#### ACTUARIAL VALUATION

OF THE

LEGISLATIVE RETIREMENT SYSTEM OF

NORTH CAROLINA

AS OF DECEMBER 31, 2011

## LEGISLATIVE RETIREMENT SYSTEM OF NORTH CAROLINA

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TO: Legislative Services Commission North Carolina General Assembly

The North Carolina Legislative Retirement System was established by Chapter 761, 1983 Session Laws, which amended Chapter 120 of the General Statutes by adding Sections 120-4.3 through 120-4.23 comprising Article 1A entitled "Legislative Retirement System".

I have made an actuarial valuation of the Legislative Retirement System as of December 31, 2011.

A summary of the results of this valuation is included herein, along with the assumptions used in the valuation, and a description of the amounts calculated.

A brief description of the principal provisions of the System is also included in this report.

The recommended Employer contribution rate to be applied to the compensation of active members for the 2012 calendar year is (2.2%). The Member contribution rate is 7% of compensation, for a total contribution rate of 4.8% of compensation.

Charles W. Dunn, FSA, MAAA

### LEGISLATIVE RETIREMENT SYSTEM OF

#### NORTH CAROLINA

## SUMMARY OF VALUATION RESULTS

### AS OF DECEMBER 31, 2011

#### Actuarial Liability:

## Present Value of Total Projected Benefits:

Active Members Terminated but	\$ 7,855,092
not Receiving Benefits Retired Members Total	1,542,238 14,359,221 \$23,756,551
Assets:	
Market Related Value	\$29,468,021
Unfunded Liability	\$(5,711,470)
Recommended Contributions to Fund	
For service to be accrued in 2012	\$ 993,518
For disability benefits in 2012	77,706
Unfunded Accrued Liability (8-year liquidation)	( 900,489)
Interest to June 30, 2012	6,189
Total Contribution	\$ 176,924
Expected 2012 Earnings	\$ 3,678,834
Recommended Contribution as per cent of Earnings Member Contribution Employer Contribution	$\frac{4.8\%}{7.0\%}$

Number of Nonretired Members:	Active Terminated	$     \begin{array}{r}       170 \\       \hline       83 \\       \hline       253     \end{array} $
Number of Retired Members and Be	eneficiaries	278
Total Members and Benefici	aries Included	531

Note: Carolyn Justus is included in the Retired Member count twice. She is receiving benefits based on both her own service and her husband's service.

Total Monthly Payment to Retirees as of December 31, 2011

\$171,495

# LEGISLATIVE RETIREMENT SYSTEMS OF NORTH CAROLINA ACTUARIAL ASSUMPTIONS

The assumptions used in the valuation are outlined below along with other data used in the valuation. For subsequent valuations the experience of the plan will be analyzed, and appropriate modifications of the assumptions will be recommended to the Trustees.

Effective date - July 1, 1984

Valuation date - December 31, 2011

Normal retirement age - 65, or current age if over 65, and completion of 5 years of creditable service.

Normal form of benefit - Life annuity payable monthly.

Mortality - 1971 Group Annuity Mortality Table (no age setback for females).

Interest - 7.25%

Benefit projection - Current earnings are assumed to increase by 7.5% annually to normal retirement age.

Disability - Experience table of annual rates of disability of State employees ranging from .0001 to age 25 to .0240 at age 60.

Terminations and vesting - 100% vesting after five years of creditable service; no assumptions for terminations other than death and disability.

Actuarial Valution Method -The method used in the Actuarial Valuation is the Projected Unit Credit Cost Method with Service Prorata. Benefits at Normal Retirement Date are projected using salary assumptions. The actuarial liability is computed by using member service to date and attributing an equal benefit amount to each year of credited and expected future service.

# LEGISLATIVE RETIREMENT SYSTEM OF NORTH CAROLINA ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statement Nos. 25 and 27 set forth certain items of information to be disclosed in the financial statements of the System and the employer. One such item is the Actuarial Accrued Liability, a standardized measure of the System's liabilities. It is the amount owed for benefits allocated to employee service before the balance sheet date, when total projected benefits (including the effects of projected salary increases) are allocated equally over all years of employee service before and after the balance sheet date.

In accordance with GASB requirements, market related asset value is used to determine the percentage of the Actuarial Accrued Liability that is funded. This asset valuation method is designed to recognize each security's intrinsic value and to smooth the effects of short-term volatility in market values. The calculation of the market related value is included on page 13 of this report.

Ten-year historical trend information, prepared in accordance with Governmental Accounting Standards Board Statement Nos. 25 and 27, provides information on progress made in accumulating sufficient assets to pay benefits when due. A purpose of the chart is to establish a consistent method for analyzing and making comparisons among different public retirement systems.

Schedule of Funding Progress						
	(1)	(2)	(3)	(4)	(5)	(6)
Valuation Date 12/31/11 12/31/10 12/31/09 12/31/08 12/31/07 12/31/06 12/31/05	Assets 29,468,021 29,834,730 29,792,114 30,097,153 30,698,398 29,589,218 28,380,922	Actuarial Accrued Liability 23,756,551 23,751,803 23,510,848 23,091,832 22,883,168 21,742,317 21,523,547	Percentage Funded (1) / (2) 124.0%  125.6% 126.7% 130.3% 134.2% 136.1% 131.9%	Unfunded Actuarial Accrued Liability (2) - (1) (5,711,470) (6,082,927) (6,281,266) (7,005,321) (7,815,230) (7,846,901) (6,857,375)	Annual Covered Payroll 3,678,834 3,668,183 3,622,377 3,669,989 3,679,568 3,694,555 3,680,610	UAAL as % of Covered Payroll (4)/(5) (155.3%) (165.8%) (173.4%) (190.9%) (212.4%) (212.4%) (186.3%)
12/31/04 12/31/03 12/31/02	27,477,818 26,326,522 25,303,583	20,696,400 20,045,644 19,243,060	132.8% 131.3% 131.5%	(6,781,418) (6,280,878) (6,060,523)	3,658,034 3,691,757 3,667,974	(185.4%) (170.1%) (165.2%)

Analysis of the dollar amounts of assets available for benefits, actuarial accrued liability, and unfunded actuarial accrued liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides one indication of the Retirement System's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the Retirement System.

# LEGISLATIVE RETIREMENT SYSTEM OF NORTH CAROLINA SUMMARY OF PROVISIONS

#### MEMBERSHIP

The membership of the System includes all present members of the General Assembly who are not active members of the three other State administered retirement systems. Also, included in the membership of the System are former members of the General Assembly who have five or more years of membership service but who are neither members of the Legislative Retirement Fund nor active members of the three other State-administered retirement systems.

Membership service is the number of years served as a member of the General Assembly.

#### NORMAL RETIREMENT

A member who has attained 65 years of age and has five or more years of creditable service is eligible to retire with an unreduced service retirement allowance. A member who has attained age 60 years of age and has five or more years of creditable service is eligible to retire with a reduced service retirement allowance. Also, a member who is age 50 with 20 or more years of creditable service is eligible to retire with a reduced retirement allowance.

A service retirement allowance is equal to 4.02% of a member's highest annual salary and expense allowance multiplied by the number of years of his/her creditable service. For a member who retires prior to age 65, the benefit is reduced by .25% for each month the retirement date precedes his/her 65th

birthday.

Creditable service comprises membership service rendered by the member of the System and any prior service purchased or granted by the provisions of the System.

A member's service retirement allowance shall not exceed 75% of his/her highest annual salary. The benefit will not be payable while employed in a position that makes him/her a member of one of the three other State-administered retirement systems.

#### DISABILITY RETIREMENT

A member with at least five years of creditable service who becomes permanently disabled while in service and prior to attaining his/her 60th birthday may apply for a disability retirement allowance. If the member is medically certified as disabled according to the provisions of the System, his/her disability retirement allowance will be equal to 4.02% of his/her highest annual salary and expense allowance multiplied by the number of years of creditable service at age 60 if he/she had continued in service until that date.

A member's disability retirement allowance is subject to the same limitations as a service retirement allowance.

#### CONTRIBUTIONS

The State provides the cost of the System in excess of the contributions by its members. Member contributions are equal to 7% of compensation, which is salary and expense allowance paid as a legislator in the General Assembly exclusive of allowances for travel and per diem.

If a member ceases to be a member of the General Assembly except by death or retirement, he/she may apply for a return of his/her accumulated contributions. If the member has five or more years of service, the contributions will be returned with interest.

#### PRE-RETIREMENT DEATH BENEFIT

If a member or former member dies prior to retirement, the accumulated contributions are payable to his/her beneficiary. If death occurs before retirement but after age 60 and completion of five or more years of creditable service, or after completion of twelve years of creditable service, the beneficiary may elect to receive a survivor annuity as though the member prior to death had elected a reduced service retirement allowance with a joint annuitant.

If a member who has completed one or more years of creditable service dies while he/she is a member of the General Assembly, the beneficiary shall receive a lump sum payment equal to the member's highest annual salary subject to a maximum of \$15,000.

#### BENEFIT PAYMENT OPTIONS

A member may elect prior to retirement to receive his/her retirement allowance in the form of a life income payable monthly or he/she may elect to receive a reduced retirement allowance payable as a life income under one of the two following options:

Option 1 -Upon the death of the retired member the reduced retirement allowance will continue to be paid thoughout the life of the beneficiary.

Option 2 -Upon the death of the retired member one-half of the reduced retirement allowance will be paid throughout the life of the beneficiary.

Upon the death of the retired member or the beneficiary of a retired member receiving Option 1 or Option 2, an amount equal to the excess, if any, of the accumulated contributions at the time of retirement over the total retirement allowance paid shall be paid to the person designated by the retiree or to the retiree's estate.

#### ADMINISTRATION

The System is administered by the Board of Trustees of the Teachers' and State Employees' Retirement System under the direction of the Legislative Services Commission.

12/31/11

### Market Related Value

1. 12/31/10 MRV	\$29,834,730
2. 2011 Contributions	258,549
3. 2011 Distributions	2,148,626
4. 2011 Expected Return @ 7.25%	2,094,503
5. 12/31/11 Expected MRV	
(1 + 2 - 3 + 4)	30,039,156
6. 12/31/11 Market Value	27,183,483
7. 2011 Market Value in Excess	
of Expected MRV (6 - 5)	(2,855,673)
8. 20% Adjustment toward Market Value	( 571,135)
$(.20 \times 7)$	
9. 12/31/11 MRV (5 + 8)	29,468,021

## DISTRIBUTION OF N.C. LEGISLATIVE PLAN ACTIVE MEMBERS @ 12/31/11

61       7       148993.80         62       4       113438.88         63       5       110561.80         64       10       217701.60         65       9       219594.87         66       7       179060.76         67       6       123953.76         68       8       165271.68         69       3       61976.88         70       4       82635.84         71       2       45699.00         72       5       103294.80         73       1       20658.96         74       2       41317.92         75       4       82635.84         76       1       20658.96         77       1       20658.96         78       2       41317.92         80       2       41317.92         81       1       20658.96	AGE  26  33  34  35  36  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51  52  53  54  55  56  57  58  59  60	NUMBER  1 1 2 1 1 1 2 2 3 1 4 1 3 5 2 4 4 5 5 2 4 6 3 3 5 6	COMPENSATION 20658.96 20658.96 20658.96 20658.96 20658.96 20658.96 27989.52 41317.92 21991.68 61976.88 20658.96 82635.84 20658.96 61976.88 103294.80 41317.92 82635.84 114768.87 103294.80 113660.08 41317.92 82635.84 128040.43 45982.74 61976.88 135722.64 123953.76
67       6       123953.76         68       8       165271.68         69       3       61976.88         70       4       82635.84         71       2       45699.00         72       5       103294.80         73       1       20658.96         74       2       41317.92         75       4       82635.84         76       1       20658.96         77       1       20658.96         78       2       41317.92         80       2       41317.92	63 64 65	4 5 10 9	113438.88 110561.80 217701.60 219594.87
74     2     41317.92       75     4     82635.84       76     1     20658.96       77     1     20658.96       78     2     41317.92       80     2     41317.92	68 69 70 71 72	8 3 4 2 5	123953.76 165271.68 61976.88 82635.84 45699.00 103294.80
	74 75 76 77 78 80	2 4 1 1 2 2	41317.92 82635.84 20658.96 20658.96 41317.92 41317.92

TOT

# DISTRIBUTION OF N.C. LEGISLATIVE PLAN ACTIVE MEMBERS @ 12/31/11

YRS SVC	NUMBER	COMPENSATION
0	5	49481.13
1	43	887613.24
2	4	82635.84
3	16	334456.36
4	2	41317.92
5	13	331502.55
6	2	41317.92
7	20	427631.15
9	18	371861.28
10	2	41317.92
11	7	184775.64
12	2	41317.92
13	7	144612.72
15	5	103294.80
16	1	20658.96
17	7	155724.72
19	4	82635.84
21	4	93747.84
23	2	45699.00
27	1	20658,96
30	1	25040.04
31	3	96424.92
35	1	55107.00
TOT	170	3678833.67

# DISTRIBUTION OF N.C. LEGISLATIVE PLAN RETIRED MEMBERS @ 12/31/11

AGE	NUMBER	MONTHLY BENEFIT
41	1	835.78
44	1	534.42
49	1	424.18
55	1	155.54
57	2	701.55
60	1	57.75
61	2	1371.95
62	9	4744.50
63	7	5454.72
64	4	3859.90
65	7	4167.42
66	11	5459.38
67	12	7914.04
68	9	4618.34
69	12	6996.60
70	10	5484.57
71	7	2520.99
72	6	3090.10
73	9	5648.65
74	9	6626.01
75	15	10144.83
76	11	7225.15
77	12	9808.11
78	7	4082.29
79	14	7840.54
80	8	4324.86
81	11	7017.38
82	9	6221.81
83	7	2027.56
84	13	8134.51
85	10	5064.62
86	8	4541.06
87	5	3248.74
88	7	5274.84
89	7	7785.26
90	6	4235.31
91	2	1561.44
92	1	686.71
93	1	437.96
94	1	539.11
96	1	39.15
98	1	34.10
	278	170941.73

TOT

# DISTRIBUTION OF N.C. LEGISLATIVE PLAN RETIRED MEMBERS @ 12/31/11

	OPT	NUMBER	MONTHLY BENEFIT
	1	7	3405.85
	2	96	54764.51
	3	12	10567.95
	6	163	102203.42
ТОТ		278	170941.73