459	.0720	.0508	.0644	.0459

Annual Rate of Death after Retirement (Beneficiaries of Deceased Members and Disabled Retirees)				
<u>Age</u>	<u>Male</u> <u>Beneficiaries of</u> <u>Deceased</u> <u>Members</u>	<u>Female</u> <u>Beneficiaries of</u> <u>Deceased</u> <u>Members</u>	<u>Male</u> <u>Disabled</u> <u>Retirees</u>	<u>Female</u> <u>Disabled</u> <u>Retirees</u>
55	.0061	.0044	.0277	.0176
60	.0090	.0077	.0342	.0229
65	.0149	.0125	.0407	.0296
70	.0246	.0207	.0483	.0401
75	.0422	.0341	.0596	.0558
80	.0720	.0563	.0775	.0771

MORTALITY IMPROVEMENTS: Representative values of the assumed mortality improvement rates (applied to pre-retirement mortality rates for active members and post-retirement mortality rates for healthy retirees and beneficiaries of deceased members after such tables have been set back or set forward) are as follows:

<u>Age</u>	<u>Male Projection Scale</u>	<u>Female Projection Scale</u>
25	0.010	0.014
30	0.005	0.010
35	0.005	0.011
40	0.008	0.015
45	0.013	0.016
50	0.018	0.017
55	0.019	0.008
60	0.016	0.005
65	0.014	0.005
70	0.015	0.005
75	0.014	0.008
80	0.010	0.007

DEATHS AFTER RETIREMENT (NON-DISABLED): According to the RP-2000 Mortality tables for retirees. These tables are set back one year for male teachers, set forward one year for all general employees and unadjusted for female teachers and all law enforcement officers. These tables are also set forward one year for male beneficiaries of deceased members and set forward two years for female beneficiaries of deceased members. The base retiree RP-2000 tables have no rates prior to age 50. The active employee rates of RP-2000 are used for ages less than 50 prior to any adjustments for setbacks.

DEATH AFTER DISABILITY: According to the RP-2000 Mortality tables for disabled annuitants set back six years for males and set forward one year for females.

DEATHS PRIOR TO RETIREMENT: According to the RP-2000 Mortality tables for active employees. These tables are set back one year for male teachers, set forward one year for all general employees and unadjusted for female teachers and all law enforcement officers. The base RP-2000 tables for active employees have no rates after age 70. A blend of active rates and retired rates are used from ages 70 to 80 prior to any set back and adjustments.

MORTALITY PROJECTION (NON-DISABLED): All mortality rates are projected from December 31, 2003 using Scale AA.

TIMING OF ASSUMPTIONS: All withdrawals, deaths, disabilities, retirements and salary increases are assumed to occur on July 1 of each year.

DISABILITY RATES: Rates of disability and termination are based on the Group Long-Term Disability (GLTD) Valuation Tables published in the Society of Actuaries Transactions Volume XXXIX, 1987. The rates of disability have been adjusted by a factor of 0.80. The termination rates are the basic rates at all durations prior to adjustment for margin.

RATES OF DISABILITY: The assumed rates of disability per 1,000 lives exposed are as follows:

AGE	RATE OF DISABILITY PER 1,000 LIVES	
	MEN	WOMEN
20 – 24	1.18	1.50
25 – 29	1.26	1.63
30 – 34	1.44	2.13
35 – 39	1.87	3.16
40 – 44	2.66	4.02
45 – 49	4.31	5.60
50 – 54	7.18	7.89
55 – 59	12.03	10.83
60 – 64	17.07	12.80

RATES OF TERMINATION: Select rates of termination of disability were used for the first 24 months of disability. Sample rates of termination per 1,000 lives are as follows:

MEN									
Duration of Disability (in months)	Age at Disability								
	22	27	32	37	42	47	52	57	62
5	142.2	129.1	118.7	106.4	94.1	81.5	67.3	49.8	27.5
10	69.0	60.0	52.3	45.6	39.0	32.9	26.4	18.5	11.2
15	44.0	38.6	34.0	29.9	25.2	21.3	17.8	12.2	6.3
20	28.0	25.5	23.0	21.2	18.5	15.3	13.1	8.9	4.9
24	20.2	18.6	16.7	15.7	14.0	11.6	9.8	7.5	4.8

WOMEN									
Duration of Disability (in months)	Age at Disability								
	22	27	32	37	42	47	52	57	62
5	147.7	134.1	123.3	110.5	97.8	84.7	69.9	51.7	28.6
10	78.6	68.3	59.6	51.9	44.4	37.5	30.1	21.1	12.8
15	45.9	40.3	35.5	31.2	26.3	22.2	18.6	12.7	6.6
20	28.2	25.7	23.1	21.3	18.6	15.4	13.2	9.0	4.9
24	19.7	18.1	16.3	15.3	13.6	11.3	9.5	7.3	4.7

Ultimate rates of termination of disability were used after the first 24 months of disability. Sample rates per 1,000 lives are as follows:

MEN									
Duration of Disability (in years)	Age at Disability								
	22	27	32	37	42	47	52	57	62
5	105.9	93.8	78.4	63.5	52.9	48.2	48.5	50.5	48.8
10	27.3	28.5	30.3	32.6	36.4	36.9	37.3	44.9	57.2
15	25.1	27.0	29.9	34.2	36.3	38.2	46.0	64.1	90.9
20	27.0	29.9	34.2	36.3	38.2	46.0	64.1	90.9	131.4

WOMEN									
Duration of Disability (in years)	Age at Disability								
	22	27	32	37	42	47	52	57	62
5	73.7	65.3	54.6	44.2	36.8	33.5	33.8	35.1	34.0
10	18.2	19.0	20.2	21.7	24.3	24.6	24.9	29.9	38.2
15	16.8	18.1	20.0	22.9	24.3	25.6	30.8	42.9	60.9
20	18.1	20.0	22.9	24.3	25.6	30.8	42.9	60.9	88.1

SOCIAL SECURITY ASSUMPTIONS: The assumed rate of approval for Social Security disability benefits prior to completion of four years of disability from the conclusion of the waiting period is 50%.

FUTURE INCREASES IN SOCIAL SECURITY BENEFITS: Social Security disability benefits are assumed to increase by 3.00% per year. This impacts those disabled on or after January 1, 1988.

ACROSS-THE-BOARD SALARY INCREASES: 3.50% per year. This impacts the LTD benefits (before reductions) for those disabled on or after January 1, 1988.

LEAVE CONVERSIONS: Sick leave can be converted to increase creditable service and used to meet the eligibility requirements for retirement. Unused vacation leave can be converted to increase creditable service, but does not add to the eligibility service. The assumed impact of these conversions is shown on the table below.

	Classroom Teachers		General		Law Enforcement		Other Education	
	Males	Females	Males	Females	Males	Females	Males	Females
Increase in AFC	2.25%	2.25%	2.25%	2.25%	1.50%	1.50%	3.50%	3.50%
Increase in Creditable Service (years)								
Credited	1.25	1.00	0.90	0.65	1.50	1.50	1.25	1.00
Eligibility	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

ADMINISTRATIVE EXPENSES: No provision made.

MARRIAGE ASSUMPTION: 100% married with the husband four years older than his wife.

REPORTED COMPENSATION: Calendar year compensation as furnished by the system's office.

VALUATION COMPENSATION: Reported compensation adjusted to reflect the assumed rate of pay as of the valuation date.

VALUATION METHOD: Aggregate.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule A. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets is not allowed to be greater than 120% of the market value of assets or less than 80% of the market value of assets.

SCHEDULE E

SUMMARY OF MAIN BENEFIT PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

The Disability Income Plan of North Carolina became effective January 1, 1988. The Plan replaced the Disability Salary Continuation Plan for Teachers and State Employees of North Carolina (DSC Plan). Those beneficiaries disabled prior to January 1, 1988 continue to be covered under the provisions of the DSC Plan as in effect December 31, 1987. Beneficiaries disabled on or after January 1, 1988 are covered under the provisions of the Disability Income Plan. The following summary describes the main membership, benefit and contribution provisions of the Plan as interpreted for the valuation.

1 - MEMBERSHIP IN THE PLAN

All teachers and other employees who are in active service and are members of the Teachers and State Employees' Retirement System or the Optional Retirement Program on or after January 1, 1988 are eligible to participate in the Plan.

2 - BENEFITS

Definition of Disability	The mental or physical incapacity for the further performance of duty of a beneficiary; provided that such incapacity was not the result of terrorist activity, of active participation in a riot, of the commission or attempt to commit a felony, or of the intentional self-infliction of an injury.
Waiting Period	A beneficiary shall receive no benefits from the Plan for a period of 60 continuous calendar days from the onset of disability determined as the last actual day of service or the day succeeding at least 365 calendar days after the commencement of service as a teacher or employee, whichever is later.
Salary Continuation Benefits	<p>During the waiting period, a beneficiary may be paid such salary continuation as provided by an employer through the use of sick leave, vacation leave or any other salary continuation.</p> <p>A disabled beneficiary may elect to receive any such salary continuation in lieu of STD benefits provided such election shall not extend the 365 days duration of the STD period.</p>

Eligibility for Short Term Disability (STD) Benefits

A disabled beneficiary may elect to receive any such salary continuation in lieu of LTD benefits provided such election shall not extend the first 36 consecutive calendar months of the LTD period.

Any beneficiary who becomes disabled and is no longer able to perform his usual occupation after at least 365 calendar days succeeding his date of initial employment and at least one year of contributing membership service may be eligible for STD benefits.

Commencement of STD Benefits

The STD benefit commences on the first day succeeding the waiting period.

Duration of STD Benefits

These benefits are payable for 365 days following the waiting period. The first six months of benefits are payable by the employer outside of the trust. The remaining six months are paid by the employer outside of the trust but the employer is reimbursed by the trust quarterly. STD benefits may be extended up to an additional 365 days if the Medical Board determines that the beneficiary's disability is temporary and is likely to end within the extended period. During this extended period, STD benefits are paid directly from the trust.

Amount of Monthly STD Benefits

50% of 1/12th of the annual base rate of compensation last payable to the beneficiary prior to the beginning of the STD period plus 50% of 1/12th of the annual longevity payment (see below) to which the beneficiary would be eligible, to a maximum of \$3,000 per month, reduced by monthly payments for Workers' Compensation. Provided that a beneficiary has earnings in excess of the STD benefit, the STD benefit shall be reduced on a dollar-for-dollar basis by the amount that exceeds the STD benefit.

Eligibility for Long Term Disability (LTD) Benefits

Any beneficiary who has five or more years of membership service may receive LTD benefits from the Plan upon approval by the Board of Trustees provided that the disability is likely to be permanent.

Commencement of LTD Benefits

Benefits commence on the first day succeeding the conclusion of the short-term disability period provided the beneficiary makes application for such benefits within 180 days after the short-term disability period ceases or after salary continuation payments cease, whichever is later.

Duration of LTD Benefits

The LTD benefit is payable until the earliest date at which the beneficiary is eligible for an unreduced service retirement allowance from the Retirement System.

Amount of Monthly LTD Benefits

65% of 1/12th of the annual base rate of compensation last payable to the beneficiary prior to the beginning of the STD benefit period plus 65% of 1/12th of the annual longevity payment (see below) to which the beneficiary would be eligible, to a maximum of \$3,900 per month, reduced by benefits payable from other plans including but not limited to the "Plan Offsets" (listed below).

Plan Offsets

Primary Social Security disability benefits. For beneficiaries not approved for Primary Social Security disability benefits, upon completion of four years from the conclusion of the waiting period, the beneficiary's benefit shall be reduced by an amount as determined by the Board of Trustees, equal to a Primary Social Security disability benefit to which the beneficiary might be entitled had the beneficiary been awarded Social Security disability benefits. For members with less than five years of service as of July 31, 2007, the LTD benefit ceases after 36 months if the member has not been approved for Social Security disability benefits.

Workers' Compensation

Post Disability Benefit Adjustments

The compensation upon which the short-term or long-term disability benefit is calculated may be increased by any percentage across-the-board salary increases granted by the General Assembly. Benefits shall be reduced by future increases granted by the Social Security Administration.

Outside Earnings

During the first 36 months of disability, the net monthly LTD benefit plus outside earnings cannot be greater than 100% of the monthly compensation used to calculate the LTD benefit including any across-the-board salary increases granted by the General Assembly.

After the first 36 months of disability, a beneficiary's earnings will not result in any reduction of the monthly long-term disability benefit until the monthly earnings equal the net monthly long-term disability benefit. The monthly long-term disability benefit will be reduced by \$1.00 for each \$3.00 of monthly earnings in excess of the net long-term disability benefit until the sum of the monthly net long-term benefit and monthly earnings reaches 100% of monthly compensation adjusted for across-the-board salary increases, at which point the monthly long-term disability benefit shall be reduced dollar-for-dollar for the amount of earnings in excess of the 100% monthly limit.

Annual Longevity Payments

These payments are based on service and are additional components of the STD and LTD benefit formulas.

<u>Years of Service</u>	<u>Percentage of Base Salary</u>
less than 10	0.00%
10 - 14	1.50%
15 - 19	2.25%
20 - 24	3.25%
25 and over	4.50%

Transition Provisions

Any participant in service as of August 7, 1987 who becomes disabled after one year of membership service may be eligible for LTD benefits regardless of the requirement of five years of membership service. However, any beneficiary who receives benefits under the transition provisions shall receive lifetime benefits in lieu of service accruals under the Retirement System.

Benefits for Participants Disabled Prior to and January 1, 1988 Receiving Payments Under Former Disability Salary Continuation Plan

The LTD benefit is payable until termination of disability and pays 60% of monthly salary to a maximum of \$1,000 per month reduced by benefits payable from other plans including but not limited to the "Plan Offsets."

Plan Offsets include:

- Social Security benefits payable:
 - Prior to July 1, 1974 - Full family benefits.
 - July 1, 1974 and after – Primary benefits only.
- Workers' Compensation and statutory disability plans.
- Teachers' and State Employees' Retirement System, or other retirement systems supported by the State.
- Other insurance plans to which the State contributes.
- Wages or other income paid by public or private employers.

Benefits shall not be increased by future across-the-board salary increases granted by the General Assembly nor decreased by any future increases granted by the Social Security Administration.

3 - CONTRIBUTIONS

All contributions are to be made by the State or Employing Units.