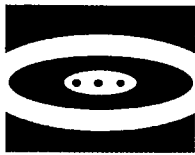


NCRB-NCRF-NCIGA



north carolina
RATE BUREAU
REINSURANCE FACILITY
INSURANCE GUARANTY ASSOCIATION

March 31, 2006

Honorable James E. Long
Commissioner of Insurance
North Carolina Department of Insurance
P. O. Box 26387
Raleigh, North Carolina 27611

Re: Revision of Dwelling Fire and
Extended Coverage Insurance Rates

Dear Sir:

Enclosed herewith for filing on behalf of all member companies of the North Carolina Rate Bureau are revised premium rates for dwelling fire and extended coverage insurance subject to the jurisdiction of the North Carolina Rate Bureau.

The enclosed memoranda and exhibits set forth and explain the calculations which indicate the need for (1) statewide average rate level changes of +32.9% for dwelling fire and extended coverage insurance; and (2) appropriate rate levels varying by territory within the state according to loss experience within each territory.

The foregoing changes were calculated based on rates currently in force and reflect consideration, duly given, to data for the experience period set forth herein. Ratios in the filing relating to expense experience were developed from the Special Calls issued by the Rate Bureau. In preparing this filing, due consideration has been given to the factors specified in G.S. 58-36-10(2).

Information and statistical data required pursuant to G.S. 58-36-15 and 11 NCAC 10.1105 are shown and referenced in Section E. Additionally, the prefiled testimony of (a) Robert J. Curry, Assistant Vice President & Actuary - Insurance Services Office; (b) Dave Border, Chairman, Property Rating Subcommittee; (c) David LaLonde, Senior Vice President - AIR Worldwide Corporation; (d) Dr. James Vander Weide - Fuqua School of Business, Duke University; and (e) Dr. David Appel, Director - Milliman USA are submitted herewith.

We propose that the revised rates become effective according to the following Rule of Application:

These changes are applicable to all new and renewal policies effective on or after November 1, 2006.

Your approval of these rates is respectfully requested.

Very truly yours,

A handwritten signature in black ink, appearing to read "F. Timothy Lucas". The signature is fluid and cursive, with a long horizontal stroke at the end.

F. Timothy Lucas
Personal Lines Manager

FTL:dp

Enclosures

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

REVISION OF RATES

INDEX

SECTION A – Summary of Revision

Statewide Rate Level Changes	A-1
Territory Rate Level Changes	A-2

SECTION B – Material to be Implemented

Current and Revised Territory Base Rates	B-1-2
Revised Rules	B-3

SECTION C – Supporting Material

Determination of Statewide Rate Level Changes	C-1-4
Calculation of Relative Changes by Class	C-5-6
Calculation of Relative Changes by Territory	C-7-10
Calculation of Wind Exclusion Credit	C-11-12

SECTION D – Explanatory Material

Explanatory Memorandum	D-1-11
Loss Development	D-12-13
Loss and Premium Trend	D-14-22
Expense Exhibit and Trend	D-23-29
Derivation of Excess Factor	D-30
Development of Excess Losses on a \$250 Deductible Level	D-31
Modeled Hurricane Losses	D-32

SECTION E – Supplemental Material

E-1-86

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

SECTION A – SUMMARY OF REVISION

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

Rate Level Summary

<u>Coverage</u>	<u>Premium Weight</u>	<u>Indicated Change</u>	<u>Filed Change</u>
Fire	\$ 67,530,203	8.3%	8.3%
Extended Coverage	\$ 125,008,736	58.4%	46.2%
Total	\$ 192,538,939	40.8%	32.9%

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

FILED TERRITORY RATE LEVEL CHANGES BY CLASS

Territory Code	FIRE		EXTENDED COVERAGE	
	<u>Buildings</u>	<u>Contents</u>	<u>Buildings</u>	<u>Contents</u>
5	-4.6%	-17.8%	55.8%	3.3%
6	-4.6%	-17.8%	55.8%	3.3%
32	18.7%	2.3%	22.6%	-18.7%
34	21.7%	4.8%	20.2%	-20.3%
36	16.9%	0.7%	6.6%	-29.3%
38	23.1%	6.0%	15.5%	-23.4%
39	8.8%	-6.3%	17.7%	-22.0%
41	34.2%	15.6%	81.9%	20.6%
42	4.8%	-9.7%	67.8%	11.3%
43	4.8%	-9.7%	67.8%	11.3%
44	13.0%	-2.6%	42.2%	-5.7%
45	12.4%	-3.1%	69.9%	12.6%
46	11.7%	-3.8%	8.7%	-27.9%
47	12.4%	-3.1%	40.3%	-7.0%
53	4.3%	-10.1%	16.3%	-22.9%
57	9.8%	-5.4%	0.9%	-33.1%
60	5.4%	-9.2%	19.1%	-21.0%

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

SECTION B - MATERIAL TO BE IMPLEMENTED

NORTH CAROLINA
 DWELLING FIRE AND EXTENDED COVERAGE INSURANCE
CURRENT AND REVISED TERRITORY BASE RATES

FIRE (A)

<u>Territory Code</u>	CURRENT		REVISED	
	<u>Buildings</u>	<u>Contents</u>	<u>Buildings</u>	<u>Contents</u>
5	24	10	23	8
6	26	10	25	8
32	53	22	63	23
34	50	20	61	21
36	52	20	61	20
38	49	18	60	19
39	43	18	47	17
41	53	22	71	25
42	39	17	41	15
43	39	17	41	15
44	40	17	45	17
45	48	20	54	19
46	48	20	54	19
47	48	20	54	19
53	41	17	43	15
57	48	19	53	18
60	38	16	40	15

EXTENDED COVERAGE (B)

<u>Territory Code</u>	CURRENT		REVISED	
	<u>Buildings</u>	<u>Contents</u>	<u>Buildings</u>	<u>Contents</u>
5	137	23	213	24
6	137	23	213	24
32	24	2	29	2
34	28	2	34	2
36	16	1	17	1
38	14	1	16	1
39	16	1	19	1
41	36	5	65	6
42	80	13	134	14
43	80	13	134	14
44	22	2	31	2
45	34	4	58	5
46	28	3	30	2
47	32	3	45	3
53	25	2	29	2
57	21	2	21	1
60	20	2	24	2

(A) Base Class is Protection Class 5, Frame Construction; \$15,000 Coverage A, \$6,000 Coverage C.
 (B) Base Class is Form DP-001; \$15,000 Coverage A, \$6,000 Coverage C.

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

DETERMINATION OF RATES TO BE CHARGED INDIVIDUAL INSUREDS

The filed base rates by territory are shown on page B-1. These are the filed manual rates for the classification carrying a unity differential. The revised rates for the remaining classifications are determined by applying the established classification rate differentials to the base rates by territory.

Matter underlined is new, matter in [brackets] is deleted.

DWELLING POLICY PROGRAM MANUAL
RATE PAGES

NORTH CAROLINA (32)

5.12 WINDSTORM OR HAIL COVERAGE –
MISCELLANEOUS PROPERTIES (Cont'd)

		Territories		
	05 & 06	42 & 43	32, 34, 41, 45-47, 53	36, 38, 39, 44, 57, 60
8. Outdoor Equipment	\$ 4.80	\$ 2.40	\$ 2.12	\$ 2.03
C. Greenhouses or Hothouses				
Rates per \$1,000				
1. Structures including Glass, Flowers & Plants or	130.60	65.30	61.10	60.60
2. If insured separately:				
a. Structure	11.56	5.78	4.67	4.48
b. Glass	66.20	33.10	31.30	30.80
c. Flowers & Plants	87.80	43.90	40.60	40.10

ADDITIONAL RULE(S)

INSTALLMENT PAYMENT PLAN

C. Additional Charge Per Installment \$3.00

**UNPROTECTED DWELLINGS – PROTECTION CLASS
9, 9S OR 10**

D.1. Additional Rate Per \$1,000 of
Insurance.....\$1.50

**WINDSTORM OR HAIL EXCLUSION –
TERRITORIES 05, 06, 42 AND 43 ONLY**

Territories 05 and 06
B.2. Building Credit.....[\$124] 191
 Contents Credit.....[\$20] 21

Territories 42 and 43
B.2. Building Credit.....[\$59] 112
 Contents Credit.....[\$10] 11

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

SECTION C - SUPPORTING MATERIAL

NORTH CAROLINA DWELLING FIRE
CALCULATION OF INDICATED STATEWIDE RATE LEVEL CHANGE

	(1) Adjusted Incurred <u>Losses (a)</u>	(2) Adjusted Incurred Losses <u>Including LAE (b)</u>	(3) Current Cost/Amount <u>Factor (c)</u>	(4) Earned House <u>Years</u>
1999	27,458,415	29,517,796	1.029	516,224
2000	30,088,666	32,345,316	1.024	521,483
2001	31,948,768	34,344,926	1.043	526,634
2002	33,470,361	35,980,638	1.060	531,884
2003	32,885,625	35,352,047	1.038	549,049

	(5) Trended Loss Cost <u>(2) * (3) * CPF / (4) (d)</u>	(6) Average Rating Factor (e)	(7) Trended Base Loss Cost <u>Loss Cost</u>	(8) <u>Weights</u>
1999	64.02	3.135	20.42	0.10
2000	69.10	3.218	21.47	0.15
2001	74.01	3.323	22.27	0.20
2002	78.02	3.445	22.65	0.25
2003	72.72	3.489	20.84	0.30

(9)	Weighted Trended Base Loss Cost (f)	21.63
(10)	Credibility (2,645,274 House Years)	1.00
(11)	Fixed Expense per Policy (g)	4.79
(12)	Loss and Fixed Expense, (9) + (11)	26.42
(13)	Expected Loss and Fixed Expense Ratio (h)	0.720
(14)	Net Base Rate per Policy, (12) / (13)	36.70
(15)	Deviation (i)	0.038
(16)	Deviation Amount per Policy, (14) / (1.0 - (15)) - (14)	1.45
(17)	Required Base Rate per Policy, (14) + (16)	38.15
(18)	Current Base Rate	35.24
(19)	Indicated Rate Level Change, (17) / (18) - 1	8.3%

NORTH CAROLINA
DWELLING FIRE INSURANCE
STATEWIDE RATE REVIEW

- (a) Incurred losses have been adjusted by the following loss development factors:

Year Ended	Loss Development Factor
12/31/99	1.000
12/31/00	0.999
12/31/01	0.999
12/31/02	1.001
12/31/03	0.994

- (b) The trended loss adjustment expenses have been calculated to be 7.5% of the incurred losses for Fire. This factor is developed on page D-26 and D-29.
- (c) The development of Current Cost/Amount Factors is shown on page D-18.
- (d) The development of the Composite Projection Factor is shown on pages D-19.
- (e) The Average Rating Factor is the ratio of average rate at current manual level and average current base rate.
- (f) The weighted trended loss cost is the sum of the products, by year, of the trended loss costs and the accident year weights.
- (g) The development of fixed expense per policy is shown on page D-29.
- (h) The development of the expected loss and fixed expense ratio is shown on page D-25.
- (i) The anticipated deviation of 3.8% was selected by the North Carolina Rate Bureau.

NORTH CAROLINA DWELLING EXTENDED COVERAGE
CALCULATION OF INDICATED STATEWIDE RATE LEVEL CHANGE

	(1) Non-Modeled Adjusted Incurred Losses (a)*	(2) Non-modeled Adjusted Excess Losses (b)	(3) Losses Adjusted for Excess = [(1)-(2)] * Excess Factor (c)	(4) Modeled Hurricane Losses (d)	(5) Total Losses Including LAE [(3)+(4)] * LAE (e)	
1999	26,571,326	0	27,554,465	32,852,943	66,991,815	
2000	14,870,015	0	15,420,206	35,950,810	56,970,457	
2001	10,053,041	0	10,425,004	39,200,572	55,034,764	
2002	16,799,610	0	17,421,196	44,449,443	68,614,539	
2003	23,020,079	0	23,871,822	52,833,875	85,066,618	
	(6) Current Cost/Amount Factor (f)	(7) Earned House Years	(8) Trended Loss Cost (5) *(6)*CPF/(7) (g)	(9) Average Rating Factor (h)	(10) Trended Base Loss Cost (8) / (9)	(11) Weights
1999	0.916	550,741	120.56	4.153	29.03	0.20
2000	0.925	555,753	102.60	4.375	23.45	0.20
2001	0.961	544,487	105.10	5.453	19.27	0.20
2002	0.987	567,894	129.03	5.812	22.20	0.20
2003	0.998	601,725	152.66	6.210	24.58	0.20
(12)	Weighted Trended Base Loss Cost (i)				23.71	
(13)	Credibility (2,820,600 House Years)				1.00	
(14)	Fixed Expense per Policy (j)				3.88	
(15)	Loss and Fixed Expense, (12) + (14)				27.59	
(16)	Expected Loss and Fixed Expense Ratio (k)				0.544	
(17)	Net Base Rate per Policy, (15) / (16)				50.71	
(18)	Deviation (l)				0.026	
(19)	Deviation Amount per Policy, (17) / (1.0 - (18)) - (17)				1.35	
(20)	Required Base Rate per Policy, (17) + (19)				52.06	
(21)	Current Base Rate				32.86	
(22)	Indicated Rate Level Change, (20) / (21) - 1				58.4%	

* Actual Hurricane losses of \$46,739,440 were removed from 1999, and \$56,286,433 were removed from 2003.

NORTH CAROLINA
 DWELLING EXTENDED COVERAGE INSURANCE
STATEWIDE RATE REVIEW

(a) Incurred losses excluding hurricane have been adjusted by the following loss development factors:

Year Ended	Loss Development Factor
12/31/99	0.999
12/31/00	1.000
12/31/01	1.001
12/31/02	1.005
12/31/03	1.018

- (b) Excess losses are calculated on page D-31.
- (c) The excess factor is calculated on page D-30.
- (d) Modeled hurricane losses are calculated by multiplying the modeled hurricane loss cost per \$1000 of coverage developed by Applied Insurance Research by total limits insurance years (in thousands of dollars).
- (e) The trended loss adjustment expenses have been calculated to be 10.9% of the incurred losses for Extended Coverage. This factor is developed on pages D-28 and D-29.
- (f) The development of Current Cost/Amount Factors is shown on page D-21.
- (g) The development of the Composite Projection Factor is shown on pages D-22.
- (h) The Average Rating Factor is the ratio of average rate at current manual level and average current base rate.
- (i) The weighted trended loss cost is the sum of the products, by year, of the trended loss costs and the accident year weights.
- (j) The development of fixed expense per policy is shown on page D-29.
- (k) The development of the expected loss and fixed expense ratio is shown on page D-27.
- (l) The anticipated deviation of 2.6% was selected by the North Carolina Rate Bureau.

NORTH CAROLINA DWELLING FIRE
CALCULATION OF INDICATED BUILDINGS/CONTENTS CLASS CHANGES

	(1)	(2)	(3)	(4)	(5)
<u>Class</u>	<u>Trended Adjusted Incurred Losses</u>	<u>Five Year House Years</u>	<u>Trended Average Rating Factor</u>	<u>Base Loss Cost (1) / [(2) * (3)]</u>	<u>Credibility</u>
Buildings	201,977,013	1,888,582	4.355	24.56	1.00
Contents	16,130,984	756,692	2.627	8.11	1.00
Total	218,107,997	2,645,274	4.120	20.01	

	(6)	(7)	(8)	(9)	(10)
<u>Class</u>	<u>Credibility Weighted Loss Cost</u>	<u>Indicated Base Loss Cost (a)</u>	<u>Current Base Rate</u>	<u>Expected Loss and Fixed Expense Ratio</u>	<u>Indicated Net Base Rate (b)</u>
Buildings	24.56	26.55	42.58	0.720	44.92
Contents	8.11	8.77	16.91	0.720	15.37
Total	20.01	21.63	35.24	0.720	36.70

	(11)	(12)	(13)	(14)
<u>Class</u>	<u>Deviation</u>	<u>Deviation Amount (10) / [1.0 - (11)] - (10)</u>	<u>Required Base Rate (10) + (12)</u>	<u>Indicated Base Rate Change (13) / (8) - 1</u>
Buildings	0.038	1.77	46.69	9.7%
Contents	0.038	0.61	15.98	-5.5%
Total	0.038	1.45	38.15	8.3%

Note: (a). Column (7) = (6) row / (6) total * Statewide Indication page column (9).

(b). Column (10) = [(7) + (8) * Trended fixed expense ratio] / (9). Trended fixed expense ratio is shown on page D-29.

NORTH CAROLINA DWELLING EXTENDED COVERAGE
CALCULATION OF INDICATED BUILDINGS/CONTENTS CLASS CHANGES

<u>Class</u>	(1) Trended Adjusted Incurred Losses	(2) Five Year House Years	(3) Trended Average Rating Factor	(4) Base Loss Cost = (1) / [(2) * (3)]	(5) Credibility
Buildings	399,417,584	1,949,458	7.107	28.83	1.00
Contents	23,412,206	871,142	7.410	3.63	1.00
Total	422,829,790	2,820,600	7.129	21.03	

<u>Class</u>	(6) Credibility Weighted Loss Cost	(7) Indicated Base Loss Cost (a)	(8) Current Base Rate	(9) Expected Loss and Fixed Expense Ratio	(10) Indicated Net Base Rate (b)
Buildings	28.83	32.50	43.54	0.544	69.19
Contents	3.63	4.09	8.98	0.544	9.47
Total	21.03	23.71	32.86	0.544	50.71

<u>Class</u>	(11) Deviation	(12) Deviation Amount (10) / [1.0 - (11)] - (10)	(13) Required Base Rate (10) + (12)	(14) Indicated Base Rate Change (13) / (8) - 1
Buildings	0.026	1.85	71.04	63.2%
Contents	0.026	0.25	9.72	8.2%
Total	0.026	1.35	52.06	58.4%

Note: (a). Column (7) = (6) row / (6) total * Statewide Indication page column (12).

(b). Column (10) = [(7) + (8) * Trended fixed expense ratio] / (9). Trended fixed expense ratio is shown on page D-29.

NORTH CAROLINA DWELING FIRE
CALCULATION OF INDICATED TERRITORY RATE LEVEL CHANGES

Territory	(1) Latest Year Earned Premium at Current Level	(2) Current Average Base Rate	(3) Five Year Experience		(4) Five Year House Years	(5) Credibility	(6) Credibility Weighted Base Loss Cost (a)		(7) Indicated Statewide Base Loss Cost		(8) Indicated Base Loss Cost Terr (6) / SW (6) * (7)	(9) Trended Gen./O.A Expense Ratio	(10) Trended Loss and Fixed Expense (8) + (9) * (2)
			Base Loss Cost	Loss Cost			Base Loss Cost	Base Loss Cost					
5&6	6,237,057	17.89	6.28	261,219	0.70	7.09	21.63	8.84	0.158	11.67			
32	2,530,423	46.21	29.59	83,677	0.40	25.78	21.63	32.14	0.116	37.50			
34	2,447,611	42.30	26.37	102,042	0.40	23.31	21.63	29.06	0.145	35.19			
36	2,125,414	46.09	26.94	82,185	0.40	24.68	21.63	30.77	0.132	36.85			
38	2,301,528	43.25	29.47	83,953	0.40	24.84	21.63	30.97	0.125	36.38			
39	2,805,061	38.74	19.30	95,601	0.40	19.41	21.63	24.20	0.119	28.81			
41	3,240,955	41.10	30.45	129,939	0.50	25.56	21.63	31.87	0.142	37.71			
42&43	8,132,061	31.27	13.58	360,941	0.80	14.01	21.63	17.47	0.158	22.41			
44	656,493	33.87	15.95	29,793	0.20	16.81	21.63	20.96	0.154	26.18			
45	4,049,049	40.21	20.64	157,174	0.50	20.43	21.63	25.47	0.135	30.90			
46	1,501,222	40.34	20.94	55,231	0.30	20.48	21.63	25.53	0.131	30.81			
47	6,480,947	40.30	20.86	244,568	0.60	20.62	21.63	25.71	0.131	30.99			
53	2,913,944	35.25	15.93	96,230	0.40	17.01	21.63	21.21	0.112	25.16			
57	5,326,284	42.15	21.21	191,678	0.60	21.20	21.63	26.43	0.124	31.66			
60	16,782,154	32.38	15.26	671,043	1.00	15.26	21.63	19.02	0.134	23.36			
Statewide:	67,530,203	35.24	17.72	2,645,274		17.35				0.136			

Note: (a). Column (6) = (5) * (3) + [1.00 - (5)] * (3) statewide * (2) / (2) statewide

NORTH CAROLINA DWELLING FIR
CALCULATION OF INDICATED TERRITORY RATE LEVEL CHANGES

Territory	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Expected Loss Ratio	Indicated Net Base Rate	Dollar Deviation Per Exposure	Indicated Required Base Rate	Indicated Rate Level Change	Indicated Buildings Rate Level	Indicated Contents Rate Level	Indicated Buildings Rate Level	Indicated Contents Rate Level
	(10)/(11)	(12) / (1.0 - (13))	(12) + (14)	(15) / (2) - 1	Change (b)	Change (c)		
5&6	0.720	16.21	0.038	0.64	16.85	-5.8%	-4.6%	-17.8%
32	0.720	52.08	0.038	2.06	54.14	17.2%	18.7%	2.3%
34	0.720	48.88	0.038	1.93	50.81	20.1%	21.7%	4.8%
36	0.720	51.18	0.038	2.02	53.20	15.4%	16.9%	0.7%
38	0.720	50.53	0.038	2.00	52.53	21.5%	23.1%	6.0%
39	0.720	40.01	0.038	1.58	41.59	7.4%	8.8%	-6.3%
41	0.720	52.38	0.038	2.07	54.45	32.5%	34.2%	15.6%
42&43	0.720	31.13	0.038	1.23	32.36	3.5%	4.8%	-9.7%
44	0.720	36.36	0.038	1.44	37.80	11.6%	13.0%	-2.6%
45	0.720	42.92	0.038	1.70	44.62	11.0%	12.4%	-3.1%
46	0.720	42.79	0.038	1.69	44.48	10.3%	11.7%	-3.8%
47	0.720	43.04	0.038	1.70	44.74	11.0%	12.4%	-3.1%
53	0.720	34.94	0.038	1.38	36.32	3.0%	4.3%	-10.1%
57	0.720	43.97	0.038	1.74	45.71	8.4%	9.8%	-5.4%
60	0.720	32.44	0.038	1.28	33.72	4.1%	5.4%	-9.2%
Statewide:	0.720					8.2%	9.6%	-5.6%

Note: (b). Column (17) = (1 + (16)) * (1 + Class page (14) Buildings) / (1 + Class page (14) total) - 1
(c). Column (18) = (1 + (16)) * (1 + Class page (14) Contents) / (1 + Class page (14) total) - 1

NORTH CAROLINA DWELLING ENDED COVERAGE
CALCULATION OF INDICATED TERRITORY RATE LEVEL CHANGES

Terr.	(1) Latest Year Earned Premium at Current Level	(2) Current Average Base Rate	(3) Five Year Experience Base Loss Cost	(4) Five Year House Years	(5) Cred.	(6) Credibility Weighted Base Loss Cost(a)	(7) Five Year Modelled Hurr Loss Cost	(8) Total Base Loss Cost (6)+(7)	(9) Indicated			(10) Indicated Base Loss Cost Terr (8) / SW (8) * (9)	(11) Trended Gen./O.A Expense Ratio	(12) Trended Loss and Fixed Expense (10) + (11) * (2)
									Statewide Base Loss Cost	Base Loss Cost	Loss Cost			
5&6	61,034,651	82.61	7.58	383,193	1.00	7.58	39.44	47.02	23.71	57.58	0.033	60.31		
32	2,123,638	18.97	8.29	82,792	0.50	5.89	3.70	9.59	23.71	11.74	0.175	15.06		
34	2,791,095	20.98	5.16	109,504	0.50	4.51	5.81	10.32	23.71	12.64	0.176	16.33		
36	1,235,169	13.12	6.68	79,656	0.40	4.12	1.45	5.57	23.71	6.82	0.278	10.47		
38	1,447,021	11.55	5.97	83,886	0.50	4.05	1.73	5.78	23.71	7.08	0.252	9.99		
39	1,522,837	13.42	6.67	95,349	0.50	4.57	1.88	6.45	23.71	7.90	0.293	11.83		
41	2,020,467	23.89	5.78	130,137	0.60	5.22	11.58	16.80	23.71	20.57	0.317	28.14		
42&43	29,247,407	53.97	5.56	459,019	1.00	5.56	36.01	41.57	23.71	50.91	0.095	56.04		
44	359,621	16.60	6.74	28,769	0.20	3.79	3.80	7.59	23.71	9.30	0.360	15.28		
45	2,786,229	25.38	8.09	152,740	0.60	6.72	10.66	17.38	23.71	21.29	0.261	27.91		
46	1,004,018	20.95	6.87	53,696	0.40	5.06	2.61	7.67	23.71	9.39	0.256	14.75		
47	4,435,912	23.77	7.71	237,622	0.80	7.04	5.68	12.72	23.71	15.58	0.253	21.59		
53	2,382,466	19.35	7.12	94,549	0.50	5.34	3.68	9.02	23.71	11.05	0.182	14.57		
57	3,369,930	17.02	6.40	182,301	0.70	5.42	1.66	7.08	23.71	8.67	0.246	12.86		
60	9,248,275	15.34	6.23	647,387	1.00	6.23	1.04	7.27	23.71	8.90	0.312	13.69		
Statewide:	125,008,736	32.86	6.04	2,820,600		5.45		19.36			0.111			

Note: (a). Column (6) = (5) * (3) + [1.00 - (5)] * (3) statewide * (2) / (2) statewide

NORTH CAROLINA DWELLING NEED COVERAGE
CALCULATION OF INDICATED TERRITORY RATE LEVEL CHANGES

	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
	Expected	Indicated		Dollar	Indicated	Indicated	Indicated	Indicated	Indicated
	Loss and	Net Base		Deviation	Required	Rate Level	Rate Level	Buildings	Contents
	Fixed Expense	Rate		Per Exposure	Base Rate	Change	Change	Rate Level	Rate Level
	Ratio	(12)/(13)	Deviation	(14)/(1.0 - (15))	(14) + (16)	(17)/(2) - 1	to Statewide	Change (c)	Change (d)
Terr.				-(14)	(14) + (16)	(17)/(2) - 1	Indicated Level (b)	Change (c)	Change (d)
5&6	48.5%	124.35	0.026	3.32	127.67	54.5%	51.2%	55.8%	3.3%
32	67.0%	22.48	0.026	0.60	23.08	21.7%	19.0%	22.6%	-18.7%
34	67.0%	24.37	0.026	0.65	25.02	19.3%	16.7%	20.2%	-20.3%
36	77.5%	13.51	0.026	0.36	13.87	5.7%	3.4%	6.6%	-29.3%
38	77.5%	12.89	0.026	0.34	13.23	14.5%	12.1%	15.5%	-23.4%
39	77.5%	15.26	0.026	0.41	15.67	16.8%	14.2%	17.7%	-22.0%
41	67.0%	42.00	0.026	1.12	43.12	80.5%	76.6%	81.9%	20.6%
42&43	48.5%	115.55	0.026	3.08	118.63	119.8%	115.1%	121.6%	46.9%
44	67.0%	22.81	0.026	0.61	23.42	41.1%	38.0%	42.2%	-5.7%
45	67.0%	41.66	0.026	1.11	42.77	68.5%	64.9%	69.9%	12.6%
46	67.0%	22.01	0.026	0.59	22.60	7.9%	5.5%	8.7%	-27.9%
47	67.0%	32.22	0.026	0.86	33.08	39.2%	36.2%	40.3%	-7.0%
53	67.0%	21.75	0.026	0.58	22.33	15.4%	12.9%	16.3%	-22.9%
57	77.5%	16.59	0.026	0.44	17.03	0.1%	-2.1%	0.9%	-33.1%
60	77.5%	17.66	0.026	0.47	18.13	18.2%	15.6%	19.1%	-21.0%
Statewide	55.1%					61.9%	58.4%	63.2%	8.2%

Note: (b). Column (19) = [1 + (18)] / [1 + (18) statewide] * (1 + Statewide indicated rate level change) - 1
(c). Column (20) = [1 + (19)] * [1 + Class page (14) Buildings] / [1 + Class page (14) total] - 1
(d). Column (21) = [1 + (19)] * [1 + Class page (14) Contents] / [1 + Class page (14) total] - 1

NORTH CAROLINA

DWELLING EXTENDED COVERAGE INSURANCE

DERIVATION OF WIND EXCLUSION CREDITS

The filed wind exclusion credits, page B-3, are based on the pricing methodology contained in Robert Hurley's "Commercial Fire Insurance Ratemaking" contained in the 1973 CAS Proceedings. This method is summarized in the following formula:

$$C = 1.0 - \frac{Ld + F}{(1 - V)R} \text{ where,}$$

C = indicated percentage credit

F = provision in filed rates for fixed expenses (territory trended fixed expense ratio divided by the filed territory buildings or contents rate level change)

V = provision in filed rates for variable expenses

L = provision in filed rates for losses and loss adjustment expense = $1.0 - V - F$

R = territory risk load factor = $(1 - \text{statewide variable expense loading}) / (1 - V)$. The statewide variable expense loading is 45.6%.

d = percentage of losses remaining after wind losses are excluded

The d values used in this calculation are obtained by the following formula:

$$d = \frac{N}{N + W}, \text{ where}$$

N = 4 year (2000-2003) non-wind losses

W = X + Y, where

X = 4 year (2000-2003) modelled hurricane losses ; and

Y = 4 year (2000-2003) non-hurricane wind losses

NORTH CAROLINA

DWELLING EXTENDED COVERAGE INSURANCE

DERIVATION OF WIND EXCLUSION CREDITS

The following displays the variables described above and the indicated percentage credit, C:

	Territories 5 & 6		Territories 42 & 43	
	Buildings	Contents	Buildings	Contents
C	89.8%	86.8%	87.5%	85.5%
F	0.021	0.033	0.043	0.065
V	0.515	0.515	0.515	0.515
L	0.464	0.452	0.442	0.420
d	0.074	0.086	0.056	0.033
N	7,057,526	573,943	3,132,512	178,084
X	86,697,766	6,082,307	51,115,658	5,061,398
Y	2,139,093	48,192	2,161,125	95,035
W	89,836,859	6,130,499	53,276,783	5,156,433
R	1.122	1.122	1.122	1.122

In order to derive the filed dollar credit, the indicated percentage credit is applied to the filed base rate.

	Territories 5 & 6		Territories 42 & 43	
	Buildings	Contents	Buildings	Contents
(1) Indicated Base Rate	\$213	\$24	\$177	\$19
(2) Indicated Percentage Credit	89.8%	86.8%	87.5%	85.5%
(3) Indiated Credit (1) x (2)	\$191	\$21	\$155	\$16
(4) Indicated Non-Wind Base Rate (1) - (3)	\$22	\$3	\$22	\$3
(5) Filed Base Rate	\$213	\$24	\$134	\$14
(6) Filed Credit (5) - (4)	\$191	\$21	\$112	\$11

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

SECTION D - EXPLANATORY MATERIAL

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

This memorandum supplements the filing letter and supporting exhibits setting forth a revision of Dwelling Fire and Extended Coverage insurance rates in the State of North Carolina. It is the purpose of this memorandum to describe the source data used and to set forth in detail the insurance ratemaking procedures reflected in the filing. Certain pages in the filing and accompanying material contain a notation "all carriers" or other similar wording. This indicates that the data are combined ISO, ISS, AAIS, and NISS data. Data for certain companies are not included, as noted in Section E.

Premium and Loss Experience

This revision is based upon the combined premium and loss experience of all licensed companies writing Dwelling insurance in this State, except as noted in Section E. In order to have this experience available in all detail necessary for rate review and ratemaking in accordance with accepted standards, all such companies are required to file each year their total Dwelling insurance experience with the official statistical agents. Experience is recorded pursuant to the officially approved statistical plans and reported by the companies in accordance with instructions issued by the statistical agents under the Official Calls for Experience.

The Commissioner appointed the following statistical agents for the collection of Dwelling insurance experience in North Carolina: Insurance Services Office (ISO), Independent Statistical Service (ISS), American Association of Insurance Services (AAIS), and National Independent Statistical Service (NISS).

Experience utilized in the filing was collected under the Personal Lines Statistical Plan (Other Than Automobile), Minimum Statistical Plan, Personal Lines Statistical Agent Plan (Other Than Automobile) and the 2004 Official Statistical Programs of ISO, the Statistical Plan for Dwelling Fire and Extended Coverage Policies, Mobilehome Policies, and Dwelling Policies and the 2004 Statistical Programs of ISS, the Dwelling Statistical Plan developed by AAIS and the 2004 Statistical Programs of the AAIS, the Dwelling Statistical Plan developed by the NISS and the 2004 Statistical Programs of the NISS. In substance, the statistical plans of all statistical agents are similar in North Carolina, and provide for the recording and reporting of the experience in the detail required for ratemaking and in such form that the experience of all companies can be combined.

The licensing of an organization and its appointment as a statistical agent in the various states is predicated upon demonstration by the organization of its ability to perform this function. Moreover, the performance of the statistical agents is reviewed periodically through examination by personnel of state insurance departments under the convention examinations of the National Association of Insurance Commissioners. From time to time such organizations are called upon by Insurance Department examiners to verify, and do verify the data consolidated by them as statistical agents.

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

The insurance companies likewise are subject to a variety of checks and controls. Effective controls are maintained within the company over the activities of company employees connected with the company's statistics. Companies are required by statute to submit directly to the Insurance Department statistical and accounting information to be found in the Annual Statement and the Insurance Expense Exhibit. These documents are scrutinized by experienced Insurance Department personnel throughout the country. The insurance companies are also subject to examination by the Insurance Department, which examinations extend into the statistical records of the companies.

Tabulations of experience reported to the Independent Statistical Service, American Association of Insurance Services, and National Independent Statistical Service are provided to the Insurance Services Office. The Insurance Services Office combines the experience of all statistical agents and develops the analysis included in this filing. This work is performed at the direction of the North Carolina Rate Bureau.

Statewide Rate Level Exhibits

1. Experience

Dwelling Fire and Extended Coverage insurance experience was compiled on a calendar accident year basis for the years ended December 31, 2003, 2002, 2001, 2000, and 1999. For any twelve-month period, the accident year experience brings together the losses resulting from accidents occurring during that period with the premiums and number of dwellings "earned" during the same period. Since this filing utilizes a computer model to measure losses attributable to hurricanes, actual hurricane losses have been removed from the ratemaking experience.

2. Average Rating Factors

Earned premiums at present rates are used to determine average rating factors. The average rating factor is the ratio of the average rate (earned premium at manual level divided by corresponding house-years) and the average current manual base rate. The average rating factor is used to convert the pure-premiums incurred during the experience period to the base level.

For data which was available in sufficient detail, the earned premiums at present manual rates for the Dwelling Fire and Extended Coverage insurance coverages are calculated by multiplying the number of insured dwellings earned during the experience period by the rates in effect at the time of review. For the North Carolina Fair Plan / Beach Plan (year 1999 and 2000), ISO Minimum Statistical Plan / Stat Agent Plan and the AAIS data, the earned premium at present manual rates were calculated by applying on-level earned premium factors to reported earned premiums.

3. Losses

Losses compiled for any accident year include paid losses as well as loss reserves. The amounts that will ultimately be required as payments of claims on open cases are carefully determined by the claim departments of the companies, and experience has shown that these determinations are highly accurate in the aggregate. Since, however, there are differences between the total incurred losses so determined and the amounts ultimately paid, the ratemaking procedure provides for a "development" of the incurred losses to a basis which, for all practical purposes, can be considered as the ultimate basis. This development is accomplished as follows:

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

Each year the experience is compiled for the latest five years, all valued as of three months after the close of the latest accident year period. Thus, the experience is reported for the latest year as of 15 months, the preceding year as of 27 months, the next preceding year as of 39 months, the third preceding year as of 51 months and the fourth preceding year as of 63 months all measured from the beginning of each accident year respectively.

From reports of prior years, similarly aged experience was obtained so that there are available 5 successive reports for the earliest year, 4 successive reports for the next earliest year, 3 successive reports for the middle year and 2 successive reports for the second most recent year.

Dwelling claims generally are settled at and are sufficiently matured as of 87 months, by which time nearly all incurred losses have been paid. From a comparison of the incurred losses for each year at successive valuation dates, it is determined what the rate of development has been in the past in order to calculate the development of less mature losses. This development is reflected in the incurred losses for the less mature years by the application of loss development factors. In this filing, loss development factors have been calculated based on the statewide experience of companies reporting to ISO, and are as follows:

<u>Accident Year Ended</u>	<u>Factor to Develop to 87 Months</u>	
	<u>Fire</u>	<u>Extended Coverage</u>
December 31, 1999	1.000	0.999
December 31, 2000	0.999	1.000
December 31, 2001	0.999	1.001
December 31, 2002	1.001	1.005
December 31, 2003	0.994	1.018

The derivation of the factors shown above is shown on pages D-12 and D-13. By applying these factors, the reported incurred losses have been adjusted to the amounts at which it is believed they will ultimately be settled.

In order to insure stability in rate levels while maintaining adequacy in the event of wide swings in hurricane and other losses, an excess procedure and a hurricane loss model have been utilized for Extended Coverage. Hence, extreme shifts in rate level (both upward and downward), which might result from reflecting large hurricane and other losses only in the year in which they occur will be avoided. The incurred non-modeled excess losses are those losses which result from unusually severe loss activity (other than hurricane). They are removed from the experience used in developing rates. In order to reflect the impact of excess losses (that are not related to hurricanes and not accounted for in the hurricane model) on a long-term basis, the non-modeled losses are multiplied by an excess factor of 1.037. The derivation of the excess factor is shown on Page D-30. The derivation of the excess non-modeled losses is shown on page D-31. The modeled losses used in this filing are based on analysis performed by the Applied Insurance Research Company on behalf of the North Carolina Rate Bureau. See page D-32 for details.

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

4. Loss Adjustment Expense

The Dwelling loss adjustment expenses, prior to trend considerations, are determined as an average percentage of the North Carolina incurred losses for calendar accident years 1999-2003 for Fire and Extended Coverage, based on a North Carolina expense call. The average is calculated using the five year period, removing the high and low values, and averaging the remaining three years. See pages D-26 and D-28.

5. Fixed Expense

The fixed expense (general expenses and other acquisition expenses) is determined as an average percentage of North Carolina earned premiums for calendar accident years 2001-2003, based on a North Carolina expense call. See pages D-25 and D-27. The development of fixed expense per policy is shown on page D-29.

6. Loss Trend

Loss Trend is based on two indices; the Boeckh Residential Index and the Modified Consumer Price Index. These indices are averaged (weighted 80% and 20%, respectively) and comprise the Current Cost Index.

The loss trending procedure is accomplished in two steps. In the first step Current Cost Factors are applied to each year's losses. The Current Cost Factors are derived from the external indices and, when applied to a given year's losses, translate these losses to a cost level which represents May 15, 2005. In order to trend losses from May 15, 2005 to one year beyond the assumed effective date of June 1, 2006, a Loss Projection Factor is applied. This projection factor is based on the annual change inherent in the latest twelve quarterly points of the Current Cost Index.

Since the external indices necessarily ignore the effect of policy deductibles, a First Dollar procedure to trend from the first dollar of loss is incorporated into the calculation of the Loss Projection Factor.

The procedures described above are displayed on pages D-14, D-15, D-19 and D-22.

7. Expense Trend

The average annual change in expenses is based on the All Items Consumer Price Index and the Compensation Cost Index. The expected average annual change in expenses has been selected to be 3.3% based on analysis and review of these data, which are displayed on pages D-23 to D-24.

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

8. Premium Trend

The historical average relativities are used to calculate an average annual change. This rate of change is used to estimate the average relativity at the point in time corresponding to the midpoint of the latest quarter of the Current Cost Index (May 15, 2005). The Current Amount Factor for a given year is calculated as the ratio of the May 15, 2005 average relativity and the given year's average relativity. In order to calculate the Premium Projection Factor, the annual rate of change is compounded over the time period between May 15, 2005 and December 1, 2006 (six months beyond the assumed effective date). The calculation is shown on pages D-17-18 and D-20-21.

9. Trend Period

The effective date assumed in this filing for trend purposes is June 1, 2006. Given this effective date, the trend periods for premiums, losses and expenses are as follows:

- premiums are trended from January 1 of the given year to December 1, 2006.
- losses are trended from July 1 of the given year to June 1, 2007.
- general expense and other acquisition expense percentages, since they are based on 2001-2003 data, are trended from July 1, 2002 to December 1, 2006.
- loss adjustment expense percentages, since they are based on 1999-2003 data, are trended from July 1, 2001 to June 1, 2007.

10. Expected Loss and Fixed Expense Ratio

These quantities represent the portion of the premium income available for losses, loss adjustment expenses, general expenses and other acquisition expenses. They are determined from special calls for North Carolina expense experience and reflect the 2001, 2002, and 2003 results as reported by all companies licensed in North Carolina during those years. The breakdown of the expected loss and fixed expense ratios is set forth on page D-25 for Fire and page D-27 for Extended Coverage.

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

Class Rate Level Exhibits - Fire and Extended Coverage (pages C-5 and C-6)

1. Trended Adjusted Incurred Losses (column 1)

Incurred losses for the latest five years, trended by year using Current Cost Factors and a Loss Projection Factor. For Extended Coverage, modeled hurricane wind losses and the excess loss procedure are incorporated into the incurred losses.

2. Trended Average Rating Factor (column 3)

The Average Rating Factor trended by Current Amount Factors and a Premium Projection Factor.

3. Credibility (column 5)

The five year loss cost by class is assigned a credibility value based on the number of house years underlying this loss cost. The standard for full credibility is 500,000 house years for Fire and 330,000 house years for Extended Coverage, with partial credibility equal to

$$\sqrt{\text{five year house years} / \text{full credibility standard}}$$

truncated to the nearest tenth. The complement of credibility is assigned to the statewide five year base loss cost adjusted by the ratio of the class' current base rate and the statewide average current base rate.

4. Indicated Base Loss Cost (column 7)

The indicated base loss cost by class is the statewide base loss cost (computed on the statewide indications pages) adjusted by the class relativity indicated by the credibility weighted loss cost (ratio of class to statewide of column 6).

5. Indicated Net Base Rate (column 10)

The indicated net base rate is the sum of the loss cost and fixed expense divided by the expected loss and fixed expense ratio derived on page D-25. The fixed expense is calculated as the average current base rate multiplied by the fixed expense ratio developed on page D-29.

6. Indicated Base Rate Change (column 14)

The indicated base rate level change is the ratio of required base rate and current base rate, minus 1.

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

Territory Rate Level Exhibits - Fire (pages C-7-8)

1. Latest Year Earned Premium at Current Level (column 1)

Earned premium for the latest year (2003), adjusted to the manual rate level currently in effect.

2. Five Year Experience Base Loss Cost (column 3)

A five year experience base loss cost by territory is derived by dividing five year territory losses by the product of the five year average rating factor and five year house-years.

3. Credibility (column 5)

The five year loss cost is assigned a credibility value based upon the number of house years underlying this loss cost. The standard for full credibility is 500,000 house years, with partial credibility equal to

$$\sqrt{\text{five year house years} / \text{full credibility standard}}$$

truncated to the nearest tenth. The complement of credibility is assigned to the statewide five year experience base loss cost adjusted by the ratio of the territory's current base rate and the statewide average current base rate.

4. Indicated Statewide Base Loss Cost (column 7)

The statewide base loss cost derived on the statewide indications page.

5. Trended General and Other Acquisition Expenses (column 9)

The trended general and other acquisition expense provision is the trended statewide provisions for these expenses multiplied by the ratio of statewide average rate to territory rate.

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE
EXPLANATORY MEMORANDUM

6. Indicated Rate Level Change (column 16)

The indicated rate level change is the ratio of required base rate and current base rate, minus 1.

7. Indicated Buildings Rate Level Change (column 17)

The indicated buildings rate level change is the product of the indicated rate level change and the class relativity embedded in the indicated buildings base rate change (column 14) on the class indications page.

8. Indicated Contents Rate Level Change (column 18)

The indicated contents rate level change is the product of the indicated rate level change and the class relativity embedded in the indicated contents base rate change (column 14) on the class indications page.

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

Territory Rate Level Exhibits - Extended Coverage (pages C-9-10)

1. Latest Year Earned Premium at Current Level (column 1)

Earned premium for the latest year (2003), adjusted to the manual rate level currently in effect.

2. Five Year Non-Modeled Experience Base Loss Cost (column 3)

A five year experience base loss cost by territory is derived by dividing five year territory losses by the product of the five year average rating factor and five year house-years. The territory losses exclude hurricane losses and include an excess loss provision.

3. Credibility (column 5)

The five year loss cost is assigned a credibility value based upon the number of house years underlying this loss cost. The standard for full credibility is 330,000 house years, with partial credibility equal to

$$\sqrt{\text{five year house years} / \text{full credibility standard}}$$

truncated to the nearest tenth. The complement of credibility is assigned to the statewide five year non-modeled experience base loss cost adjusted by the ratio of the territory's current base rate and the statewide average current base rate.

4. Five Year Modeled Hurricane Base Loss Cost (column 7)

The five year modeled hurricane base loss cost is derived by dividing five year modeled hurricane territory losses by the product of the five year average rating factor and five year house-years.

5. Indicated Statewide Base Loss Cost (column 9)

The statewide base loss cost derived on the statewide indications page.

6. Trended General and Other Acquisition Expenses (column 11)

The trended general and other acquisition expenses are the trended statewide provisions for these expenses multiplied by the ratio of statewide average rate to territory average rate.

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

7. Expected Loss and Fixed Expense Ratio (column 13)

These quantities represent the portion of the premium income available for losses, loss adjustment expenses, general expenses and other acquisition expenses. The ratio varies by territory because the provision for the reinsurance cost expense varies by territory. (See testimony of D. Appel.)

8. Indicated Rate Level Change (column 19)

The indicated rate level change is the ratio of required base rate and current base rate, minus 1.

9. Indicated Buildings Rate Level Change (column 20)

The indicated buildings rate level change is the product of the indicated rate level change and the class relativity embedded in the indicated buildings base rate change (column 14) on the class indications page.

10. Indicated Contents Rate Level Change (column 21)

The indicated contents rate level change is the product of the indicated rate level change and the class relativity embedded in the indicated contents base rate change (column 14) on the class indications page.

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXPLANATORY MEMORANDUM

Credibility Factor Determination

Credibility considerations enter into the Dwelling Fire and Extended Coverage ratemaking formulas.

The credibility procedure is based on the 'frequency with severity modification' model discussed in "Credibility of the Pure Premium" by Mayerson, Bowers and Jones. The full credibility standard is based on a normal distribution with a 90% probability of meeting the test and a 10% maximum departure from the expected value, translated to house year standards. Partial credibility (Z_p) is calculated as follows:

$$Z_p = \sqrt{\text{five year house years} / \text{full credibility standard}} \text{ (truncated to the nearest tenth)}$$

The full credibility standards are 500,000 house years for Fire and 330,000 house years for Extended Coverage.

On a statewide basis, both Fire and Extended Coverage are fully credible.

On a class or territory basis, partial credibility may be employed. In that case, the calculation of the rate level indication incorporates credibility as follows: for the class review, credibility is applied to the five year class loss costs and (1 - credibility) to the complement of credibility; for the territory review, credibility is applied to the five year (non-hurricane for Extended Coverage) territory loss costs and (1 - credibility) to the complement of credibility.

NORTH CAROLINA
DWELLING FIRE INSURANCE

LOSS DEVELOPMENT

North Carolina Incurred Losses as of

Accident Year	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>	<u>75 Months</u>	<u>87 Months</u>
1992	2,229,699	2,127,675	2,143,760	2,143,783	2,136,874	2,136,874	2,136,785
1993	3,039,168	2,972,612	2,972,121	2,972,389	2,972,389	2,972,389	2,972,389
1994	3,020,852	2,996,626	3,000,187	3,016,242	2,992,850	2,992,805	2,992,805
1995	3,400,557	3,388,116	3,403,120	3,407,019	3,408,569	3,408,569	3,408,319
1996	6,271,356	6,316,390	6,383,042	6,354,567	6,338,156	6,338,156	6,337,194
1997	7,820,964	7,865,514	7,828,267	7,851,945	7,868,408	7,820,908	7,850,695
1998	8,631,056	8,626,005	8,632,565	8,648,055	8,648,055	8,648,055	
1999	7,510,962	7,410,529	7,390,810	7,330,193	7,331,246		
2000	10,453,345	10,539,870	10,616,845	10,617,150			
2001	8,947,503	8,955,591	8,959,904				
2002	9,296,122	9,288,021					
2003	10,130,917						

North Carolina Link Ratios

Accident Year	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>	<u>75:63</u>	<u>87:75</u>
1992	0.954	1.008	1.000	0.997	1.000	1.000
1993	0.978	1.000	1.000	1.000	1.000	1.000
1994	0.992	1.001	1.005	0.992	1.000	1.000
1995	0.996	1.004	1.001	1.000	1.000	1.000
1996	1.007	1.011	0.996	0.997	1.000	1.000
1997	1.006	0.995	1.003	1.002	0.994	1.004
1998	0.999	1.001	1.002	1.000	1.000	
1999	0.987	0.997	0.992	1.000		
2000	1.008	1.007	1.000			
2001	1.001	1.000				
2002	0.999					
Average	<u>27:15</u> 0.993	<u>39:27</u> 1.002	<u>51:39</u> 1.000	<u>63:51</u> 0.999	<u>75:63</u> 0.999	<u>87:75</u> 1.001
Selected Link Ratio	0.993	1.002	1.000	0.999	0.999	1.001

Selected Loss Development Factors

<u>Fire</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
	1.000	0.999	0.999	1.001	0.994

NORTH CAROLINA
DWELLING EXTENDED COVERAGE INSURANCE

LOSS DEVELOPMENT

North Carolina Incurred Losses as of

Accident Year	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>	<u>75 Months</u>	<u>87 Months</u>
1992	1,102,508	1,108,882	1,105,635	1,105,635	1,105,635	1,105,635	1,105,635
1993	3,505,173	3,555,904	3,561,845	3,564,080	3,564,320	3,564,320	3,564,320
1994	1,629,773	1,626,385	1,629,468	1,630,687	1,630,687	1,632,562	1,632,562
1995	2,141,166	2,182,071	2,185,192	2,184,217	2,185,843	2,188,013	2,178,638
1996	31,075,871	31,652,030	31,804,673	31,848,240	31,842,861	31,837,695	31,845,518
1997	3,472,373	3,516,088	3,544,195	3,544,527	3,574,096	3,575,496	3,574,998
1998	9,213,150	9,381,029	9,384,336	9,387,818	9,406,662	9,405,191	
1999	11,759,467	11,827,604	11,866,389	11,953,331	11,953,331		
2000	5,903,724	6,023,195	6,023,196	6,023,237			
2001	3,639,623	3,703,324	3,765,347				
2002	5,961,166	6,032,468					
2003	11,081,501						

North Carolina Link Ratios

Accident Year	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>	<u>75:63</u>	<u>87:75</u>
1992	1.006	0.997	1.000	1.000	1.000	1.000
1993	1.014	1.002	1.001	1.000	1.000	1.000
1994	0.998	1.002	1.001	1.000	1.001	1.000
1995	1.019	1.001	1.000	1.001	1.001	0.996
1996	1.019	1.005	1.001	1.000	1.000	1.000
1997	1.013	1.008	1.000	1.008	1.000	1.000
1998	1.018	1.000	1.000	1.002	1.000	
1999	1.006	1.003	1.007	1.000		
2000	1.020	1.000	1.000			
2001	1.018	1.017				
2002	1.012					
Average	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>	<u>75:63</u>	<u>87:75</u>
	1.013	1.004	1.001	1.001	1.000	0.999
Selected Link Ratio	1.013	1.004	1.001	1.001	1.000	0.999

Selected Loss Development Factors

<u>EC</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
	0.999	1.000	1.001	1.005	1.018

NORTH CAROLINA

DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

DEVELOPMENT OF CURRENT COST FACTORS (CCF) AND LOSS PROJECTION FACTOR

QUARTER ENDING JUNE 30, 2005

PART A: ESTABLISHMENT OF MONTHLY CURRENT COST INDEX (CCI) WITH:
 20% WEIGHT TO MODIFIED COMSUMER PRICE INDEX (MCPI)
 80% WEIGHT TO BOECKH RESIDENTIAL INDEX (BRI) FOR N.C. #
 (MCPI BASE: 1967 = 100 BRI BASE: 1967 = 100)

MO	BRI	MCPI	CCI	QCCI	BRI	MCPI	CCI	QCCI	BRI	MCPI	CCI	QCCI
	<u>2002</u>				<u>2003</u>				<u>2004</u>			
7	669.3	209.9	577.4		710.0	202.9	608.6		767.3	198.6	653.6	
8	674.8	209.9	581.8		712.5	202.5	610.5		773.2	197.7	658.1	
9	671.1	211.0	579.1	579.4	711.9	203.4	610.2	609.8	772.4	199.4	657.8	656.5
10	672.4	211.4	580.2		714.6	204.1	612.5		777.6	201.9	662.5	
11	677.2	210.5	583.9		735.3	203.3	628.9		784.8	200.5	667.9	
12	677.2	208.1	583.4	582.5	734.8	201.1	628.1	623.2	785.8	198.2	668.3	666.2
	<u>2003</u>				<u>2004</u>				<u>2005</u>			
1	676.4	206.8	582.5		741.2	200.5	633.1		790.2	197.6	671.7	
2	681.2	207.5	586.5		745.7	201.7	636.9		798.4	198.1	678.3	
3	685.3	207.8	589.8	586.3	745.8	203.4	637.3	635.8	799.1	199.8	679.2	676.4
4	689.4	208.1	593.1		745.4	203.4	637.0		799.9	199.7	679.9	
5	696.3	206.3	598.3		756.2	202.5	645.5		810.5	199.4	688.3	
6	703.1	204.3	603.3	598.2	755.7	201.2	644.8	642.4	809.8	196.5	687.1	685.1

PART B: USE OF AVERAGE ANNUAL CCI TO CALCULATE CURRENT COST FACTORS (CCF)

YEAR	CALENDAR YEAR AVERAGE CCI			CURRENT COST FACTORS BASED ON AVERAGE CCI VALUE FOR QUARTER ENDING 6/30/2005 = 685.1
	BRI	MCPI	CCI	
1999	604.1	227.9	528.9	1.295
2000	629.4	223.2	548.2	1.250
2001	645.0	218.2	559.6	1.224
2002	668.1	212.0	576.9	1.188
2003	704.2	204.8	604.3	1.134

THE FIGURES SHOWN WERE CALCULATED USING THE BOECKH RESIDENTIAL REPORT, MODIFIED BY APPLICATION OF CERTAIN ACTUARIAL FORMULAS, AND COMBINED WITH DATA AVAILABLE THROUGH VARIOUS GOVERNMENTAL SOURCES. FURTHER USE OF THE FIGURES DERIVED FROM THE BOECKH INDEX REQUIRES WRITTEN CONSENT FROM NCRB.

NORTH CAROLINA
 DWELLING FIRE AND EXTENDED COVERAGE INSURANCE
DEVELOPMENT OF CURRENT COST FACTORS (CCF) AND LOSS PROJECTION FACTOR
 QUARTER ENDING JUNE 30, 2005

PART C: COMPUTATION OF LOSS PROJECTION FACTOR

CAL. YEAR	QUARTER ENDING	TIME (2X)	² 4X	AVG. CCI (Y)	Z=LN(Y)	2XZ	FITTED CCI
2002	SEP. 30	-11	121	579.4	6.362	-69.982	572.9
2002	DEC. 31	-9	81	582.5	6.367	-57.303	582.5
2003	MAR. 31	-7	49	586.3	6.374	-44.618	592.2
2003	JUN. 30	-5	25	598.2	6.394	-31.970	602.1
2003	SEP. 30	-3	9	609.8	6.413	-19.239	612.2
2003	DEC. 31	-1	1	623.2	6.435	-6.435	622.5
2004	MAR. 31	1	1	635.8	6.455	6.455	632.9
2004	JUN. 30	3	9	642.4	6.465	19.395	643.5
2004	SEP. 30	5	25	656.5	6.487	32.435	654.3
2004	DEC. 31	7	49	666.2	6.502	45.514	665.2
2005	MAR. 31	9	81	676.4	6.517	58.653	676.3
2005	JUN. 30	11	<u>121</u>	685.1	<u>6.530</u>	<u>71.830</u>	687.7
			572		77.301	4.735	

EQUATIONS: $A + BX$
 $Y = E$
 $Z = A + BX$
 $SZ = NA + BSX$
 $SXZ = ASX + BSX$

WHERE A = MEAN OF FITTED LINE
 B = AVERAGE QUARTERLY INCREMENT
 S = SUMMATION
 N = NUMBER OF OBSERVATIONS

$2SXZ = 4.735$ OR $SXZ = 2.368$ $4SX = 572$ OR $SX = 143$

A (MEAN OF FITTED LINE) = $77.301 / 12 = 6.442$
 B (AVG. QUARTERLY INCREMENT) = $2.368 / 143 = 0.0166$

QUARTERLY RATE OF CHANGE = $E - 1 = 0.0166 - 1 = 0.0167$

ANNUAL RATE OF CHANGE = $(E^4) = (0.0166)^4 = 1.069$ OR 6.9%

LOSS PROJECTION FACTOR* = $(E^{24.5/3}) = (0.0166)^{24.5/3} = 1.145$

* TO PROJECT LOSSES FROM 5/15/2005 TO 6/1/2007.

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

FOOTNOTES TO DETERMINATION OF TREND

Modified Consumer Price Index - source: Bureau of Labor Statistics.
Weights are applied to individual Consumer Price Index components
as follows:

70 % House Furnishings
20% Apparel Commodities
10% Entertainment Commodities

NORTH CAROLINA
DWELLING FIRE INSURANCE
CALCULATION OF PREMIUM PROJECTION FACTORS

	(1)	(2)	(3)	(4)	(5)
<u>YEAR</u>	<u>X</u>	<u>Average Policy Size Relativity</u>	<u>Log of Average Policy Size Relativity</u>	<u>X * Log of Average Policy Size Relativity</u>	<u>X * X</u>
<u>Buildings</u>					
1999	-2	2.701	0.994	-1.988	4
2000	-1	2.789	1.026	-1.026	1
2001	0	2.897	1.064	0.000	0
2002	1	3.034	1.110	1.110	1
2003	2	3.111	1.135	2.270	4
Sum			5.329	0.366	10
<u>Contents</u>					
1999	-2	1.497	0.403	-0.806	4
2000	-1	1.524	0.421	-0.421	1
2001	0	1.617	0.481	0.000	0
2002	1	1.675	0.516	0.516	1
2003	2	1.728	0.547	1.094	4
Sum			2.368	0.383	10

	<u>Buildings</u>	<u>Contents</u>
(6) Sum of Column (3) / 5 = A	1.066	0.474
(7) Sum of Column (4) / Sum of Column (5) = B	0.037	0.038
(8) Average Annual Rate of Change = $(e^B) - 1$	0.038	0.039
(9) Premium Projection Factor to trend from 5/15/2005 to 12/1/2006 (18.5 months)	1.059	1.060

NORTH CAROLINA
 DWELLING FIRE INSURANCE
CALCULATION OF CURRENT COST/AMOUNT FACTORS

<u>YEAR</u>	<u>Average Policy Size Relativity</u>	<u>Current Amount Factor (b)</u>	<u>Latest Year Premium Distribution</u>
<u>Buildings</u>			
1999	2.701	1.258	0.9148
2000	2.789	1.219	0.9148
2001	2.897	1.173	0.9148
2002	3.034	1.120	0.9148
2003	3.111	1.093	0.9148
5/15/2005 (a)	3.399		
<u>Contents</u>			
1999	1.497	1.264	0.0852
2000	1.524	1.241	0.0852
2001	1.617	1.170	0.0852
2002	1.675	1.130	0.0852
2003	1.728	1.095	0.0852
5/15/2005 (a)	1.892		
<u>Buildings & Contents</u>	<u>Current Amount Factor (c)</u>	<u>Current Cost Factor</u>	<u>Current Cost/Amount Factor</u>
1999	1.259	1.295	1.029
2000	1.221	1.250	1.024
2001	1.173	1.224	1.043
2002	1.121	1.188	1.060
2003	1.093	1.134	1.038

(a) $A * [(1+C)^{(28.5/12)}]$, where C is the average annual rate of change ($e^B - 1$), 28.5 is the number of months between 1/1/2003 and 5/15/2005, and A is the average relativity at 1/1/2003.

(b) The Current Amount Factor equals the average relativity at 5/15/2005 divided by the yearly relativity.

(c) Weighted average of buildings and contents factors based on the latest year (2003) premium distribution.

NORTH CAROLINA
DWELLING FIRE INSURANCE
CALCULATION OF COMPOSITE PROJECTION FACTORS

(1)	Buildings Premium Projection Factor	1.059
(2)	2003 Buildings Premium Distribution	0.9148
(3)	Contents Premium Projection Factor	1.06
(4)	2003 Contents Premium Distribution	0.0852
(5)	Total Premium Projection Factor [(1) x (2)] + [(3) x (4)]	1.059
(6)	Loss Projection Factor	1.145
(7)	Trend From First Dollar (a)	1.006
(8)	Composite Projection Factor [(6) x (7)] / (5)	1.088

- (a) First dollar factor calculated as $[A * (B + C) - B] / (A * C)$
where A = average yearly loss trend factor
B = loss eliminated by deductible
C = five year losses after application of deductible

NORTH CAROLINA
 DWELLING EXTENDED COVERAGE INSURANCE
CALCULATION OF PREMIUM PROJECTION FACTORS

	(1)	(2)	(3)	(4)	(5)
<u>YEAR</u>	<u>X</u>	<u>Average Policy Size Relativity</u>	<u>Log of Average Policy Size Relativity</u>	<u>X * Log of Average Policy Size Relativity</u>	<u>X * X</u>
<u>Buildings</u>					
1999	-2	3.491	1.250	-2.500	4
2000	-1	3.639	1.292	-1.292	1
2001	0	3.831	1.343	0.000	0
2002	1	4.047	1.398	1.398	1
2003	2	4.258	1.449	2.898	4
Sum			6.732	0.504	10
<u>Contents</u>					
1999	-2	2.357	0.857	-1.714	4
2000	-1	2.551	0.936	-0.936	1
2001	0	2.911	1.068	0.000	0
2002	1	3.123	1.139	1.139	1
2003	2	3.579	1.275	2.550	4
Sum			5.275	1.039	10

	<u>Buildings</u>	<u>Contents</u>
(6) Sum of Column (3) / 5 = A	1.346	1.055
(7) Sum of Column (4) / Sum of Column (5) = B	0.050	0.104
(8) Average Annual Rate of Change = (e ^ B) - 1	0.051	0.110
(9) Premium Projection Factor to trend from 5/15/2005 to 12/1/2006 (18.5 months)	1.080	1.174

NORTH CAROLINA
 DWELLING EXTENDED COVERAGE INSURANCE
 CALCULATION OF CURRENT COST/AMOUNT FACTORS

<u>YEAR</u>	<u>Average Policy Size Relativity</u>	<u>Current Amount Factor (b)</u>	<u>Latest Year Premium Distribution</u>
<u>Buildings</u>			
1999	3.491	1.373	0.9281
2000	3.639	1.317	0.9281
2001	3.831	1.251	0.9281
2002	4.047	1.184	0.9281
2003	4.258	1.125	0.9281
5/15/2005 (a)	4.792		
<u>Contents</u>			
1999	2.357	1.946	0.0719
2000	2.551	1.798	0.0719
2001	2.911	1.575	0.0719
2002	3.123	1.468	0.0719
2003	3.579	1.281	0.0719
5/15/2005 (a)	4.586		
<u>Buildings & Contents</u>	<u>Current Amount Factor (c)</u>	<u>Current Cost Factor</u>	<u>Current Cost/Amount Factor</u>
1999	1.414	1.295	0.916
2000	1.352	1.250	0.925
2001	1.274	1.224	0.961
2002	1.204	1.188	0.987
2003	1.136	1.134	0.998

(a) $A * [(1+C)^{(28.5/12)}]$, where C is the average annual rate of change $(e^B - 1)$, 28.5 is the number of months between 1/1/2003 and 5/15/2005, and A is the average relativity at 1/1/2003.

(b) The Current Amount Factor equals the average relativity at 5/15/2005 divided by the yearly relativity.

(c) Weighted average of buildings and contents factors based on the latest year (2003) premium distribution.

NORTH CAROLINA
 DWELLING EXTENDED COVERAGE INSURANCE
CALCULATION OF COMPOSITE PROJECTION FACTORS

(1)	Buildings Premium Projection Factor	1.08
(2)	2003 Buildings Premium Distribution	0.9281
(3)	Contents Premium Projection Factor	1.174
(4)	2003 Contents Premium Distribution	0.0719
(5)	Total Premium Projection Factor [(1) x (2)] + [(3) x (4)]	1.087
(6)	Loss Projection Factor	1.145
(7)	Trend From First Dollar (a)	1.027
(8)	Composite Projection Factor [(6) x (7)] / (5)	1.082

- (a) First dollar factor calculated as $[A * (B + C) - B] / (A * C)$
 where A = average yearly loss trend factor
 B = loss eliminated by deductible
 C = five year losses after application of deductible

NORTH CAROLINA
 DWELLING FIRE AND EXTENDED COVERAGE INSURANCE
 DETERMINATION OF TREND FOR EXPENSES

	<u>ALL ITEMS CPI INDEX</u>	<u>COMPENSATION COST INDEX</u>
Jan-01	175.1	
Feb-01	175.8	157.6
Mar-01	176.2	
Apr-01	176.9	
May-01	177.7	159.3
Jun-01	178.0	
Jul-01	177.5	
Aug-01	177.5	159.9
Sep-01	178.3	
Oct-01	177.7	
Nov-01	177.4	161.3
Dec-01	176.7	
Jan-02	177.1	
Feb-02	177.8	164.0
Mar-02	178.8	
Apr-02	179.8	
May-02	179.8	166.1
Jun-02	179.9	
Jul-02	180.1	
Aug-02	180.7	167.1
Sep-02	181.0	
Oct-02	181.3	
Nov-02	181.3	167.9
Dec-02	180.9	
Jan-03	181.7	
Feb-03	183.1	172.1
Mar-03	184.2	
Apr-03	183.8	
May-03	183.5	173.9
Jun-03	183.7	
Jul-03	183.9	
Aug-03	184.6	175.1
Sep-03	185.2	
Oct-03	185.0	
Nov-03	184.5	176.2
Dec-03	184.3	
Jan-04	185.2	
Feb-04	186.2	177.8
Mar-04	187.4	
Apr-04	188.0	
May-04	189.1	180.5
Jun-04	189.7	
Jul-04	189.4	
Aug-04	189.5	182.1
Sep-04	189.9	
Oct-04	190.9	
Nov-04	191.0	183.6
Dec-04	190.3	

NORTH CAROLINA
 DWELLING FIRE AND EXTENDED COVERAGE INSURANCE
 DETERMINATION OF TREND FOR EXPENSES

	<u>All Items (A)</u>	<u>CCI (B)</u>	<u>Combined (C)</u>
(1) Annual Change in indices based on exponential curve of best fit for the latest 48 points (or 16 quarters)	2.17%	4.30%	3.23%
(2) Annual Change in indices based on exponential curve of best fit for the latest 36 points (or 12 quarters)	2.45%	4.25%	3.35%
(3) Annual Change in indices based on exponential curve of best fit for the latest 24 points (or 8 quarters)	2.55%	3.80%	3.17%
(4) Annual Change in indices based on exponential curve of best fit for the latest 12 points (or 4 quarters)	3.03%	4.29%	3.66%
(5) Selected Annual Change: 3.3%.			

Notes: (A) All items CPI index (urban). Source: Bureau of Labor Statistics.

(B) Total Compensation Cost Index - Insurance Carriers, Agent Brokers, and Service.
 Source: Bureau of Labor Statistics.

(C) Weighted Average determined as .50 (All items) + .50 (CCI).

NORTH CAROLINA
DWELLING FIRE INSURANCE
EXPENSE EXHIBIT

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>Average</u>
Comissions and Brokerage	9,673,489	10,733,549	12,394,796	
Written Premium	56,328,429	70,273,670	82,051,351	
Ratio	0.172	0.153	0.151	0.159
Other Acquisition	4,171,279	4,342,265	4,272,212	
Earned Premium	53,008,284	66,699,108	76,949,158	
Ratio	0.079	0.065	0.056	0.067
General Expense	6,185,080	3,203,726	4,088,237	
Earned Premium	53,008,284	66,699,108	76,949,158	
Ratio	0.117	0.048	0.053	0.073
Taxes, Licenses and Fees	1,746,215	2,186,357	2,600,423	
Written Premium	56,328,429	70,273,670	82,051,351	
Ratio	0.031	0.031	0.032	0.031

Expected Loss and Fixed Expense Ratio

Commission and Brokerage	15.9%
Taxes, Licenses and Fees	3.1%
Dividends	0.0%
Contingencies	1.0%
Profit	8.0%
Total	28.0%
Expected Loss and Fixed Expense Ratio (1 - variable expense)	72.0%

NORTH CAROLINA
DWELLING FIRE INSURANCE
EXPENSE EXHIBIT

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>Average*</u>
Allocated LAE	337,221	568,830	417,410	504,521	246,224	
Unallocated LAE	2,005,410	2,029,590	1,932,344	2,465,540	2,718,606	
Total LAE	2,342,631	2,598,420	2,349,754	2,970,061	2,964,830	
Incurred Losses	27,581,023	25,781,170	26,432,630	34,671,997	35,796,749	
Ratio	0.085	0.101	0.089	0.086	0.083	0.087

* Average excludes high and low values.

NORTH CAROLINA
DWELLING EXTENDED COVERAGE INSURANCE
EXPENSE EXHIBIT

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>Average</u>
Commissions and Brokerage	6,491,275	6,176,869	6,653,478	
Written Premium	40,154,943	42,528,202	47,285,243	
Ratio	0.162	0.145	0.141	0.149
Other Acquisition	2,942,901	2,991,303	3,031,571	
Earned Premium	38,712,393	42,404,769	45,159,644	
Ratio	0.076	0.071	0.067	0.071
General Expense	2,965,868	1,832,257	3,034,199	
Earned Premium	38,712,393	42,404,769	45,159,644	
Ratio	0.077	0.043	0.067	0.062
Taxes, Licenses and Fees	1,231,601	1,023,903	1,073,979	
Written Premium	40,154,943	42,528,202	47,285,243	
Ratio	0.031	0.024	0.023	0.026

Expected Loss and Fixed Expense Ratio

Commission and Brokerage	14.9%
Taxes, Licenses and Fees	2.6%
Dividends	0.0%
Contingencies	1.0%
Profit	8.0%
<u>Cost of Reinsurance</u>	<u>19.1%</u>
Total	45.6%
Expected Loss and Fixed Expense Ratio (1 - variable expense)	54.4%

NORTH CAROLINA
 DWELLING EXTENDED COVERAGE INSURANCE
 EXPENSE EXHIBIT

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>Average*</u>
Allocated LAE	775,584	328,121	115,022	495,591	632,579	
Unallocated LAE	2,285,921	1,182,318	1,336,005	2,067,003	2,729,955	
Total LAE	3,061,505	1,510,439	1,451,027	2,562,594	3,362,534	
Incurred Losses	32,886,472	14,482,074	8,234,404	13,762,737	34,689,929	
Ratio	0.093	0.104	0.176	0.186	0.097	0.126

* Average excludes high and low values.

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

CALCULATION OF TRENDED EXPENSE PROVISIONS

(1) Factor to trend losses based on annual rate of change:

Fire:	e	(0.0166 (24.5 / 3)	(71 / 12)	* 1.000	* 1.224 =	1.402
EC:	e	(0.0166 (24.5 / 3)	(71 / 12)	* 1.000	* 1.224 =	1.402

(2) Factor to trend LAE based on Current Expense Index:

Fire:		1.033	(71 / 12)	=	1.212
EC:		1.033	(71 / 12)	=	1.212

(3) Factor to trend premium based on growth in premium revenue:

Fire:		1.038	(18.5 / 12)	* 1.121 =	1.187
EC:		1.055	(18.5 / 12)	* 1.204 =	1.308

(4) Factor to trend expense based on Current Expense Index:

Fire:		1.033	(53 / 12)	=	1.154
EC:		1.033	(53 / 12)	=	1.154

(5) Trended Expenses

Fire:	Trended LAE Factor:	1 + (0.087 * 1.212 / 1.402)	=	1.075
	Trended GE Ratio:	0.073 * 1.154 / 1.187	=	0.071
	Trended OA Ratio:	0.067 * 1.154 / 1.187	=	0.065
	Trended Fixed Expense Ratio	0.071 + 0.065	=	0.136
	Statewide Average Current Base Rate		=	35.24
	Fixed Expense Per Policy	35.24 * 0.136	=	4.79

EC:	Trended LAE Factor:	1 + (0.126 * 1.212 / 1.402)	=	1.109
	Trended GE Ratio:	0.062 * 1.154 / 1.308	=	0.055
	Trended OA Ratio:	0.071 * 1.154 / 1.308	=	0.063
	Trended Fixed Expense Ratio	0.055 + 0.063	=	0.118
	Statewide Average Current Base Rate		=	32.86
	Fixed Expense Per Policy	32.86 * 0.118	=	3.88

NORTH CAROLINA DWELLING EXTENDED COVERAGE
DERIVATION OF EXCESS LOSS FACTOR

Year	(1) REP	(2) DIL	(3) Loss Ratio (2)/(1)	(4) Normal Loss Ratio	(5) Excess Loss Ratio (3)-(4)	(6) Total Excess Losses (1)x(5)	(7) (6)/(2)
1950	1,388,467	312,200	0.225	0.225	0.000	0	0.000
1951	1,422,207	290,780	0.204	0.204	0.000	0	0.000
1952	1,440,159	792,365	0.550	0.500	0.050	72,008	0.091
1956	2,297,877	1,928,925	0.839	0.500	0.339	778,980	0.404
1957	2,117,102	839,255	0.396	0.396	0.000	0	0.000
1961	2,448,500	779,573	0.318	0.318	0.000	0	0.000
1962	2,342,116	672,396	0.287	0.287	0.000	0	0.000
1963	2,304,330	1,094,763	0.475	0.475	0.000	0	0.000
1964	2,333,802	713,168	0.306	0.306	0.000	0	0.000
1965	2,461,063	671,381	0.273	0.273	0.000	0	0.000
1966	2,592,580	646,405	0.249	0.249	0.000	0	0.000
1967	2,765,447	624,920	0.226	0.226	0.000	0	0.000
1968	3,684,951	571,095	0.155	0.155	0.000	0	0.000
1969	3,727,782	595,281	0.160	0.160	0.000	0	0.000
1970	3,809,666	755,021	0.198	0.198	0.000	0	0.000
1971	4,500,088	1,314,056	0.292	0.292	0.000	0	0.000
1972	6,175,223	848,369	0.137	0.137	0.000	0	0.000
1973	6,830,111	1,179,331	0.173	0.173	0.000	0	0.000
1974	5,341,091	2,504,466	0.469	0.469	0.000	0	0.000
1975	5,781,924	1,495,851	0.259	0.259	0.000	0	0.000
1976	6,310,907	1,045,882	0.166	0.166	0.000	0	0.000
1977	6,923,905	1,128,249	0.163	0.163	0.000	0	0.000
1978	7,371,068	2,656,163	0.360	0.360	0.000	0	0.000
1979	8,204,305	1,935,938	0.236	0.236	0.000	0	0.000
1980	9,409,413	1,851,000	0.197	0.197	0.000	0	0.000
1981	11,618,787	2,025,113	0.174	0.174	0.000	0	0.000
1982	12,703,938	2,672,646	0.210	0.210	0.000	0	0.000
1983	12,782,050	2,811,342	0.220	0.220	0.000	0	0.000
1984	13,378,072	5,069,761	0.379	0.379	0.000	0	0.000
1985	15,586,661	5,416,799	0.348	0.348	0.000	0	0.000
1986	18,573,125	3,624,751	0.195	0.195	0.000	0	0.000
1987	20,970,707	3,207,305	0.153	0.153	0.000	0	0.000
1988	22,803,120	6,816,348	0.299	0.299	0.000	0	0.000
1989	24,622,966	13,459,214	0.547	0.500	0.047	1,157,279	0.086
1990	25,923,637	5,278,639	0.204	0.204	0.000	0	0.000
1991	28,100,632	4,332,959	0.154	0.154	0.000	0	0.000
1992	29,900,438	4,742,564	0.159	0.159	0.000	0	0.000
1993	31,889,553	16,886,073	0.530	0.500	0.030	956,687	0.057
1994	34,062,149	8,139,204	0.239	0.239	0.000	0	0.000
1995	36,469,795	7,946,434	0.218	0.218	0.000	0	0.000
1996	40,105,731	10,177,932	0.254	0.254	0.000	0	0.000
1997	45,956,155	8,042,733	0.175	0.175	0.000	0	0.000
1998	50,483,351	19,677,761	0.390	0.390	0.000	0	0.000
1999	57,917,971	26,401,571	0.456	0.456	0.000	0	0.000
2000	64,276,450	14,556,461	0.226	0.226	0.000	0	0.000
2001	69,820,114	9,634,921	0.138	0.138	0.000	0	0.000
2002	75,499,449	16,014,954	0.212	0.212	0.000	0	0.000
2003	84,241,857	21,635,064	0.257	0.257	0.000	0	0.000
Total	931,670,790	245,817,382	13.450	12.984	0.466	2,964,954	
Average			0.280	0.271	0.010		

Average Excess Loss Ratio = Avg of column (5)
Average Normal Loss Ratio = Avg of column (4)
Excess Factor = 1.0 + (avg (5)/avg (4)) =
= 1.0 + (0.01 / 0.271) =

0.010
0.271
1.037

North Carolina Dwelling Extended Coverage
Derivation of Excess Loss Factor
Development of Excess Losses on a \$250 Deductible Level

Accident <u>Year</u>	Non Modelled Adjusted <u>Inc. Losses</u>	Excess <u>Loss Ratio</u>	Adjusted Excess <u>Losses</u>
1999	26,571,326	0.000	0
2000	14,870,015	0.000	0
2001	10,053,041	0.000	0
2002	16,799,610	0.000	0
2003	23,020,079	0.000	0

NORTH CAROLINA

DWELLING EXTENDED COVERAGE INSURANCE

MODELED HURRICANE LOSSES

<u>Terr</u>	<u>Buildings Loss Cost(a)</u>	<u>Contents Loss Cost(a)</u>	<u>2003 Modeled Losses(b)</u>
5	2.979	1.131	16,151,344
6	3.546	1.590	11,780,985
32	0.291	0.062	409,300
34	0.500	0.115	762,315
36	0.117	0.024	135,723
38	0.143	0.030	215,401
39	0.145	0.034	210,459
41	0.900	0.255	921,036
42	2.753	1.186	12,675,551
43	2.368	0.932	5,791,121
44	0.293	0.074	80,832
45	0.744	0.189	1,141,848
46	0.220	0.053	123,048
47	0.423	0.103	1,037,844
53	0.303	0.071	449,624
57	0.141	0.036	328,732
60	0.087	0.021	618,712
Total			52,833,875

(a) Loss cost per \$1,000 of insured value.

(b) Includes a factor of 1.181 applicable to Coverage A modeled losses for other than the FAIR and Beach Plan, and a factor of 1.100 applicable to Coverage A modeled losses for the FAIR and Beach Plan, to reflect Coverage B (Other Structures) and Coverage D (Loss of Use) modeled losses.

SECTION E
SUPPLEMENTAL MATERIAL

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

SUPPLEMENTAL MATERIAL

North Carolina G.S. 58-36-15(h) specifies that the following information must be included in all policy form, rule and rate filings filed under Article 12B. 11 NCAC 10.1105 specifies that additional detail be provided under each of these items. These materials are contained on the pages indicated.

<u>Item</u>	<u>Page</u>
1. North Carolina earned premiums at actual and current rate levels; losses and loss adjustment expenses, each on a paid and incurred basis; the loss ratio anticipated at the time rates were promulgated for the experience period.	E-2-32
2. Credibility factor development and application.	E-33
3. Loss development factor derivation and application on both paid and incurred bases and in both dollars and numbers of claims.	E-34
4. Trending factor development and application.	E-35
5. Changes in premium base resulting from rating exposure trends.	E-36
6. Limiting factor development and application.	E-37
7. Overhead expense development and application of commission and brokerage, other acquisition expenses, general expenses, taxes, licenses and fees.	E-38-40
8. Percent rate change.	E-41
9. Final proposed rates.	E-42
10. Investment earnings, consisting of investment income and realized plus unrealized capital gains, from loss, loss expense and unearned premium reserves.	E-43-73
11. Identification of applicable statistical plans and programs and a certification of compliance with them.	E-74-80
12. Investment earnings on capital and surplus.	E-81
13. Level of capital and surplus needed to support premium writings without endangering the solvency of member companies.	E-82
14. Additional supplemental information (as per 11 NCAC 10.1105)	E-83-86

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
 REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
 AS PER 11 NCAC 10.1105

1. NORTH CAROLINA EARNED PREMIUMS AT THE ACTUAL AND CURRENT RATE LEVEL, LOSSES AND LOSS ADJUSTMENT EXPENSES, EACH ON PAID AND INCURRED BASES WITHOUT TRENDING OR OTHER MODIFICATION FOR THE EXPERIENCE PERIOD, INCLUDING THE LOSS RATIO ANTICIPATED AT THE TIME THE RATES WERE PROMULGATED FOR THE EXPERIENCE PERIOD	
Earned premiums at collected and current levels.	E-3
Paid/incurred losses and loss adjustment expense.	E-4
Anticipated loss ratios.	E-5
(a) Companies excluded - rate level, trend, loss development, relativity, and investment income.	E-6
(b) Not applicable to Dwelling Fire and Extended Coverage insurance.	E-7
(c) Adjustments to premium, losses, loss adjustment expenses, expenses and exposures.	E-8
(d) Actual earned premiums and calculation of earned premium at present rates.	E-9
(e) Written and earned premiums and market shares for the ten largest writers.	E-10-11
(f) Composite loss and premium information from each of the latest two annual statements for the 50 largest writers.	E-12
(g) Deviations.	E-12
(h) Dividends.	E-12
(i) Losses and loss adjustment expenses.	E-13
(j) Not applicable to Dwelling Fire and Extended Coverage insurance.	E-14
(k) Excess (catastrophe) and nonexcess (noncatastrophe) losses.	E-15
(l) Losses by cause.	E-16-32

NORTH CAROLINA
 DWELLING FIRE AND EXTENDED COVERAGE INSURANCE
EARNED PREMIUMS AT ACTUAL AND CURRENT RATE LEVEL

I. EARNED PREMIUM AT COLLECTED LEVEL

<u>Year</u>	<u>Fire</u>	<u>Extended Coverage</u>
1999	\$ 46,790,187	\$ 57,917,971
2000	48,798,856	64,276,450
2001	50,443,059	69,820,114
2002	52,384,216	75,499,449
2003	55,092,439	84,241,857

II. EARNED PREMIUM AT CURRENT LEVEL

<u>Year</u>	<u>Fire</u>	<u>Extended Coverage</u>
1999	\$ 57,108,701	\$ 73,635,681
2000	58,822,770	79,290,342
2001	61,899,549	97,808,457
2002	64,555,633	109,105,759
2003	67,530,203	125,008,736

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

PAID/INCURRED LOSSES AND ALLOCATED LOSS ADJUSTMENT EXPENSE

I. PAID LOSSES

The Rate Bureau is advised by ISO that paid loss and loss adjustment expenses are not available for the experience period of this filing.

II. INCURRED LOSSES (a)

<u>Year</u>	<u>Fire</u>	<u>Extended Coverage</u>
1999	\$ 27,458,415	\$ 73,310,766
2000	30,088,666	14,870,015
2001	31,948,768	10,053,041
2002	33,470,361	16,799,610
2003	32,885,625	79,306,512

- (a) Incurred losses are developed, include actual hurricane losses and do not include loss adjustment expense. These expenses are reflected via a factor. For Fire this factor is 7.5%. For Extended Coverage this factor is 10.9%.

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE
ANTICIPATED LOSS AND LOSS ADJUSTMENT EXPENSE RATIOS

The anticipated loss and LAE ratios included in the 2003 filing (for rates implemented in 2003) were 0.620 for Fire, and 0.502 for Extended Coverage.

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EXCLUDED COMPANIES

(The marketshares shown are based on 2003 Dwelling Fire and Extended Coverage written premium.)

The average policy amount relativities used in the premium trend procedure are based on the experience of companies reporting to the Insurance Services Office (full statistical plan only), the Independent Statistical Service, the National Insurance Statistical Service, and the North Carolina FAIR and Beach Plan. The experience reported to the American Association of Insurance Services and the experience reported under the ISO Minimum Statistical Plan / Stat Agent level data is excluded because it is not available in sufficient detail. The ISO, ISS, NISS, and the FAIR and Beach Plan experience represents 99.1% of the market.

The experience used to calculate rate level changes excludes experience reported by one company. The data was excluded because of data problem. The excluded data represent 0.1% of the market. The loss development factors used in the calculation of the statewide rate level indications are based on ISO North Carolina experience. This experience represents 26.8% of the market. See also the prefiled testimony of R. Curry and D. Border.

Not applicable to Dwelling Fire and Extended Coverage insurance.

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

ADJUSTMENTS TO PREMIUMS, LOSSES, LOSS ADJUSTMENT EXPENSES,
EXPENSES AND EXPOSURES

Adjustments made to premiums, losses, loss adjustment expenses, and expenses are set forth below and in the prefiled testimony of R. Curry, D. Border and D. LaLonde.

For ISO (excluding Minimum Statistical Plan /Stat Agent level data and a portion of the data for the North Carolina FAIR & Beach Plans), ISS and NISS, losses are adjusted to the \$250 base deductible level by application of loss elimination ratios. These factors are applied on a record-by-record basis and vary by cause of loss.

Losses were developed to an ultimate basis through the application of loss development factors. The derivation and application of loss development factors is described in the response to 11 NCAC 10.1105(3).

Additionally, due to the volatile nature and the catastrophic potential of hurricane losses, they have been removed from the actual data and replaced with expected hurricane losses produced by a model designed by Applied Insurance Research (AIR).

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

EARNED PREMIUM AT PRESENT RATES CALCULATION

For ISO (excluding Minimum Statistical Plan / Stat Agent Plan data and year 1999 and 2000 data for the North Carolina FAIR & Beach Plans), ISS and NISS data, earned premium at present rates by coverage is calculated by the following formula for each individual insured:

Fire Premium = Territory Base Rate x Amount of Insurance Factor x Optional Coverage Factor

Extended Coverage Premium = Territory Base Rate x Amount of Insurance Factor x Optional Coverage Factor

The results are then summed over all territories to generate aggregate earned premium at present rates.

A sample calculation for a single insured is shown below. This sample insured is in territory 32, Coverage A, \$30,000 amount of insurance, protection class 8, masonry construction, Extended Coverage policy form 1.

Fire:

(1)	Territory 32, Coverage A, protection class 8, masonry construction base rate	50
(2)	Amount of insurance factor for \$30,000	1.60
(3)	Optional Coverage Factor	1.00
(4)	Earned premium at present rates (1)x(2)x(3)	80.00

Extended Coverage:

(1)	Territory 32, Coverage A, masonry construction, policy form 1 base rate	24
(2)	Amount of insurance factor for \$30,000	1.79
(3)	Optional Coverage Factor	1.00
(4)	Earned premium at present rates (1)x(2)x(3)	42.96

For the AAIS, the North Carolina Fair & Beach Plans (year 1999 and 2000), and ISO Minimum Plan / Stat Agent Plan data, earned premium at current rates by coverage is calculated by applying "on-level" factors to the reported premiums. The on-level factors are derived using the standard "parallelogram method" which accounts for past approved rate changes and their varying effect by year.

The results of these two calculations are then summed to obtain the one earned premium at present rates required for the statewide, territory and class rate level analyses.

TOP TEN DWELLING FIRE INSURANCE WRITERS

COMPANY NAME	2004		2004	
	<u>WRITTEN PREMIUM</u>	<u>WRITTEN PREMIUM MARKET SHARE</u>	<u>EARNED PREMIUM</u>	<u>EARNED PREMIUM MARKET SHARE</u>
N C FARM BUREAU MUTUAL INS CO	16,357,022	20.71%	14,857,105	20.17%
AUTO OWNERS INS CO	13,939,949	17.65%	12,893,317	17.50%
AMERICAN SECURITY INS CO	10,384,884	13.15%	10,247,725	13.91%
NATIONWIDE MUTUAL FIRE INS CO	8,216,971	10.40%	7,761,657	10.54%
BALBOA INSURANCE COMPANY	3,606,635	4.57%	3,756,097	5.10%
UNITED SERVICES AUTOMOBILE ASSOC	3,239,797	4.10%	3,002,843	4.08%
PEERLESS INSURANCE COMPANY	2,198,380	2.78%	1,942,361	2.64%
AUTOMOBILE INS CO OF HARTFORD	1,832,758	2.32%	1,660,852	2.25%
AMERICAN AUTOMOBILE INSURANCE COMPANY	1,730,966	2.19%	1,521,777	2.07%
FEDERATED MUTUAL INS CO	910,743	1.15%	977,671	1.33%
Total	62,418,105	79.03%	58,621,405	79.59%
Grand Total	78,980,132		73,657,178	

(a) Per the 2004 Dwelling Expense Experience

TOP TEN DWELLING EXTENDED COVERAGE INSURANCE WRITERS

<u>COMPANY NAME</u>	2004		2004 (a)		2004	
	<u>WRITTEN PREMIUM</u>	<u>WRITTEN PREMIUM MARKET SHARE</u>	<u>WRITTEN PREMIUM</u>	<u>WRITTEN PREMIUM MARKET SHARE</u>	<u>EARNED PREMIUM</u>	<u>EARNED PREMIUM MARKET SHARE</u>
N C FARM BUREAU MUTUAL INS CO	11,291,194	20.20%	10,338,309	19.67%	10,338,309	19.67%
NATIONWIDE MUTUAL FIRE INS CO	6,927,294	12.39%	6,577,713	12.51%	6,577,713	12.51%
UNITED SERVICES AUTOMOBILE ASSOC	4,581,716	8.20%	4,209,641	8.01%	4,209,641	8.01%
PEERLESS INSURANCE COMPANY	4,511,106	8.07%	3,909,405	7.44%	3,909,405	7.44%
AMERICAN SECURITY INS CO	3,310,365	5.92%	3,165,977	6.02%	3,165,977	6.02%
GENERAL INS CO OF AMERICA	2,794,772	5.00%	2,792,307	5.31%	2,792,307	5.31%
AXIS REINSURANCE COMPANY	2,355,643	4.21%	1,352,996	2.57%	1,352,996	2.57%
BALBOA INSURANCE COMPANY	1,865,600	3.34%	1,779,848	3.39%	1,779,848	3.39%
AUTOMOBILE INS CO OF HARTFORD	1,803,311	3.23%	1,648,323	3.14%	1,648,323	3.14%
PENNSYLVANIA NAT'L MUT CAS INS CO	1,179,845	2.11%	1,140,347	2.17%	1,140,347	2.17%
Total	40,620,846	72.66%	36,914,866	70.23%	36,914,866	70.23%
Grand Total	55,908,539		52,564,869		52,564,869	

(a) Per the 2004 Dwelling Expense Experience

Not applicable to Dwelling Fire and Extended Coverage insurance.

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE
LOSSES AND LOSS ADJUSTMENT EXPENSE

The data requested by 11 NCAC 10.1105(1)(i)(i,ii) were not being collected or reported in the experience period. The response to 11 NCAC 10.1105(1), page E-4, provides incurred loss and loss adjustment expense information. The response to 11 NCAC 10.1105(1)(1) provides incurred data by cause of loss. Additional information concerning loss development is provided in the response to 11 NCAC 10.1105(3). Additional information concerning loss adjustment expenses is provided in the response to 11 NCAC 10.1105(7). Additional information concerning loss trend is provided in Section D and in the prefiled testimony of R. Curry and D. Border.

(iii)	<u>Fire</u>	<u>Extended Coverage</u>
	Applied Loss <u>Development Factor</u>	Applied Loss <u>Development Factor</u>
<u>Year</u>		
1999	1.000	0.999
2000	0.999	1.000
2001	0.999	1.001
2002	1.001	1.005
2003	0.994	1.018

(iv)	<u>Loss Adjustment</u>	<u>Loss Adjustment</u>
	<u>Expense Percentage</u>	<u>Expense Percentage</u>
<u>Year</u>		
1999	8.5%	9.3%
2000	10.1	10.4
2001	8.9	17.6
2002	8.6	18.6
2003	8.3	9.7

(v)	<u>Applied</u>	<u>Applied</u>
	<u>Loss Trend Factor</u>	<u>Loss Trend Factor</u>
<u>Year</u>		
1999	1.492	1.523
2000	1.440	1.470
2001	1.410	1.439
2002	1.368	1.397
2003	1.306	1.333

(vi)	<u>Trended Incurred</u>	<u>Trended Incurred</u>
	<u>Losses and LAE</u>	<u>Losses and LAE</u>
1999		
2000	\$ 44,450,231	\$ 122,035,960
2001	47,703,775	24,132,250
2002	49,057,014	17,012,399
2003	49,725,175	27,834,299
1999	46,513,362	115,969,992

(vii) This information is given in the response to 11 NCAC 10.1105(1), page E-5.

Not applicable to Dwelling Fire and Extended Coverage insurance.

See prefiled testimony of R. Curry, D. Border and D. LaLonde.

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

CAUSE OF LOSS DATA

Loss experience by cause of loss is provided on the attached Exhibit (1)(1).

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

Exhibit (1)(I)

TERRITORY 5, 6	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	31,181,855	9,421	416.78	12.59	3,310
	2000	625,076	302	8.12	0.39	2,070
	2001	210,057	145	2.86	0.20	1,449
	2002	263,302	152	3.44	0.20	1,732
	2003	27,253,741	6,087	334.66	7.47	4,477
	TOTAL	59,534,031	16,107	155.36	4.20	3,696
WATER DAMAGE AND FREEZING	1999	156,781	42	2.10	0.06	3,733
	2000	656,695	183	8.53	0.24	3,588
	2001	1,324,921	300	18.03	0.41	4,416
	2002	1,443,285	301	18.88	0.39	4,795
	2003	3,253,784	526	39.95	0.65	6,186
	TOTAL	6,835,466	1,352	17.84	0.35	5,056
ALL OTHER PD	1999	57,707	31	0.77	0.04	1,862
	2000	286,884	103	3.73	0.13	2,785
	2001	106,059	50	1.44	0.07	2,121
	2002	39,318	33	0.51	0.04	1,191
	2003	298,164	57	3.66	0.07	5,231
	TOTAL	788,132	274	2.06	0.07	2,876
VANDALISM AND MALICIOUS MISCHIEF	1999	15,911	8	0.21	0.01	1,989
	2000	37,738	37	0.49	0.05	1,020
	2001	40,700	41	0.55	0.06	993
	2002	94,871	46	1.24	0.06	2,062
	2003	41,188	24	0.51	0.03	1,716
	TOTAL	230,408	156	0.60	0.04	1,477
UNIDENTIFIED	1999	851,507	229	11.38	0.31	3,718
	2000	854	3	0.01	0.00	285
	2001	5,788	2	0.08	0.00	2,894
	2002	10,664	3	0.14	0.00	3,555
	2003	61,104	21	0.75	0.03	2,910
	TOTAL	929,917	258	2.43	0.07	3,604
ALL CAUSES	1999	32,263,761	9,731	431.24	13.01	3,316
	2000	1,607,247	628	20.87	0.82	2,559
	2001	1,687,525	538	22.96	0.73	3,137
	2002	1,851,440	535	24.22	0.70	3,461
	2003	30,907,981	6,715	379.53	8.25	4,603
	TOTAL	68,317,954	18,147	178.29	4.74	3,765

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 32	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	599,612	261	36.76	1.60	2,297
	2000	220,182	76	13.66	0.47	2,897
	2001	65,436	36	3.96	0.22	1,818
	2002	163,881	84	9.82	0.50	1,951
	2003	310,916	118	18.14	0.69	2,635
	TOTAL	1,360,027	575	16.43	0.69	2,365
WATER DAMAGE AND FREEZING	1999	474,633	106	29.10	0.65	4,478
	2000	329,040	114	20.41	0.71	2,886
	2001	276,629	86	16.74	0.52	3,217
	2002	546,216	145	32.72	0.87	3,767
	2003	593,798	78	34.64	0.45	7,613
	TOTAL	2,220,316	529	26.82	0.64	4,197
ALL OTHER PD	1999	98,664	52	6.05	0.32	1,897
	2000	204,565	84	12.69	0.52	2,435
	2001	104,449	54	6.32	0.33	1,934
	2002	756,620	333	45.33	1.99	2,272
	2003	153,935	45	8.98	0.26	3,421
	TOTAL	1,318,233	568	15.92	0.69	2,321
VANDALISM AND MALICIOUS MISCHIEF	1999	53,503	45	3.28	0.28	1,189
	2000	56,546	26	3.51	0.16	2,175
	2001	23,136	14	1.40	0.08	1,653
	2002	84,148	40	5.04	0.24	2,104
	2003	16,975	15	0.99	0.09	1,132
	TOTAL	234,308	140	2.83	0.17	1,674
UNIDENTIFIED	1999	17,656	14	1.08	0.09	1,261
	2000	11,328	7	0.70	0.04	1,618
	2001	1,681	3	0.10	0.02	560
	2002	16,262	7	0.97	0.04	2,323
	2003	2,130	1	0.12	0.01	2,130
	TOTAL	49,057	32	0.59	0.04	1,533
ALL CAUSES	1999	1,244,068	478	76.27	2.93	2,603
	2000	821,661	307	50.96	1.90	2,676
	2001	471,331	193	28.53	1.17	2,442
	2002	1,567,127	609	93.88	3.65	2,573
	2003	1,077,754	257	62.87	1.50	4,194
	TOTAL	5,181,941	1,844	62.59	2.23	2,810

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 34	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	997,124	735	49.30	3.63	1,357
	2000	205,468	104	9.80	0.50	1,976
	2001	175,775	115	7.91	0.52	1,528
	2002	130,453	85	5.67	0.37	1,535
	2003	296,409	183	12.84	0.79	1,620
	TOTAL	1,805,229	1,222	16.49	1.12	1,477
WATER DAMAGE AND FREEZING	1999	159,832	87	7.90	0.43	1,837
	2000	300,618	104	14.33	0.50	2,891
	2001	215,329	105	9.69	0.47	2,051
	2002	333,290	113	14.49	0.49	2,949
	2003	312,308	59	13.52	0.26	5,293
	TOTAL	1,321,377	468	12.07	0.43	2,823
ALL OTHER PD	1999	82,901	52	4.10	0.26	1,594
	2000	65,856	63	3.14	0.30	1,045
	2001	113,770	57	5.12	0.26	1,996
	2002	154,845	112	6.73	0.49	1,383
	2003	79,599	67	3.45	0.29	1,188
	TOTAL	496,971	351	4.54	0.32	1,416
VANDALISM AND MALICIOUS MISCHIEF	1999	74,589	48	3.69	0.24	1,554
	2000	68,367	35	3.26	0.17	1,953
	2001	51,919	30	2.34	0.14	1,731
	2002	31,161	24	1.36	0.10	1,298
	2003	34,844	31	1.51	0.13	1,124
	TOTAL	260,880	168	2.38	0.15	1,553
UNIDENTIFIED	1999	34,219	38	1.69	0.19	901
	2000	7,551	13	0.36	0.06	581
	2001	5,898	13	0.27	0.06	454
	2002	5,281	7	0.23	0.03	754
	2003	4,390	5	0.19	0.02	878
	TOTAL	57,339	76	0.52	0.07	754
ALL CAUSES	1999	1,348,665	960	66.68	4.75	1,405
	2000	647,860	319	30.89	1.52	2,031
	2001	562,691	320	25.33	1.44	1,758
	2002	655,030	341	28.49	1.48	1,921
	2003	727,550	345	31.51	1.49	2,109
	TOTAL	3,941,796	2,285	36.00	2.09	1,725

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 36	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	94,070	86	5.86	0.54	1,094
	2000	817,750	284	52.25	1.81	2,879
	2001	264,763	126	16.69	0.79	2,101
	2002	101,914	78	6.41	0.49	1,307
	2003	153,616	68	9.48	0.42	2,259
	TOTAL	1,432,113	642	17.98	0.81	2,231
WATER DAMAGE AND FREEZING	1999	195,954	84	12.20	0.52	2,333
	2000	95,600	62	6.11	0.40	1,542
	2001	77,806	52	4.91	0.33	1,496
	2002	126,229	69	7.94	0.43	1,829
	2003	273,184	63	16.87	0.39	4,336
	TOTAL	768,773	330	9.65	0.41	2,330
ALL OTHER PD	1999	199,238	62	12.41	0.39	3,214
	2000	148,195	85	9.47	0.54	1,743
	2001	98,253	53	6.19	0.33	1,854
	2002	266,268	105	16.76	0.66	2,536
	2003	330,076	147	20.38	0.91	2,245
	TOTAL	1,042,030	452	13.08	0.57	2,305
VANDALISM AND MALICIOUS MISCHIEF	1999	20,960	17	1.31	0.11	1,233
	2000	58,680	36	3.75	0.23	1,630
	2001	56,975	15	3.59	0.09	3,798
	2002	39,339	21	2.48	0.13	1,873
	2003	21,357	13	1.32	0.08	1,643
	TOTAL	197,311	102	2.48	0.13	1,934
UNIDENTIFIED	1999	(6,385)	(8)	(0.40)	(0.05)	798
	2000	3,025	2	0.19	0.01	1,513
	2001	1,713	1	0.11	0.01	1,713
	2002	12,898	6	0.81	0.04	2,150
	2003	1,541	1	0.10	0.01	1,541
	TOTAL	12,792	2	0.16	0.00	6,396
ALL CAUSES	1999	503,837	241	31.38	1.50	2,091
	2000	1,123,250	469	71.77	3.00	2,395
	2001	499,510	247	31.49	1.56	2,022
	2002	546,648	279	34.40	1.76	1,959
	2003	779,774	292	48.14	1.80	2,670
	TOTAL	3,453,019	1,528	43.35	1.92	2,260

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 38	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	113,303	58	6.84	0.35	1,954
	2000	150,853	95	9.52	0.60	1,588
	2001	81,667	43	4.82	0.25	1,899
	2002	392,697	151	23.15	0.89	2,601
	2003	269,620	94	15.35	0.54	2,868
	TOTAL	1,008,140	441	12.02	0.53	2,286
WATER DAMAGE AND FREEZING	1999	124,003	76	7.48	0.46	1,632
	2000	215,273	75	13.59	0.47	2,870
	2001	126,391	72	7.46	0.42	1,755
	2002	337,684	106	19.90	0.62	3,186
	2003	309,095	74	17.60	0.42	4,177
	TOTAL	1,112,446	403	13.26	0.48	2,760
ALL OTHER PD	1999	161,949	91	9.77	0.55	1,780
	2000	145,634	84	9.19	0.53	1,734
	2001	184,613	68	10.90	0.40	2,715
	2002	791,077	319	46.63	1.88	2,480
	2003	144,771	65	8.24	0.37	2,227
	TOTAL	1,428,044	627	17.02	0.75	2,278
VANDALISM AND MALICIOUS MISCHIEF	1999	139,072	50	8.39	0.30	2,781
	2000	180,503	42	11.40	0.27	4,298
	2001	66,433	29	3.92	0.17	2,291
	2002	27,628	16	1.63	0.09	1,727
	2003	18,618	20	1.06	0.11	931
	TOTAL	432,254	157	5.15	0.19	2,753
UNIDENTIFIED	1999	20,494	13	1.24	0.08	1,576
	2000	10,156	12	0.64	0.08	846
	2001	8,584	9	0.51	0.05	954
	2002	19,956	15	1.18	0.09	1,330
	2003	1,470	1	0.08	0.01	1,470
	TOTAL	60,660	50	0.72	0.06	1,213
ALL CAUSES	1999	558,821	288	33.72	1.74	1,940
	2000	702,419	308	44.35	1.94	2,281
	2001	467,688	221	27.60	1.30	2,116
	2002	1,569,042	607	92.49	3.58	2,585
	2003	743,574	254	42.33	1.45	2,927
	TOTAL	4,041,544	1,678	48.18	2.00	2,409

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 39	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	120,679	85	6.28	0.44	1,420
	2000	332,999	177	18.07	0.96	1,881
	2001	197,092	75	10.72	0.41	2,628
	2002	226,222	119	11.98	0.63	1,901
	2003	522,352	191	25.53	0.93	2,735
	TOTAL	1,399,344	647	14.68	0.68	2,163
WATER DAMAGE AND FREEZING	1999	123,447	53	6.43	0.28	2,329
	2000	140,555	80	7.63	0.43	1,757
	2001	118,964	34	6.47	0.19	3,499
	2002	155,672	68	8.24	0.36	2,289
	2003	185,584	61	9.07	0.30	3,042
	TOTAL	724,222	296	7.60	0.31	2,447
ALL OTHER PD	1999	103,941	41	5.41	0.21	2,535
	2000	213,901	94	11.61	0.51	2,276
	2001	101,944	40	5.55	0.22	2,549
	2002	476,974	177	25.26	0.94	2,695
	2003	256,687	61	12.54	0.30	4,208
	TOTAL	1,153,447	413	12.10	0.43	2,793
VANDALISM AND MALICIOUS MISCHIEF	1999	32,372	17	1.69	0.09	1,904
	2000	31,465	18	1.71	0.10	1,748
	2001	28,848	15	1.57	0.08	1,923
	2002	42,955	15	2.28	0.08	2,864
	2003	27,932	9	1.37	0.04	3,104
	TOTAL	163,572	74	1.72	0.08	2,210
UNIDENTIFIED	1999	42,000	35	2.19	0.18	1,200
	2000	14,020	14	0.76	0.08	1,001
	2001	9,184	2	0.50	0.01	4,592
	2002	12,445	9	0.66	0.05	1,383
	2003	7,227	7	0.35	0.03	1,032
	TOTAL	84,876	67	0.89	0.07	1,267
ALL CAUSES	1999	422,439	231	22.00	1.20	1,829
	2000	732,940	383	39.78	2.08	1,914
	2001	456,032	166	24.82	0.90	2,747
	2002	914,268	388	48.42	2.05	2,356
	2003	999,782	329	48.86	1.61	3,039
	TOTAL	3,525,461	1,497	36.97	1.57	2,355

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 41	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	3,268,133	2,088	130.01	8.31	1,565
	2000	127,874	110	4.89	0.42	1,162
	2001	153,340	128	6.04	0.50	1,198
	2002	165,243	85	6.35	0.33	1,944
	2003	1,122,777	610	40.92	2.22	1,841
	TOTAL	4,837,367	3,021	37.17	2.32	1,601
WATER DAMAGE AND FREEZING	1999	30,671	16	1.22	0.06	1,917
	2000	25,862	19	0.99	0.07	1,361
	2001	13,843	10	0.55	0.04	1,384
	2002	26,418	20	1.02	0.08	1,321
	2003	22,186	21	0.81	0.08	1,056
	TOTAL	118,980	86	0.91	0.07	1,383
ALL OTHER PD	1999	34,892	26	1.39	0.10	1,342
	2000	39,111	44	1.50	0.17	889
	2001	46,764	20	1.84	0.08	2,338
	2002	57,262	31	2.20	0.12	1,847
	2003	45,615	35	1.66	0.13	1,303
	TOTAL	223,644	156	1.72	0.12	1,434
VANDALISM AND MALICIOUS MISCHIEF	1999	39,034	24	1.55	0.10	1,626
	2000	34,955	17	1.34	0.06	2,056
	2001	5,583	8	0.22	0.03	698
	2002	7,023	7	0.27	0.03	1,003
	2003	5,418	6	0.20	0.02	903
	TOTAL	92,013	62	0.71	0.05	1,484
UNIDENTIFIED	1999	80,717	65	3.21	0.26	1,242
	2000	8,777	4	0.34	0.02	2,194
	2001	1,666	4	0.07	0.02	417
	2002	1,482	1	0.06	0.00	1,482
	2003	11,772	6	0.43	0.02	1,962
	TOTAL	104,414	80	0.80	0.06	1,305
ALL CAUSES	1999	3,453,447	2,219	137.39	8.83	1,556
	2000	236,579	194	9.05	0.74	1,219
	2001	221,196	170	8.71	0.67	1,301
	2002	257,428	144	9.89	0.55	1,788
	2003	1,207,768	678	44.02	2.47	1,781
	TOTAL	5,376,418	3,405	41.31	2.62	1,579

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 42, 43	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	12,536,086	6,275	154.91	7.75	1,998
	2000	446,589	285	5.00	0.32	1,567
	2001	385,791	233	4.48	0.27	1,656
	2002	444,987	213	4.73	0.23	2,089
	2003	20,003,920	5,771	184.28	5.32	3,466
	TOTAL	33,817,373	12,777	73.67	2.78	2,647
WATER DAMAGE AND FREEZING	1999	284,960	151	3.52	0.19	1,887
	2000	330,293	161	3.70	0.18	2,052
	2001	373,873	141	4.34	0.16	2,652
	2002	475,286	153	5.05	0.16	3,106
	2003	726,387	172	6.69	0.16	4,223
	TOTAL	2,190,799	778	4.77	0.17	2,816
ALL OTHER PD	1999	338,299	129	4.18	0.16	2,622
	2000	191,295	116	2.14	0.13	1,649
	2001	127,431	79	1.48	0.09	1,613
	2002	223,530	91	2.38	0.10	2,456
	2003	689,010	130	6.35	0.12	5,300
	TOTAL	1,569,565	545	3.42	0.12	2,880
VANDALISM AND MALICIOUS MISCHIEF	1999	101,128	58	1.25	0.07	1,744
	2000	49,527	33	0.55	0.04	1,501
	2001	27,702	25	0.32	0.03	1,108
	2002	74,137	30	0.79	0.03	2,471
	2003	73,389	30	0.68	0.03	2,446
	TOTAL	325,883	176	0.71	0.04	1,852
UNIDENTIFIED	1999	395,431	185	4.89	0.23	2,137
	2000	9,112	17	0.10	0.02	536
	2001	4,908	4	0.06	0.00	1,227
	2002	10,527	9	0.11	0.01	1,170
	2003	98,560	44	0.91	0.04	2,240
	TOTAL	518,538	259	1.13	0.06	2,002
ALL CAUSES	1999	13,655,904	6,798	168.74	8.40	2,009
	2000	1,026,816	612	11.50	0.69	1,678
	2001	919,705	482	10.67	0.56	1,908
	2002	1,228,467	496	13.06	0.53	2,477
	2003	21,591,266	6,147	198.90	5.66	3,512
	TOTAL	38,422,158	14,535	83.70	3.17	2,643

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 44	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	58,191	32	9.73	0.54	1,818
	2000	45,047	29	7.91	0.51	1,553
	2001	33,518	24	6.12	0.44	1,397
	2002	53,141	25	9.30	0.44	2,126
	2003	134,451	58	22.79	0.98	2,318
	TOTAL	324,348	168	11.27	0.58	1,931
WATER DAMAGE AND FREEZING	1999	22,553	10	3.77	0.17	2,255
	2000	29,545	11	5.19	0.19	2,686
	2001	21,784	8	3.98	0.15	2,723
	2002	29,963	11	5.25	0.19	2,724
	2003	54,113	11	9.17	0.19	4,919
	TOTAL	157,958	51	5.49	0.18	3,097
ALL OTHER PD	1999	19,071	10	3.19	0.17	1,907
	2000	17,498	12	3.07	0.21	1,458
	2001	25,340	12	4.63	0.22	2,112
	2002	47,242	22	8.27	0.39	2,147
	2003	39,298	15	6.66	0.25	2,620
	TOTAL	148,449	71	5.16	0.25	2,091
VANDALISM AND MALICIOUS MISCHIEF	1999	11,003	4	1.84	0.07	2,751
	2000	7,805	4	1.37	0.07	1,951
	2001	6,375	3	1.16	0.05	2,125
	2002	3,901	2	0.68	0.04	1,951
	2003	8,399	2	1.42	0.03	4,200
	TOTAL	37,483	15	1.30	0.05	2,499
UNIDENTIFIED	1999	4,532	3	0.76	0.05	1,511
	2000	1,625	2	0.29	0.04	813
	2001	1,857	2	0.34	0.04	929
	2002	3,331	2	0.58	0.04	1,666
	2003	1,429	1	0.24	0.02	1,429
	TOTAL	12,774	10	0.44	0.03	1,277
ALL CAUSES	1999	115,350	59	19.29	0.99	1,955
	2000	101,520	58	17.82	1.02	1,750
	2001	88,874	49	16.22	0.89	1,814
	2002	137,578	62	24.09	1.09	2,219
	2003	237,690	87	40.29	1.47	2,732
	TOTAL	681,012	315	23.67	1.09	2,162

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 45	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	3,974,530	2,018	136.43	6.93	1,970
	2000	676,760	311	22.64	1.04	2,176
	2001	123,130	94	4.14	0.32	1,310
	2002	278,036	165	8.95	0.53	1,685
	2003	3,615,464	1,455	109.72	4.42	2,485
	TOTAL	8,667,920	4,043	56.75	2.65	2,144
WATER DAMAGE AND FREEZING	1999	190,200	83	6.53	0.28	2,292
	2000	140,744	64	4.71	0.21	2,199
	2001	98,491	45	3.31	0.15	2,189
	2002	104,265	57	3.36	0.18	1,829
	2003	131,347	57	3.99	0.17	2,304
	TOTAL	665,047	306	4.35	0.20	2,173
ALL OTHER PD	1999	133,168	72	4.57	0.25	1,850
	2000	133,588	82	4.47	0.27	1,629
	2001	169,069	61	5.69	0.21	2,772
	2002	225,052	122	7.25	0.39	1,845
	2003	182,003	94	5.52	0.29	1,936
	TOTAL	842,880	431	5.52	0.28	1,956
VANDALISM AND MALICIOUS MISCHIEF	1999	127,279	67	4.37	0.23	1,900
	2000	36,199	18	1.21	0.06	2,011
	2001	29,420	18	0.99	0.06	1,634
	2002	12,983	9	0.42	0.03	1,443
	2003	13,436	10	0.41	0.03	1,344
	TOTAL	219,317	122	1.44	0.08	1,798
UNIDENTIFIED	1999	70,435	60	2.42	0.21	1,174
	2000	32,765	14	1.10	0.05	2,340
	2001	2,081	1	0.07	0.00	2,081
	2002	5,393	4	0.17	0.01	1,348
	2003	19,732	17	0.60	0.05	1,161
	TOTAL	130,406	96	0.85	0.06	1,358
ALL CAUSES	1999	4,495,612	2,300	154.31	7.89	1,955
	2000	1,020,056	489	34.12	1.64	2,086
	2001	422,191	219	14.21	0.74	1,928
	2002	625,729	357	20.15	1.15	1,753
	2003	3,961,982	1,633	120.23	4.96	2,426
	TOTAL	10,525,570	4,998	68.91	3.27	2,106

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 46	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	1,425,887	724	139.64	7.09	1,969
	2000	242,831	112	23.19	1.07	2,168
	2001	44,166	34	4.24	0.33	1,299
	2002	98,608	60	9.01	0.55	1,643
	2003	1,218,355	487	104.53	4.18	2,502
	TOTAL	3,029,847	1,417	56.43	2.64	2,138
WATER DAMAGE AND FREEZING	1999	68,259	30	6.68	0.29	2,275
	2000	50,487	24	4.82	0.23	2,104
	2001	35,337	17	3.39	0.16	2,079
	2002	37,422	21	3.42	0.19	1,782
	2003	47,116	21	4.04	0.18	2,244
	TOTAL	238,621	113	4.44	0.21	2,112
ALL OTHER PD	1999	47,782	25	4.68	0.24	1,911
	2000	47,962	29	4.58	0.28	1,654
	2001	60,669	22	5.83	0.21	2,758
	2002	87,481	49	7.99	0.45	1,785
	2003	62,849	36	5.39	0.31	1,746
	TOTAL	306,743	161	5.71	0.30	1,905
VANDALISM AND MALICIOUS MISCHIEF	1999	45,651	24	4.47	0.24	1,902
	2000	12,983	6	1.24	0.06	2,164
	2001	10,556	6	1.01	0.06	1,759
	2002	4,657	3	0.43	0.03	1,552
	2003	4,820	3	0.41	0.03	1,607
	TOTAL	78,667	42	1.47	0.08	1,873
UNIDENTIFIED	1999	25,278	22	2.48	0.22	1,149
	2000	11,754	5	1.12	0.05	2,351
	2001	747	1	0.07	0.01	747
	2002	1,968	1	0.18	0.01	1,968
	2003	6,917	6	0.59	0.05	1,153
	TOTAL	46,664	35	0.87	0.07	1,333
ALL CAUSES	1999	1,612,857	825	157.95	8.08	1,955
	2000	366,017	176	34.95	1.68	2,080
	2001	151,475	80	14.55	0.77	1,893
	2002	230,136	134	21.03	1.22	1,717
	2003	1,340,057	553	114.97	4.74	2,423
	TOTAL	3,700,542	1,768	68.92	3.29	2,093

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 47	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	6,404,999	3,253	140.99	7.16	1,969
	2000	1,090,380	501	23.40	1.08	2,176
	2001	198,467	152	4.28	0.33	1,306
	2002	447,497	267	9.25	0.55	1,676
	2003	5,405,687	2,200	106.18	4.32	2,457
	TOTAL	13,547,030	6,373	57.01	2.68	2,126
WATER DAMAGE AND FREEZING	1999	306,374	134	6.74	0.29	2,286
	2000	226,841	103	4.87	0.22	2,202
	2001	158,706	73	3.43	0.16	2,174
	2002	167,931	91	3.47	0.19	1,845
	2003	211,701	92	4.16	0.18	2,301
	TOTAL	1,071,553	493	4.51	0.21	2,174
ALL OTHER PD	1999	214,560	116	4.72	0.26	1,850
	2000	215,070	131	4.62	0.28	1,642
	2001	272,376	98	5.88	0.21	2,779
	2002	360,596	195	7.46	0.40	1,849
	2003	281,670	149	5.53	0.29	1,890
	TOTAL	1,344,272	689	5.66	0.29	1,951
VANDALISM AND MALICIOUS MISCHIEF	1999	205,177	109	4.52	0.24	1,882
	2000	58,353	28	1.25	0.06	2,084
	2001	47,400	28	1.02	0.06	1,693
	2002	20,929	14	0.43	0.03	1,495
	2003	21,654	16	0.43	0.03	1,353
	TOTAL	353,513	195	1.49	0.08	1,813
UNIDENTIFIED	1999	113,456	97	2.50	0.21	1,170
	2000	52,801	23	1.13	0.05	2,296
	2001	3,354	2	0.07	0.00	1,677
	2002	8,671	7	0.18	0.01	1,239
	2003	30,948	27	0.61	0.05	1,146
	TOTAL	209,230	156	0.88	0.07	1,341
ALL CAUSES	1999	7,244,566	3,709	159.47	8.16	1,953
	2000	1,643,445	786	35.27	1.69	2,091
	2001	680,303	353	14.68	0.76	1,927
	2002	1,005,624	574	20.80	1.19	1,752
	2003	5,951,660	2,484	116.91	4.88	2,396
	TOTAL	16,525,598	7,906	69.55	3.33	2,090

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 53	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	973,985	490	51.21	2.58	1,988
	2000	393,304	171	20.93	0.91	2,300
	2001	57,593	35	3.16	0.19	1,646
	2002	168,712	103	8.99	0.55	1,638
	2003	770,569	311	39.00	1.57	2,478
	TOTAL	2,364,163	1,110	25.00	1.17	2,130
WATER DAMAGE AND FREEZING	1999	142,589	65	7.50	0.34	2,194
	2000	250,090	82	13.31	0.44	3,050
	2001	179,352	76	9.85	0.42	2,360
	2002	399,138	133	21.26	0.71	3,001
	2003	195,950	68	9.92	0.34	2,882
	TOTAL	1,167,119	424	12.34	0.45	2,753
ALL OTHER PD	1999	179,158	63	9.42	0.33	2,844
	2000	170,511	65	9.07	0.35	2,623
	2001	161,257	36	8.86	0.20	4,479
	2002	620,154	268	33.04	1.43	2,314
	2003	126,544	53	6.40	0.27	2,388
	TOTAL	1,257,624	485	13.30	0.51	2,593
VANDALISM AND MALICIOUS MISCHIEF	1999	76,120	41	4.00	0.22	1,857
	2000	28,784	17	1.53	0.09	1,693
	2001	35,798	23	1.97	0.13	1,556
	2002	24,050	14	1.28	0.07	1,718
	2003	11,184	9	0.57	0.05	1,243
	TOTAL	175,936	104	1.86	0.11	1,692
UNIDENTIFIED	1999	16,038	18	0.84	0.09	891
	2000	30,569	12	1.63	0.06	2,547
	2001	4,475	4	0.25	0.02	1,119
	2002	15,332	11	0.82	0.06	1,394
	2003	31,701	20	1.60	0.10	1,585
	TOTAL	98,115	65	1.04	0.07	1,509
ALL CAUSES	1999	1,387,890	677	72.97	3.56	2,050
	2000	873,258	347	46.47	1.85	2,517
	2001	438,475	174	24.09	0.96	2,520
	2002	1,227,386	529	65.38	2.82	2,320
	2003	1,135,948	461	57.49	2.33	2,464
	TOTAL	5,062,957	2,188	53.55	2.31	2,314

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 57	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	1,521,115	801	41.72	2.20	1,899
	2000	729,116	353	20.29	0.98	2,065
	2001	199,453	126	5.64	0.36	1,583
	2002	514,104	288	14.21	0.80	1,785
	2003	1,926,589	779	50.22	2.03	2,473
	TOTAL	4,890,377	2,347	26.83	1.29	2,084
WATER DAMAGE AND FREEZING	1999	201,749	107	5.53	0.29	1,886
	2000	179,256	91	4.99	0.25	1,970
	2001	145,920	80	4.13	0.23	1,824
	2002	180,635	102	4.99	0.28	1,771
	2003	146,100	80	3.81	0.21	1,826
	TOTAL	853,660	460	4.68	0.25	1,856
ALL OTHER PD	1999	145,899	88	4.00	0.24	1,658
	2000	313,767	117	8.73	0.33	2,682
	2001	265,069	111	7.50	0.31	2,388
	2002	623,954	321	17.24	0.89	1,944
	2003	418,693	180	10.91	0.47	2,326
	TOTAL	1,767,382	817	9.69	0.45	2,163
VANDALISM AND MALICIOUS MISCHIEF	1999	63,265	45	1.74	0.12	1,406
	2000	49,563	28	1.38	0.08	1,770
	2001	44,893	38	1.27	0.11	1,181
	2002	35,318	19	0.98	0.05	1,859
	2003	23,634	10	0.62	0.03	2,363
	TOTAL	216,673	140	1.19	0.08	1,548
UNIDENTIFIED	1999	72,368	39	1.98	0.11	1,856
	2000	36,192	31	1.01	0.09	1,167
	2001	17,089	14	0.48	0.04	1,221
	2002	23,007	11	0.64	0.03	2,092
	2003	24,776	22	0.65	0.06	1,126
	TOTAL	173,432	117	0.95	0.06	1,482
ALL CAUSES	1999	2,004,396	1,080	54.98	2.96	1,856
	2000	1,307,894	620	36.40	1.73	2,110
	2001	672,424	369	19.01	1.04	1,822
	2002	1,377,018	741	38.06	2.05	1,858
	2003	2,539,792	1,071	66.20	2.79	2,371
	TOTAL	7,901,524	3,881	43.34	2.13	2,036

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

TERRITORY 60	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
WIND AND HAIL	1999	1,512,527	841	11.18	0.62	1,798
	2000	1,185,051	742	9.19	0.58	1,597
	2001	872,721	618	7.04	0.50	1,412
	2002	1,378,725	646	10.70	0.50	2,134
	2003	3,413,854	1,440	26.20	1.11	2,371
	TOTAL	8,362,878	4,287	12.92	0.66	1,951
WATER DAMAGE AND FREEZING	1999	586,922	275	4.34	0.20	2,134
	2000	767,433	269	5.95	0.21	2,853
	2001	567,195	221	4.57	0.18	2,566
	2002	778,402	274	6.04	0.21	2,841
	2003	1,396,608	273	10.72	0.21	5,116
	TOTAL	4,096,560	1,312	6.33	0.20	3,122
ALL OTHER PD	1999	496,319	252	3.67	0.19	1,970
	2000	461,713	302	3.58	0.23	1,529
	2001	660,850	315	5.33	0.25	2,098
	2002	1,262,676	598	9.80	0.46	2,111
	2003	1,028,865	388	7.90	0.30	2,652
	TOTAL	3,910,423	1,855	6.04	0.29	2,108
VANDALISM AND MALICIOUS MISCHIEF	1999	285,204	107	2.11	0.08	2,665
	2000	202,835	107	1.57	0.08	1,896
	2001	164,828	93	1.33	0.07	1,772
	2002	102,039	57	0.79	0.04	1,790
	2003	227,044	51	1.74	0.04	4,452
	TOTAL	981,950	415	1.52	0.06	2,366
UNIDENTIFIED	1999	118,176	82	0.87	0.06	1,441
	2000	42,016	66	0.33	0.05	637
	2001	48,029	49	0.39	0.04	980
	2002	84,846	50	0.66	0.04	1,697
	2003	37,558	21	0.29	0.02	1,788
	TOTAL	330,625	268	0.51	0.04	1,234
ALL CAUSES	1999	2,999,148	1,557	22.17	1.15	1,926
	2000	2,659,048	1,486	20.63	1.15	1,789
	2001	2,313,623	1,296	18.65	1.04	1,785
	2002	3,606,688	1,625	27.98	1.26	2,220
	2003	6,103,929	2,173	46.85	1.67	2,809
	TOTAL	17,682,436	8,137	27.31	1.26	2,173

NORTH CAROLINA DWELLING EXTENDED COVERAGE CAUSE OF LOSS EXPERIENCE

	YEAR	INCURRED LOSSES	INCURRED CLAIMS	LOSS COST/ HOUSE YEAR	LOSS FREQ/ 100 HOUSE YR	AVG LOSS
STATEWIDE						
WIND AND HAIL	1999	64,782,096	27,168	117.63	4.93	2,385
	2000	7,289,280	3,652	13.12	0.66	1,996
	2001	3,062,969	1,984	5.63	0.36	1,544
	2002	4,827,522	2,521	8.50	0.44	1,915
	2003	66,418,320	19,852	110.38	3.30	3,346
	TOTAL	146,380,187	55,177	51.90	1.96	2,653
WATER DAMAGE AND FREEZING	1999	3,068,927	1,319	5.57	0.24	2,327
	2000	3,738,332	1,442	6.73	0.26	2,592
	2001	3,734,541	1,320	6.86	0.24	2,829
	2002	5,141,836	1,664	9.05	0.29	3,090
	2003	7,859,261	1,656	13.06	0.28	4,746
	TOTAL	23,542,897	7,401	8.35	0.26	3,181
ALL OTHER PD	1999	2,313,548	1,110	4.20	0.20	2,084
	2000	2,655,550	1,411	4.78	0.25	1,882
	2001	2,497,913	1,076	4.59	0.20	2,321
	2002	5,993,049	2,776	10.55	0.49	2,159
	2003	4,137,779	1,522	6.88	0.25	2,719
	TOTAL	17,597,839	7,895	6.24	0.28	2,229
VANDALISM AND MALICIOUS MISCHIEF	1999	1,290,268	664	2.34	0.12	1,943
	2000	914,303	452	1.65	0.08	2,023
	2001	640,566	386	1.18	0.07	1,659
	2002	605,139	317	1.07	0.06	1,909
	2003	549,892	249	0.91	0.04	2,208
	TOTAL	4,000,168	2,068	1.42	0.07	1,934
UNIDENTIFIED	1999	1,855,922	892	3.37	0.16	2,081
	2000	272,545	225	0.49	0.04	1,211
	2001	117,054	111	0.21	0.02	1,055
	2002	232,063	143	0.41	0.03	1,623
	2003	341,255	200	0.57	0.03	1,706
	TOTAL	2,818,839	1,571	1.00	0.06	1,794
ALL CAUSES	1999	73,310,761	31,153	133.11	5.66	2,353
	2000	14,870,010	7,182	26.76	1.29	2,070
	2001	10,053,043	4,877	18.46	0.90	2,061
	2002	16,799,609	7,421	29.58	1.31	2,264
	2003	79,306,507	23,479	131.80	3.90	3,378
	TOTAL	194,339,930	74,112	68.90	2.63	2,622

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

2. CREDIBILITY FACTOR DEVELOPMENT AND APPLICATION

The volume of North Carolina data is sufficiently large that that it is fully credible in both the statewide and class rate level reviews.

To distribute the statewide change by territory, a credibility procedure was used on the five year (non-hurricane for Extended Coverage) loss costs. The credibility standard used was based on the 'frequency with severity modification' model discussed in "Credibility of the Pure Premium" by Mayerson, Bowers and Jones. The full credibility standard is based on a normal distribution with a 90% probability of meeting the test and a 10% maximum departure from the expected value, translated to house years. The full credibility standards are 500,000 house years for Fire and 330,000 house years for Extended Coverage. Partial credibility is calculated using the square root rule:

$$\sqrt{\text{five year house years} / \text{full credibility standard}}$$

The Rate Bureau made a Dwelling Fire and Extended Coverage rate filing in 2003 that used same credibility procedure.

See Section D and prefiled testimony of R. Curry and D. Border.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

3. LOSS DEVELOPMENT FACTOR DERIVATION AND APPLICATION ON BOTH PAID AND
INCURRED BASES AND IN BOTH NUMBERS AND DOLLARS OF CLAIMS

(a)-(g) Not applicable to Dwelling Fire and Extended Coverage insurance.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

4. TRENDING FACTOR DEVELOPMENT AND APPLICATION

- (a) See Section D and prefiled testimony of R. Curry and D. Border. The Rate Bureau made a Dwelling Fire and Extended Coverage rate level filing in 2003 that used the same loss trend procedure.
- (b) See prefiled testimony of R. Curry and D. Border.
- (c) Not applicable for Dwelling Fire and Extended Coverage insurance.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

5. CHANGES IN PREMIUM BASE RESULTING FROM RATING EXPOSURE TRENDS
- (a) See Section D and prefiled testimony of R. Curry and D. Border. The Rate Bureau made a Dwelling Fire and Extended Coverage rate level filing in 2003 that used same exposure trend procedure.
 - (b) Not applicable to Dwelling Fire and Extended Coverage insurance.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

6. LIMITING FACTOR DEVELOPMENT AND APPLICATION

No limitations were applied.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

7. OVERHEAD EXPENSE DEVELOPMENT AND APPLICATION OF COMMISSION AND BROKERAGE, OTHER ACQUISITION EXPENSES, GENERAL EXPENSES, TAXES, LICENSES, AND FEES
- (a) Exhibit (7)(a) provides all information relating to expense provisions contained in the filing. The Rate Bureau made a Dwelling Fire and Extended Coverage rate level filing in 2003 that used same procedure for overhead expense development and application of commission and brokerage, other acquisition expense, general expenses, taxes, licenses and fees.
 - (b) Not applicable to Dwelling Fire and Extended Coverage insurance.
 - (c) Not applicable to Dwelling Fire and Extended Coverage insurance.

The following provides a description of the derivation of Dwelling Fire and Extended Coverage expense provisions. The underlying expense data are provided by the North Carolina Rate Bureau and are displayed on pages D-25-28.

The filed expense provision methodology makes a distinction between those provisions that require trending and those that do not. For example, since commission and brokerage, and taxes, licenses and fees vary directly with premium, no additional trend is required. In contrast, general expense, other acquisition expense, and loss adjustment expense do not vary directly with premium and are subject to trend.

The provisions for commission and brokerage expenses, 15.9% of written premium for Fire and 14.9% of written premium for Extended Coverage, and the provisions for taxes, licenses, and fees, 3.1% of written premium for Fire and 2.6% of written premium for Extended Coverage, are based on the data shown on pages D-25 and D-27 for the years 2001-2003.

Since general expenses and other acquisition expenses are relative to earned premiums and loss adjustment expenses are relative to losses, separate trend factors are required for premiums, losses, and expenses.

General Expense and Other Acquisition Expense - Based on the 2001-2003 experience on pages D-25 and D-27, general expenses average 7.3% of earned premium for Fire and 6.2% of earned premium for Extended Coverage, and other acquisition expenses average 6.7% of earned premium for Fire and 7.1% of earned premium for Extended Coverage. Since these expenses are incurred throughout the twelve-month effective period, both the numerator and denominator of these factors are trended to 12/1/2006 (six months beyond the 6/1/2006 average effective date).

The average date of payment of the 2001-2003 expenses used to calculate the provisions is 7/1/2002. Similarly, the average date of earning of the 2001-2003 premiums is 7/1/2002. Assuming policies are written with an effective period of one year, the average date of writing is therefore six months earlier, or 1/1/2002. The average date of writing of policies under the proposed rates, and the average date of payment of the expenses on these policies, is six months after the assumed effective date of 6/1/2006, or 12/1/2006. Therefore, the expenses in the numerator are projected 53 months (from 7/1/2002 to 12/1/2006) and the premiums in the denominator are projected 59 months (from 1/1/2002 to 12/1/2006).

The trend factor for expenses in the numerator is based on the rates of change inherent in the Consumer Price Index and the Compensation Cost Index, displayed on pages D-23-24. Based on an equal weighting of the rates of change in these two indices, an average annual change of 3.3% was selected. This average annual change is projected 53 months (from 7/1/2002 to 12/1/2006).

To trend the premiums in the denominator, two multiplicative factors are applied: the 2002 Current Amount Factor and the Premium Projection Factor. Those factors are shown on pages D-18-19 and D-21-22.

Loss Adjustment Expense

Fire: Based on the 1999-2003 experience shown on page D-26, loss adjustment expense (both allocated and unallocated) average 8.7% of incurred losses. The average date of loss in these data is 7/1/2001. Both the numerator and denominator are trended 71 months, from 7/1/2001 to 6/1/2007 (12 months beyond the average effective date of 6/1/2006).

Extended Coverage: Based on the 1999-2003 experience shown on page D-28, loss adjustment expenses (both allocated and unallocated) average 12.6% of incurred losses. The average date of loss in these data is 7/1/2001. Both the numerator and denominator are trended 71 months, from 7/1/2001 to 6/1/2007 (12 months beyond the average effective date of 6/1/2006).

The trend factor used for expenses in the numerator is determined in a similar way as for general and other acquisition expenses. The 3.3% selected average annual change is projected 71 months for Fire and Extended Coverage (from 7/1/2001 to 6/1/2007).

To trend the losses in the denominator, quantities that are calculated in the loss trend procedure are used. Two factors are applied. The first is the 2001 Current Cost Factor shown on page D-14. The second is the rate of change in the CCI (page D-15). The CCI rate of change is applied over the 24.5 month period from 5/15/2005 to 6/1/2007.

No alternate expense trend methodology has been considered within the last three years.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

8. PERCENT RATE CHANGE

The overall statewide rate change by coverage is shown on page A-1. The statewide rate changes are applied uniformly by coverage amount, protection class, construction and deductible.

The proposed rate changes are dependent on the actual implementation date of the new rates, because any such change will affect all of the trending periods used in the filing. Any change in the trending periods will affect all of the losses, fixed expenses, and premiums used in the calculation of the rate level indication.

If the effective date were to be changed, advance notice of one hundred five (105) days is required for an orderly implementation of the change in rates. This is the amount of time required to calculate the new rates based on the new effective date, and distribute the necessary information to member companies.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

9. FINAL PROPOSED RATES

The proposed rates are shown in Section B.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

10. INVESTMENT EARNINGS, CONSISTING OF INVESTMENT INCOME AND REALIZED PLUS UNREALIZED CAPITAL GAINS, FROM LOSS, LOSS EXPENSE AND UNEARNED PREMIUM RESERVES
- (a) See attached Exhibit (10)(a) and the prefiled testimony of R. Curry and D. Appel.
 - (b) Not applicable to Dwelling Fire and Extended Coverage insurance.
 - (c) Not applicable to Dwelling Fire and Extended Coverage insurance.

NORTH CAROLINA
DWELLING FIRE INSURANCE

Exhibit (10)(a)

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/03		73,890,286
2.	Mean Unearned Premium Reserve (1) x	0.4546	33,590,524
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		15.71%
	Taxes, Licenses and Fees		2.75%
	1/2 General Expenses		2.77%
	1/2 Other Acquisition		2.89%
	Total		24.12%
4.	(2) x (3)		8,102,034
5.	Net Subject to Investment (2) - (4)		25,488,490

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)		73,890,286
2.	Average Agents' Balances		0.113
3.	Delayed Remission (1) x (2)		8,349,602

C. Loss Reserve

1.	Direct Earned Premium (A-1)		73,890,286
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.7001	51,730,589
3.	Expected Mean Loss Reserves (2) x	0.712	36,832,179

D. Net Subject to Investment (A-5)-(B-3)+(C-3) 53,971,067

E. Average Rate of Return 4.71%

F. Investment Earnings on Net Subject to Investment (D) x (E) 2,542,037

G. Average Rate of Return as a Percent of Direct Earned Premium (F) / (A-1) 3.44%

H. Average Rate of Return as a Percent of Direct Earned Premium after Federal Income Taxes (G) x 0.787 2.71%

NORTH CAROLINA
DWELLING EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/03		43,194,647
2.	Mean Unearned Premium Reserve (1) x	0.3954	17,079,163
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		14.69%
	Taxes, Licenses and Fees		1.98%
	1/2 General Expenses		3.51%
	1/2 Other Acquisition		3.51%
	Total		23.69%
4.	(2) x (3)		4,046,054
5.	Net Subject to Investment (2) - (4)		13,033,109

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)	43,194,647
2.	Average Agents' Balances	0.113
3.	Delayed Remission (1) x (2)	4,880,995

C. Loss Reserve

1.	Direct Earned Premium (A-1)	43,194,647	
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.6899	29,799,987
3.	Expected Mean Loss Reserves (2) x	1.289	38,412,183

D. Net Subject to Investment (A-5)-(B-3)+(C-3) 46,564,297

E. Average Rate of Return 4.71%

F. Investment Earnings on Net Subject to Investment (D) x (E) 2,193,178

G. Average Rate of Return as a Percent of Direct Earned Premium (F) / (A-1) 5.08%

H. Average Rate of Return as a Percent of Direct Earned Premium after Federal Income Taxes (G) x 0.787 4.00%

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line A-1

Direct earned premiums are the earned premiums for Dwelling insurance in North Carolina from page 15 of the Annual Statement.

Line A-2

The mean unearned premium reserve is determined by multiplying the direct earned premiums in line (1) by the ratio of the mean unearned premium reserve to the collected earned premium for calendar year ended 12/31/03 for all companies writing Dwelling insurance in North Carolina. These data are from page 15 of the Annual Statement.

	<u>Fire</u>	<u>EC</u>
1. Collected Earned Premium for Calendar Year ended 12/31/03	\$183,544,047	\$156,729,285
2. Unearned Premium Reserve as of 12/31/02	83,845,604	60,695,380
3. Unearned Premium Reserve as of 12/31/03	83,032,929	63,261,713
4. Mean Unearned Premium Reserve 1/2 [(2) + (3)]	83,439,267	61,978,547
5. Ratio (4) ÷ (1)	0.4546	0.3954

Line A-3

Deduction for prepaid expenses:

Production costs and a large part of the other company expenses in connection with the writing and handling of Dwelling policies, exclusive of claim adjustment expenses, are incurred when the policy is written and before the premium is paid. The deduction for these expenses is determined from data provided by the NCRB for the year ended 12/31/03.

Line B-2

Delayed remission of premium:

This deduction is necessary because of delay in remission and collection of premium to the companies, which amounts to approximately 50-75 days after the effective dates of the policies. Therefore, funds for the unearned premium reserve required during the initial days of all policies must be taken from the company's surplus.

1. Agents' balances for premiums due less than 90 days as a ratio to net written premium (based on data for all companies writing Dwelling insurance in North Carolina)	0.1094	0.1093
2. Factor to include effect of agents' balances or uncollected premiums overdue for more than 90 days (based on data provided by A. M. Best)	1.033	1.033
3. Factor for agents' balances (1) x (2)	0.113	0.113

Line C-2

The expected loss and loss adjustment expense ratio reflects the expense provisions for the year ended 12/31/03.

Line C-3

The mean loss reserve is determined by multiplying the incurred losses in line (2) by the North Carolina ratio of the mean loss reserves to the incurred losses in 2003 for Dwelling insurance. This ratio is based on North Carolina companies' Page 15 annual statement data and has been adjusted to include loss adjustment expense reserves.

	<u>Fire</u>	<u>EC</u>
1. Incurred Losses for Calendar Year 2003	47,926,168	23,185,307
2. Loss Reserves as of 12/31/02	30,860,422	27,203,722
3. Loss Reserves as of 12/31/03	33,193,930	28,902,647
4. Mean Loss Reserve 2003: 1/2 [(2) + (3)]	32,027,176	28,053,184
5. Ratio (4) ÷ (1)	0.668	1.210
6. Ratio of LAE Reserves to Loss Reserves (a)	0.242	0.242
7. Ratio of Incurred LAE to Incurred Losses (a)	0.166	0.166
8. Loss and LAE Reserve [(5)x(1.0+(6))]/(1.0+(7))]	0.712	1.289

(a) Based on 2003 All-Industry Insurance Expense Exhibit (source: A.M. Best)

Line E

The rate of return is the ratio of net investment income earned to mean cash and invested assets. Net investment income is computed for all companies writing Dwelling insurance in North Carolina as follows:

<u>Year</u>	<u>Net Investment Income Earned</u>	<u>Mean Cash and Invested Assets</u>	<u>Rate of Return</u>
2003	9,039,610,016	191,754,825,688	4.71%

Line H

The average rate of Federal income tax was determined by applying the average tax rate for net investment income and the current tax rate applicable to realized capital gains (or losses) to the rates of return as calculated above.

	<u>Rate of Return</u>	<u>Federal Income Tax Rate</u>
Net Investment Income Earned	4.71%	0.213

The average rate of Federal income tax was determined by applying current tax rates to the distribution of investment income earned for all companies. These data are for 2003 from Best's Aggregates and Averages, Underwriting and Investment Exhibit, Part 1, Column 8.

Bonds	Taxable	21,190,681	0.350
	Non-Taxable	9,918,255	-
	Sub-Total	31,108,936	0.238
Stocks	Taxable (a)	2,864,754	0.105
	Non-Taxable	3,838,458	-
	Sub-Total	6,703,212	0.045
Mortgage Loans		158,612	
Real Estate		1,690,507	
Contract Loans		438	
Cash/Short Term Investments		1,158,122	
Derivative Instruments		164,953	
All Other		3,526,989	
Sub-Total		6,699,621	0.350
Total		44,511,769	0.226
Investment Deductions		4,174,811	0.350
Net Investment Income Earned		40,336,958	0.213

(a) Only 30% of dividend income on stock is subject to the full corporate income tax rate of 35%. The applicable tax rate is thus 10.5% (.35 x .3 = 10.5%)

NORTH CAROLINA
DWELLING FIRE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/02		62,717,432
2.	Mean Unearned Premium Reserve (1) x	0.4340	27,219,365
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		15.71%
	Taxes, Licenses and Fees		2.64%
	1/2 General Expenses		2.53%
	1/2 Other Acquisition		3.39%
	Total		24.27%
4.	(2) x (3)		6,606,140
5.	Net Subject to Investment (2) - (4)		20,613,225

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)		62,717,432
2.	Average Agents' Balances		0.106
3.	Delayed Remission (1) x (2)		6,648,048

C. Loss Reserve

1.	Direct Earned Premium (A-1)		62,717,432
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.6960	43,651,333
3.	Expected Mean Loss Reserves (2) x	0.614	26,801,918

D. Net Subject to Investment (A-5)-(B-3)+(C-3) 40,767,095

E. Average Rate of Return 4.60%

F. Investment Earnings on Net Subject to
Investment (D) x (E) 1,875,286

G. Average Rate of Return as a Percent of Direct
Earned Premium (F) / (A-1) 2.99%

H. Average Rate of Return as a Percent of Direct Earned
Premium after Federal Income Taxes (G) x 0.782 2.34%

NORTH CAROLINA
DWELLING EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/02		40,237,095
2.	Mean Unearned Premium Reserve (1) x	0.3870	15,571,756
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		15.00%
	Taxes, Licenses and Fees		2.08%
	1/2 General Expenses		2.25%
	1/2 Other Acquisition		3.66%
	Total		22.99%
4.	(2) x (3)		3,579,947
5.	Net Subject to Investment (2) - (4)		11,991,809

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)		40,237,095
2.	Average Agents' Balances		0.123
3.	Delayed Remission (1) x (2)		4,949,163

C. Loss Reserve

1.	Direct Earned Premium (A-1)		40,237,095
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.7085	28,507,982
3.	Expected Mean Loss Reserves (2) x	0.548	15,622,374

D. Net Subject to Investment (A-5)-(B-3)+(C-3) 22,665,020

E. Average Rate of Return 4.60%

F. Investment Earnings on Net Subject to Investment (D) x (E) 1,042,591

G. Average Rate of Return as a Percent of Direct Earned Premium (F) / (A-1) 2.59%

H. Average Rate of Return as a Percent of Direct Earned Premium after Federal Income Taxes (G) x 0.782 2.03%

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line A-1

Direct earned premiums are the earned premiums for Dwelling insurance in North Carolina from page 15 of the Annual Statement.

Line A-2

The mean unearned premium reserve is determined by multiplying the direct earned premiums in line (1) by the ratio of the mean unearned premium reserve to the collected earned premium for calendar year ended 12/31/02 for all companies writing Dwelling insurance in North Carolina. These data are from page 15 of the Annual Statement.

	<u>Fire</u>	<u>EC</u>
1. Collected Earned Premium for Calendar Year ended 12/31/02	\$176,509,939	\$143,476,773
2. Unearned Premium Reserve as of 12/31/01	69,371,944	50,350,822
3. Unearned Premium Reserve as of 12/31/02	83,845,604	60,695,380
4. Mean Unearned Premium Reserve 1/2 [(2) + (3)]	76,608,774	55,523,101
5. Ratio (4) ÷ (1)	0.4340	0.3870

Line A-3

Deduction for prepaid expenses:

Production costs and a large part of the other company expenses in connection with the writing and handling of Dwelling policies, exclusive of claim adjustment expenses, are incurred when the policy is written and before the premium is paid. The deduction for these expenses is determined from data provided by the NCRB for the year ended 12/31/02.

Line B-2

Delayed remission of premium:

This deduction is necessary because of delay in remission and collection of premium to the companies, which amounts to approximately 50-75 days after the effective dates of the policies. Therefore, funds for the unearned premium reserve required during the initial days of all policies must be taken from the company's surplus.

1. Agents' balances for premiums due less than 90 days as a ratio to net written premium (based on data for all companies writing Dwelling insurance in North Carolina)	0.1028	0.1194
2. Factor to include effect of agents' balances or uncollected premiums overdue for more than 90 days (based on data provided by A. M. Best)	1.033	1.033
3. Factor for agents' balances (1) x (2)	0.106	0.123

Line C-2

The expected loss and loss adjustment expense ratio reflects the expense provisions for the year ended 12/31/02.

Line C-3

The mean loss reserve is determined by multiplying the incurred losses in line (2) by the North Carolina ratio of the mean loss reserves to the incurred losses in 2002 for Dwelling insurance. This ratio is based on North Carolina companies' Page 15 annual statement data and has been adjusted to include loss adjustment expense reserves.

	<u>Fire</u>	<u>EC</u>
1. Incurred Losses for Calendar Year 2002	57,628,854	64,812,574
2. Loss Reserves as of 12/31/01	34,510,847	38,411,135
3. Loss Reserves as of 12/31/02	30,860,422	27,203,722
4. Mean Loss Reserve 2002: 1/2 [(2) + (3)]	32,685,635	32,807,429
5. Ratio (4) + (1)	0.567	0.506
6. Ratio of LAE Reserves to Loss Reserves (a)	0.272	0.272
7. Ratio of Incurred LAE to Incurred Losses (a)	0.174	0.174
8. Loss and LAE Reserve [(5)x(1.0+(6))]/(1.0+(7))]	0.614	0.548

(a) Based on 2002 All-Industry Insurance Expense Exhibit (source: A.M. Best)

Line E

The rate of return is the ratio of net investment income earned to mean cash and invested assets. Net investment income is computed for all companies writing Dwelling insurance in North Carolina as follows:

<u>Year</u>	<u>Net Investment Income Earned</u>	<u>Mean Cash and Invested Assets</u>	<u>Rate of Return</u>
2002	8,793,364,861	191,093,409,097	4.60%

Line H

The average rate of Federal income tax was determined by applying the average tax rate for net investment income and the current tax rate applicable to realized capital gains (or losses) to the rates of return as calculated above.

	<u>Rate of Return</u>	<u>Federal Income Tax Rate</u>
Net Investment Income Earned	4.60%	0.218

The average rate of Federal income tax was determined by applying current tax rates to the distribution of investment income earned for all companies. These data are for 2002 from Best's Aggregates and Averages, Underwriting and Investment Exhibit, Part 1, Column 8.

Bonds	Taxable	23,094,226	0.350
	Non-Taxable	9,284,966	-
	Sub-Total	32,379,192	0.250
Stocks	Taxable (a)	2,763,531	0.105
	Non-Taxable	3,977,275	-
	Sub-Total	6,740,806	0.043
Mortgage Loans		178,521	
Real Estate		1,672,965	
Contract Loans		207	
Cash/Short Term Investments		1,048,332	
Derivative Instruments		75,319	
All Other		2,353,502	
Sub-Total		5,328,846	0.350
Total		44,448,844	0.231
Investment Deductions		4,336,105	0.350
Net Investment Income Earned		40,112,739	0.218

(a) Only 30% of dividend income on stock is subject to the full corporate income tax rate of 35%. The applicable tax rate is thus 10.5% ($.35 \times .3 = 10.5\%$)

NORTH CAROLINA
DWELLING FIRE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/01		49,767,738
2.	Mean Unearned Premium Reserve (1) x	0.4384	21,818,176
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		15.29%
	Taxes, Licenses and Fees		2.49%
	1/2 General Expenses		6.17%
	1/2 Other Acquisition		4.13%
	Total		28.08%
4.	(2) x (3)		6,126,544
5.	Net Subject to Investment (2) - (4)		15,691,632

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)		49,767,738
2.	Average Agents' Balances		0.150
3.	Delayed Remission (1) x (2)		7,465,161

C. Loss Reserve

1.	Direct Earned Premium (A-1)		49,767,738
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.6138	30,547,438
3.	Expected Mean Loss Reserves (2) x	0.565	17,259,302

D. Net Subject to Investment (A-5)-(B-3)+(C-3) 25,485,773

E. Average Rate of Return 4.88%

F. Investment Earnings on Net Subject to Investment (D) x (E) 1,243,706

G. Average Rate of Return as a Percent of Direct Earned Premium (F) / (A-1) 2.50%

H. Average Rate of Return as a Percent of Direct Earned Premium after Federal Income Taxes (G) x 0.770 1.92%

NORTH CAROLINA
DWELLING EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/01		36,563,126
2.	Mean Unearned Premium Reserve (1) x	0.3776	13,806,236
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		13.57%
	Taxes, Licenses and Fees		2.47%
	1/2 General Expenses		4.02%
	1/2 Other Acquisition		3.97%
	Total		24.03%
4.	(2) x (3)		3,317,639
5.	Net Subject to Investment (2) - (4)		10,488,597

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)		36,563,126
2.	Average Agents' Balances		0.175
3.	Delayed Remission (1) x (2)		6,398,547

C. Loss Reserve

1.	Direct Earned Premium (A-1)		36,563,126
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.6772	24,760,549
3.	Expected Mean Loss Reserves (2) x	2.017	49,942,027

D. Net Subject to Investment (A-5)-(B-3)+(C-3)

54,032,077

E. Average Rate of Return

4.88%

F. Investment Earnings on Net Subject to
Investment (D) x (E)

2,636,765

G. Average Rate of Return as a Percent of Direct
Earned Premium (F) / (A-1)

7.21%

H. Average Rate of Return as a Percent of Direct Earned
Premium after Federal Income Taxes (G) x

0.770 5.55%

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line A-1

Direct earned premiums are the earned premiums for Dwelling insurance in North Carolina from page 15 of the Annual Statement.

Line A-2

The mean unearned premium reserve is determined by multiplying the direct earned premiums in line (1) by the ratio of the mean unearned premium reserve to the collected earned premium for calendar year ended 12/31/01 for all companies writing Dwelling insurance in North Carolina. These data are from page 15 of the Annual Statement.

	<u>Fire</u>	<u>EC</u>
1. Collected Earned Premium for Calendar Year ended 12/31/01	\$143,064,803	\$125,564,650
2. Unearned Premium Reserve as of 12/31/00	56,074,871	44,477,539
3. Unearned Premium Reserve as of 12/31/01	69,371,944	50,350,822
4. Mean Unearned Premium Reserve 1/2 [(2) + (3)]	62,723,408	47,414,181
5. Ratio (4) ÷ (1)	0.4384	0.3776

Line A-3

Deduction for prepaid expenses:

Production costs and a large part of the other company expenses in connection with the writing and handling of Dwelling policies, exclusive of claim adjustment expenses, are incurred when the policy is written and before the premium is paid. The deduction for these expenses is determined from data provided by the NCRB for the year ended 12/31/01.

Line B-2

Delayed remission of premium:

This deduction is necessary because of delay in remission and collection of premium to the companies, which amounts to approximately 50-75 days after the effective dates of the policies. Therefore, funds for the unearned premium reserve required during the initial days of all policies must be taken from the company's surplus.

1. Agents' balances for premiums due less than 90 days as a ratio to net written premium (based on data for all companies writing Dwelling insurance in North Carolina)	0.1448	0.1692
2. Factor to include effect of agents' balances or uncollected premiums overdue for more than 90 days (based on data provided by A. M. Best)	1.033	1.033
3. Factor for agents' balances (1) x (2)	0.150	0.175

Line C-2

The expected loss and loss adjustment expense ratio reflects the expense provisions for the year ended 12/31/01.

Line C-3

The mean loss reserve is determined by multiplying the incurred losses in line (2) by the North Carolina ratio of the mean loss reserves to the incurred losses in 2001 for Dwelling insurance. This ratio is based on North Carolina companies' Page 15 annual statement data and has been adjusted to include loss adjustment expense reserves.

	<u>Fire</u>	<u>EC</u>
1. Incurred Losses for Calendar Year 2001	68,153,061	25,207,960
2. Loss Reserves as of 12/31/00	37,209,132	56,313,782
3. Loss Reserves as of 12/31/01	34,510,847	38,411,135
4. Mean Loss Reserve 2001: 1/2 [(2) + (3)]	35,859,990	47,362,459
5. Ratio (4) ÷ (1)	0.526	1.879
6. Ratio of LAE Reserves to Loss Reserves (a)	0.243	0.243
7. Ratio of Incurred LAE to Incurred Losses (a)	0.158	0.158
8. Loss and LAE Reserve [(5)x(1.0+(6)))/(1.0+(7))]	0.565	2.017

(a) Based on 2001 All-Industry Insurance Expense Exhibit (source: A.M. Best)

Line E

The rate of return is the ratio of net investment income earned to mean cash and invested assets. Net investment income is computed for all companies writing Dwelling insurance in North Carolina as follows:

<u>Year</u>	<u>Net Investment Income Earned</u>	<u>Mean Cash and Invested Assets</u>	<u>Rate of Return</u>
2001	9,296,045,677	190,433,545,458	4.88%

Line H

The average rate of Federal income tax was determined by applying the average tax rate for net investment income and the current tax rate applicable to realized capital gains (or losses) to the rates of return as calculated above.

	<u>Rate of Return</u>	<u>Federal Income Tax Rate</u>
Net Investment Income Earned	4.88%	0.23

The average rate of Federal income tax was determined by applying current tax rates to the distribution of investment income earned for all companies. These data are for 2001 from Best's Aggregates and Averages, Underwriting and Investment Exhibit, Part 1, Column 8.

Bonds	Taxable	22,302,424	0.350
	Non-Taxable	9,654,683	-
	Sub-Total	31,957,107	0.244
Stocks	Taxable (a)	2,621,526	0.105
	Non-Taxable	1,405,226	-
	Sub-Total	4,026,752	0.068
Mortgage Loans		137,721	
Real Estate		1,649,181	
Collateral Loans		-	
Cash on Deposit		596,201	
Short Term Investments		1,203,685	
All Other		2,418,157	
Sub-Total		6,004,945	0.350
Total		41,988,804	0.242
Investment Deductions		4,253,706	0.350
Net Investment Income Earned		37,735,098	0.230

(a) Only 30% of dividend income on stock is subject to the full corporate income tax rate of 35%. The applicable tax rate is thus 10.5% ($.35 \times .3 = 10.5\%$)

NORTH CAROLINA
DWELLING FIRE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/00		45,018,720
2.	Mean Unearned Premium Reserve (1) x	0.4447	20,019,825
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		15.33%
	Taxes, Licenses and Fees		2.60%
	1/2 General Expenses		3.71%
	1/2 Other Acquisition		3.54%
	Total		25.18%
4.	(2) x (3)		5,040,992
5.	Net Subject to Investment (2) - (4)		14,978,833

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)		45,018,720
2.	Average Agents' Balances		0.158
3.	Delayed Remission (1) x (2)		7,112,958

C. Loss Reserve

1.	Direct Earned Premium (A-1)		45,018,720
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.6743	30,356,123
3.	Expected Mean Loss Reserves (2) x	0.953	28,929,385

D. Net Subject to Investment (A-5)-(B-3)+(C-3) 36,795,260

E. Average Rate of Return 6.12%

F. Investment Earnings on Net Subject to
Investment (D) x (E) 2,251,870

G. Average Rate of Return as a Percent of Direct
Earned Premium (F) / (A-1) 5.00%

H. Average Rate of Return as a Percent of Direct Earned
Premium after Federal Income Taxes (G) x 0.769 3.85%

NORTH CAROLINA
DWELLING EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/00		31,402,786
2.	Mean Unearned Premium Reserve (1) x	0.3528	11,078,903
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		15.70%
	Taxes, Licenses and Fees		2.23%
	1/2 General Expenses		3.56%
	1/2 Other Acquisition		4.06%
	Total		25.55%
4.	(2) x (3)		2,830,660
5.	Net Subject to Investment (2) - (4)		8,248,243

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)		31,402,786
2.	Average Agents' Balances		0.133
3.	Delayed Remission (1) x (2)		4,176,571

C. Loss Reserve

1.	Direct Earned Premium (A-1)		31,402,786
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.6664	20,926,817
3.	Expected Mean Loss Reserves (2) x	1.152	24,107,693

D. Net Subject to Investment (A-5)-(B-3)+(C-3)

28,179,365

E. Average Rate of Return

6.12%

F. Investment Earnings on Net Subject to
Investment (D) x (E)

1,724,577

G. Average Rate of Return as a Percent of Direct
Earned Premium (F) / (A-1)

5.49%

H. Average Rate of Return as a Percent of Direct Earned
Premium after Federal Income Taxes (G) x

0.769 4.22%

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line A-1

Direct earned premiums are the earned premiums for Dwelling insurance in North Carolina from page 15 of the Annual Statement.

Line A-2

The mean unearned premium reserve is determined by multiplying the direct earned premiums in line (1) by the ratio of the mean unearned premium reserve to the collected earned premium for calendar year ended 12/31/00 for all companies writing Dwelling insurance in North Carolina. These data are from page 15 of the Annual Statement.

	<u>Fire</u>	<u>EC</u>
1. Collected Earned Premium for Calendar Year ended 12/31/00	\$120,464,241	\$116,162,692
2. Unearned Premium Reserve as of 12/31/99	51,066,151	37,488,997
3. Unearned Premium Reserve as of 12/31/00	56,074,871	44,477,539
4. Mean Unearned Premium Reserve 1/2 [(2) + (3)]	53,570,511	40,983,268
5. Ratio (4) ÷ (1)	0.4447	0.3528

Line A-3

Deduction for prepaid expenses:

Production costs and a large part of the other company expenses in connection with the writing and handling of Dwelling policies, exclusive of claim adjustment expenses, are incurred when the policy is written and before the premium is paid. The deduction for these expenses is determined from data provided by the NCRB for the year ended 12/31/00.

Line B-2

Delayed remission of premium:

This deduction is necessary because of delay in remission and collection of premium to the companies, which amounts to approximately 50-75 days after the effective dates of the policies. Therefore, funds for the unearned premium reserve required during the initial days of all policies must be taken from the company's surplus.

1. Agents' balances for premiums due less than 90 days as a ratio to net written premium (based on data for all companies writing Dwelling insurance in North Carolina)	0.1533	0.1287
2. Factor to include effect of agents' balances or uncollected premiums overdue for more than 90 days (based on data provided by A. M. Best)	1.033	1.033
3. Factor for agents' balances (1) x (2)	0.158	0.133

Line C-2

The expected loss and loss adjustment expense ratio reflects the expense provisions for the year ended 12/31/00.

Line C-3

The mean loss reserve is determined by multiplying the incurred losses in line (2) by the North Carolina ratio of the mean loss reserves to the incurred losses in 2000 for Dwelling insurance. This ratio is based on North Carolina companies' Page 15 annual statement data and has been adjusted to include loss adjustment expense reserves.

	<u>Fire</u>	<u>EC</u>
1. Incurred Losses for Calendar Year 2000	53,309,276	68,179,308
2. Loss Reserves as of 12/31/99	56,759,723	88,885,063
3. Loss Reserves as of 12/31/00	37,209,132	56,313,782
4. Mean Loss Reserve 2000: 1/2 [(2) + (3)]	46,984,428	72,599,422
5. Ratio (4) ÷ (1)	0.881	1.065
6. Ratio of LAE Reserves to Loss Reserves (a)	0.255	0.255
7. Ratio of Incurred LAE to Incurred Losses (a)	0.160	0.160
8. Loss and LAE Reserve [(5)x(1.0+(6)))/(1.0+(7))]	0.953	1.152

(a) Based on 2000 All-Industry Insurance Expense Exhibit (source: A.M. Best)

Line E

The rate of return is the ratio of net investment income earned to mean cash and invested assets. Net investment income is computed for all companies writing Dwelling insurance in North Carolina as follows:

<u>Year</u>	<u>Net Investment Income Earned</u>	<u>Mean Cash and Invested Assets</u>	<u>Rate of Return</u>
2000	10,922,016,025	178,501,892,348	6.12%

Line H

The average rate of Federal income tax was determined by applying the average tax rate for net investment income and the current tax rate applicable to realized capital gains (or losses) to the rates of return as calculated above.

	<u>Rate of Return</u>	<u>Federal Income Tax Rate</u>
Net Investment Income Earned	6.12%	0.231

The average rate of Federal income tax was determined by applying current tax rates to the distribution of investment income earned for all companies. These data are for 2000 from Best's Aggregates and Averages, Underwriting and Investment Exhibit, Part 1, Column 8.

Bonds	Taxable	22,029,009	0.350
	Non-Taxable	10,543,361	-
	Sub-Total	32,572,370	0.237
Stocks	Taxable (a)	2,849,541	0.105
	Non-Taxable	1,326,160	-
	Sub-Total	4,175,701	0.072
Mortgage Loans		261,656	
Real Estate		1,570,896	
Collateral Loans		-	
Cash on Deposit		224,289	
Short Term Investments		2,145,556	
All Other		3,568,273	
Sub-Total		7,770,670	0.350
Total		44,518,741	0.241
Investment Deductions		3,815,818	0.350
Net Investment Income Earned		40,702,923	0.231

(a) Only 30% of dividend income on stock is subject to the full corporate income tax rate of 35%. The applicable tax rate is thus 10.5% (.35 x .3 = 10.5%)

NORTH CAROLINA
DWELLING FIRE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/99		43,146,318
2.	Mean Unearned Premium Reserve (1) x	0.4597	19,834,362
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		15.74%
	Taxes, Licenses and Fees		2.90%
	1/2 General Expenses		3.60%
	1/2 Other Acquisition		4.11%
	Total		26.35%
4.	(2) x (3)		5,226,354
5.	Net Subject to Investment (2) - (4)		14,608,008

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)		43,146,318
2.	Average Agents' Balances		0.166
3.	Delayed Remission (1) x (2)		7,162,289

C. Loss Reserve

1.	Direct Earned Premium (A-1)		43,146,318
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.6577	28,377,333
3.	Expected Mean Loss Reserves (2) x	0.509	14,444,062

D. Net Subject to Investment (A-5)-(B-3)+(C-3)

21,889,781

E. Average Rate of Return

6.34%

F. Investment Earnings on Net Subject to
Investment (D) x (E)

1,387,812

G. Average Rate of Return as a Percent of Direct
Earned Premium (F) / (A-1)

3.22%

H. Average Rate of Return as a Percent of Direct Earned
Premium after Federal Income Taxes (G) x

0.782 2.52%

NORTH CAROLINA
DWELLING EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

A. Unearned Premium Reserve

1.	Direct Earned Premium for Accident Year Ended 12/31/99		29,065,210
2.	Mean Unearned Premium Reserve (1) x	0.3206	9,318,306
3.	Deduction for Prepaid Expenses		
	Commission and Brokerage		14.55%
	Taxes, Licenses and Fees		2.64%
	1/2 General Expenses		3.01%
	1/2 Other Acquisition		4.59%
	Total		24.79%
4.	(2) x (3)		2,310,008
5.	Net Subject to Investment (2) - (4)		7,008,298

B. Delayed Remission of Premium (Agents' Balances)

1.	Direct Earned Premium (A-1)		29,065,210
2.	Average Agents' Balances		0.148
3.	Delayed Remission (1) x (2)		4,301,651

C. Loss Reserve

1.	Direct Earned Premium (A-1)		29,065,210
2.	Expected Incurred Losses and Loss Adjustment Expense (1) x	0.6734	19,572,512
3.	Expected Mean Loss Reserves (2) x	0.684	13,387,598

D. Net Subject to Investment (A-5)-(B-3)+(C-3) 16,094,245

E. Average Rate of Return 6.34%

F. Investment Earnings on Net Subject to
Investment (D) x (E) 1,020,375

G. Average Rate of Return as a Percent of Direct
Earned Premium (F) / (A-1) 3.51%

H. Average Rate of Return as a Percent of Direct Earned
Premium after Federal Income Taxes (G) x 0.782 2.75%

NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE INSURANCE

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line A-1

Direct earned premiums are the earned premiums for Dwelling insurance in North Carolina from page 15 of the Annual Statement.

Line A-2

The mean unearned premium reserve is determined by multiplying the direct earned premiums in line (1) by the ratio of the mean unearned premium reserve to the collected earned premium for calendar year ended 12/31/99 for all companies writing Dwelling insurance in North Carolina. These data are from page 15 of the Annual Statement.

	<u>Fire</u>	<u>EC</u>
1. Collected Earned Premium for Calendar Year ended 12/31/99	\$112,221,627	\$110,733,369
2. Unearned Premium Reserve as of 12/31/98	52,118,142	33,522,638
3. Unearned Premium Reserve as of 12/31/99	51,066,151	37,488,997
4. Mean Unearned Premium Reserve $1/2 [(2) + (3)]$	51,592,147	35,505,818
5. Ratio (4) ÷ (1)	0.4597	0.3206

Line A-3

Deduction for prepaid expenses:

Production costs and a large part of the other company expenses in connection with the writing and handling of Dwelling policies, exclusive of claim adjustment expenses, are incurred when the policy is written and before the premium is paid. The deduction for these expenses is determined from data provided by the NCRB for the year ended 12/31/99.

Line B-2

Delayed remission of premium:

This deduction is necessary because of delay in remission and collection of premium to the companies, which amounts to approximately 50-75 days after the effective dates of the policies. Therefore, funds for the unearned premium reserve required during the initial days of all policies must be taken from the company's surplus.

1. Agents' balances for premiums due less than 90 days as a ratio to net written premium (based on data for all companies writing Dwelling insurance in North Carolina)	0.1604	0.1435
2. Factor to include effect of agents' balances or uncollected premiums overdue for more than 90 days (based on data provided by A. M. Best)	1.033	1.033
3. Factor for agents' balances (1) x (2)	0.166	0.148

Line C-2

The expected loss and loss adjustment expense ratio reflects the expense provisions for the year ended 12/31/99.

Line C-3

The mean loss reserve is determined by multiplying the incurred losses in line (2) by the North Carolina ratio of the mean loss reserves to the incurred losses in 1999 for Dwelling insurance. This ratio is based on North Carolina companies' Page 15 annual statement data and has been adjusted to include loss adjustment expense reserves.

	<u>Fire</u>	<u>EC</u>
1. Incurred Losses for Calendar Year 1999	98,048,006	99,901,023
2. Loss Reserves as of 12/31/98	35,838,218	37,706,509
3. Loss Reserves as of 12/31/99	56,759,723	88,885,063
4. Mean Loss Reserve 1999: 1/2 [(2) + (3)]	46,298,971	63,295,786
5. Ratio (4) + (1)	0.472	0.634
6. Ratio of LAE Reserves to Loss Reserves (a)	0.263	0.263
7. Ratio of Incurred LAE to Incurred Losses (a)	0.171	0.171
8. Loss and LAE Reserve [(5)x(1.0+(6))]/(1.0+(7))]	0.509	0.684

(a) Based on 1999 All-Industry Insurance Expense Exhibit (source: A.M. Best)

Line E

The rate of return is the ratio of net investment income earned to mean cash and invested assets. Net investment income is computed for all companies writing Dwelling insurance in North Carolina as follows:

<u>Year</u>	<u>Net Investment Income Earned</u>	<u>Mean Cash and Invested Assets</u>	<u>Rate of Return</u>
1999	11,483,183,358	180,993,107,840	6.34%

Line H

The average rate of Federal income tax was determined by applying the average tax rate for net investment income and the current tax rate applicable to realized capital gains (or losses) to the rates of return as calculated above.

	<u>Rate of Return</u>	<u>Federal Income Tax Rate</u>
Net Investment Income Earned	6.34%	0.218

The average rate of Federal income tax was determined by applying current tax rates to the distribution of investment income earned for all companies. These data are for 1999 from Best's Aggregates and Averages, Underwriting and Investment Exhibit, Part 1, Column 8.

Bonds	Taxable	21,108,088	0.350
	Non-Taxable	11,420,119	-
	Sub-Total	32,528,207	0.227
Stocks	Taxable (a)	2,874,275	0.105
	Non-Taxable	1,156,400	-
	Sub-Total	4,030,675	0.075
Mortgage Loans		173,858	
Real Estate		1,544,685	
Collateral Loans		-	
Cash on Deposit		163,035	
Short Term Investments		1,855,876	
All Other		2,339,694	
Sub-Total		6,077,148	0.350
Total		42,636,030	0.230
Investment Deductions		3,782,299	0.350
Net Investment Income Earned		38,853,731	0.218

(a) Only 30% of dividend income on stock is subject to the full corporate income tax rate of 35%. The applicable tax rate is thus 10.5% (.35 x .3 = 10.5%)

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

11. IDENTIFICATION OF APPLICABLE STATISTICAL PLANS AND PROGRAMS AND A CERTIFICATION OF COMPLIANCE WITH THEM
- (a) ISO Personal Lines Statistical Plan (Other Than Automobile)
ISO Minimum Personal Lines Statistical Plan
ISO Personal Lines Statistical Agent Plan (Other Than Automobile)
ISO 2003 Call for Dwelling Fire and Extended Coverage Statistics
ISO 2003 Call for Dwelling Fire and Extended Coverage Statistical Agent Plan Statistics
ISS Personal Lines Statistical Plans - All Coverages
ISS 2003 Dwelling Fire and Extended Coverage Call
AAIS Personal Lines Statistical Plan
AAIS 2003 Call for Dwelling Fire and Extended Coverage Statistics
NISS Statistical Plan - All Coverages - Part IV, North Carolina
NISS 2003 Quarterly Call
NISS 2003 Calendar Year Annual Statement
NISS 2003 Financial Reconciliation Call
Annual Statement for Calendar Year 2003
Insurance Expense Exhibit for Calendar Year 2003
RB Calls for 1999-2003 North Carolina Expense Experience
- (b) The North Carolina Rate Bureau certifies that there is no evidence known to it or, insofar as it is aware following reasonable inquiry, to the statistical agencies involved that the data which were collected under the statistical plans identified in response (11)(a) above and used in the filing are not materially true and accurate representations of the experience of the companies whose data underlie such experience. While the Rate Bureau is aware that the collected data sometimes require corrections or adjustments, the Rate Bureau's review of the data, the data collection process, and the ratemaking process indicates that the aggregate data are reasonable and reliable for ratemaking purposes. See also the prefiled testimony of R. Curry and D. Border.
- (c) The attached Exhibit (11)(c) contains general descriptions of the editing procedures used to ensure data were collected in accordance with the applicable statistical plans.

North Carolina Dwelling Fire and Extended Coverage Insurance Statistical Data

ISO Editing Procedures

1. Upon receipt of the data from each reporting company, checks are made to ensure that each record (i.e., the data reported for each exposure) has valid and readable information. This includes a check that the appropriate alpha-numeric codes have been utilized.
2. The records are then checked to ensure that each of the fields has a valid code in it (e.g., company numbers must be entered as four-digit numerals).
3. Relationship edits which evaluate the interrelationship between codes are then performed. For example, if a record indicates North Carolina, Dwelling Fire and Extended Coverage, Form 3, checks are made to ascertain that applicable interrelationships are maintained.
4. Distributional edits are performed to make sure that the reporting company has not erred in miscoding its data into a single class, territory, or other rating criteria due a systems problem or other error.
5. The resulting combined data from all the company records are reconciled with Page 15 Annual Statement data for that company.
6. After all of the ISO data are aggregated, a consolidated review of the data is conducted to determine overall reasonableness and accuracy. In this procedure the data are compared with previous statewide and territory figures. Areas of concern are identified and results are verified by checking back to the source data.

North Carolina Dwelling Fire and Extended Coverage Insurance Statistical Data

Independent Statistical Service, Inc. (ISS) Editing Procedures

The following narrative sets forth a general description of the editing procedures utilized by ISS to review North Carolina statistical data. All North Carolina experience submitted to ISS by affiliated companies undergoes standard procedures to ensure that the data is reported in accordance with the ISS state approved statistical plans.

The ISS review of the data takes place on two levels: analysis of individual company data and analysis of the aggregate data of all ISS reporting companies combined. These two separate functions will be treated in that order.

Analysis of Company Data

Analysis of company data includes: completeness checks, editing for valid statistical coding and checking the distribution of data within the various data elements.

1. Completeness Checks (Balancing and Reconciliation):

Balancing and reconciliation procedures are used to determine completeness of reporting. Completeness means that ISS has received and processed all of the data due to be filed with ISS. First, totals of each company's processed data are compared to separate statewide transmittal totals supplied by the company. This step ensures that ISS has processed completely the experience included in the company's submission of data and that no errors occur during this processing. As a second check for completeness, the reported statistical data is reconciled to the Exhibit of Premiums and Losses, "Statutory Page 14", from the company's Annual Statement. It is a useful procedure in determining completeness because the annual statement represents an independent source of information.

2. Editing of Codes:

Format and Readability

Statistical data reported by affiliated companies must be filed in accordance with ISS approved statistical plans. This includes the requirement that the data must conform to the specific formats and technical specifications in order for ISS to properly read and process these submissions. The initial edit is a test of each company's submission to ensure it has been reported using the proper record format and that it meets certain technical requirements for the line of insurance being reported. Key fields are tested to ensure that only numeric information has been reported in fields defined as numeric, and that the fields have been reported in the proper position in the record.

Edits

The data items of information filed with the insurance company's experience are reported by using codes defined under the ISS statistical plans. For example, the various types of Policy Forms written on Dwelling Fire and Extended Coverage policies in North Carolina are defined in the Personal Lines Statistical Plan. Each definition for each data element has a unique code assigned to it which distinguishes it from other definitions. All data items applicable to North Carolina are defined in a similar manner in each of the ISS statistical plans and have codes assigned to properly identify each definition.

All records reported to ISS are subjected to validation of the reported codes. This validation, called editing, is performed to assure that companies are reporting properly defined ISS Statistical Plan codes for North Carolina experience.

The purpose of the edit is to validate the statistical codes reported in each record. This validation is called a Relation Edit. A relational edit verifies that a reported code is valid in combination with one or more related data items. Relational edit tests are accomplished primarily through the use of specific edit tables applicable to each line of insurance.

In most cases, the experience data in the record is used in conjunction with the related codes and compared to an establishment or discontinued date for the code being validated. This ensures that specific codes are not being utilized beyond the range of time during which they are valid.

An example of a relational edit involves territory coding. Many territory code numbers are available under each statistical plan for various states, with various effective dates. However, only codes defined for North Carolina for the specific line being processed are valid in combination with North Carolina reported experience. Further, if a new code is erected, that code will be considered valid only if the date reported in the statistical record is equal or subsequent to the establishment date of the code.

3. Distributional Analysis:

The validation of the statistical coding is not by itself sufficient to assure the credibility of company data. Having assured the reporting of valid codes, the statistical agent must verify that valid entries are indeed reliable. Therefore, the data is also reviewed for reasonable distributions. The primary focus of this review is to establish that the statistical data reported by the company is a credible reflection of the company's experience.

The distribution of company experience by specific data elements such as state, territory, policy form, and construction, for example, for the current reporting period is compared to company profiles of prior periods. In addition, ratios relevant to the line of insurance such as average premium, average loss, percent of volume, loss ratio and loss frequency are compared to industry averages. This historical comparison can highlight changes in the pattern of reporting.

The distributional analysis serves as an additional verification that systematic errors are not introduced during the production of data files submitted to ISS by our affiliated companies. Disproportionate amounts of premiums and/or losses in a particular class or territory, for example, can be detected using this technique.

Validation of Aggregate Data

After the individual company data has been reviewed, the data for all reporting companies is compiled to produce aggregate reports. The aggregate data represents the combined experience of the reporting companies. This data is also subjected to similar review procedures. To ensure completeness, run to run control techniques are applied. This involved balancing the totals of the aggregate runs to previously verified control totals. In this manner the aggregate data is monitored to ensure the inclusion of the appropriate company data.

The aggregate data is also reviewed for credibility through distributional analysis similar to that performed on the individual company data. Earned exposures (where applicable) and premiums and incurred losses and claims are used to calculate pure premiums, claim frequencies and claim costs for comparison to past averages. The analysis of the aggregate data centers on determining consistency over time by comparing several years of experience, by policy form and territory, for example. Through the application of these techniques, ISS is able to provide reliable insurance statistical data in North Carolina.

North Carolina Dwelling Fire and Extended Coverage Insurance Statistical Data

NISS Editing Procedures

- a. Every report received is checked for completeness. Every submission must include (1) an affidavit; (2) a letter of transmittal setting forth company control totals for the data being sent; (3) the data being reported on tape, cartridge, diskette or form to be keyed.
- b. Individual company submissions are balanced to the company letter of transmittal to ensure that all data have been received and processed. After all four quarters of data have been received, the company reports are reconciled to the Annual Statement Page 15 amounts. The NISS Financial Reconciliation identifies any amounts needed to reconcile any differences between the company reported data and Annual Statement amounts.
- c. Every company record submitted to NISS is verified through NISS edit software for its coding accuracy and conformance with NISS record layouts and instructions. NISS edits verify the accuracy of each code for each data element. Where possible, each data element is subjected to a relational edit whereby it will be checked for accuracy in conjunction with another field.
- d. Individual company submissions are also subjected to a series of reasonability tests to determine that the current submission is consistent with previous company submissions, known changes in this line of business and statewide trends. NISS compares current quarter data to the previous quarter. This comparison is performed and analyzed by grouping data.
- e. After all of the NISS data are combined, a review of this consolidated data is also performed. The aggregate data is compared on a year to year basis to again verify its reasonableness, similar to those checks employed on an individual company submission.

North Carolina Dwelling Fire and Extended Coverage Insurance Statistical Data

AAIS Editing Procedures

The American Association of Insurance Services functions as an official statistical agent in the State of North Carolina for a number of lines of insurance, including Dwelling Fire and Extended Coverage. In this capacity, it provides for the administration of statistical programs in accordance with approved statistical plans on behalf of the Commissioner of Insurance. These plans, which were filed according to the requirements of the State of North Carolina, serve to insure a high quality of data reliability.

1. All statistical plans constitute permanent calls for data, which is due at AAIS within 60 days following the close of the period covered by the report.
2. Each data submission is accompanied by a transmittal that summarizes the detail data by state. The transmittal provides control totals to balance to the input and output of each step in our collection procedure. Signature of the company official responsible for data collection is required on the transmittal to certify the accuracy and completeness of the data submission.
3. The AAIS data collection procedure consists of several consecutive steps in order to further verify receipt of accurate and complete data from each company and ultimately aggregate the data into the final experience format.
4. The data collection procedure begins with entering the company number, date, type of media, and transmittal control totals for each line of insurance received into a log file. Company number, record counts, lines of insurance, year, quarter, type and number of media are recorded on a processing log and submitted to the computer room.
5. Operations will load the data into the computer and process all lines through a program which verifies certain key fields. The key fields are company number, line of insurance, transaction code and report period (quarter and year). All invalid key fields must be corrected before proceeding to the next step. Once a valid key field report is generated, Operations will copy all valid key field records to the edit file.
6. Upon receipt of the Moved to Edit report, the statistical department will verify that all records were copied from the stored data file to the edit file. All companies are then released by line and report period for editing.
7. The edit program has several functions and reports. They are:
 - a. Data is balanced to transmittal totals.
 - b. Each statistical field is edited to the valid codes in the statistical plan for the line being processed. Many fields are also cross edited. An example is deductible type and amount. All invalid codes are identified with an asterisk to the right of the code.
 - c. Edit reports consist of a listing of invalid records, error summary report, month report, state report and field error detail report. Dwelling Fire and Extended Coverage has an additional report entitled "Data Consistency Report". This report shows the companies' average premium, pure premium, loss ratio, frequency and severity.

- d. In addition to the edit report, we provide the company a distribution report. As you might expect, this report provides a distribution of the reported data for almost every single field of information captured by the statistical plan. This report is not only provided as a courtesy to the company, but it is always reviewed by AAIS staff to identify any reporting irregularities that wouldn't be caught by the edit program.
 - e. Along with the edit and distribution reports, there are additional review procedures in place to identify procedural reporting errors that may exist (e.g., cancellations and coverage changes). A great deal of time is spent on this item because of it's importance to the validity of the reported data.
 - f. Our analysis of a company's data are returned to the company with a customized letter indicating the type of action required. Depending on the severity of errors, companies are requested to make corrections or resubmit data.
8. AAIS provides assistance to all of its affiliated companies to ensure a continued high level of data quality. Statistical coding seminars designed to instruct company coders and respond to questions are scheduled annually. In addition to the seminars, AAIS has developed Statistical Training Manuals for some lines and pre-edit programs for company in-house use. Technical Services staff is available to train company personnel in all aspects of data collection, coding, statistical reporting and data processing.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

12. INVESTMENT EARNINGS ON CAPITAL AND SURPLUS

Not applicable to Dwelling Fire and Extended Coverage insurance.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
 REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
 AS PER 11 NCAC 10.1105

13. LEVEL OF CAPITAL AND SURPLUS NEEDED TO SUPPORT PREMIUM WRITINGS WITHOUT
 ENDANGERING THE SOLVENCY OF MEMBER COMPANIES

- (a) The aggregate premium to surplus ratios for the calendar years 1995-2004 for the company groups which have written North Carolina dwelling fire and extended coverage insurance are as follows:

	Dwelling Fire	EC
1995	1.256	1.376
1996	1.365	1.381
1997	1.058	1.083
1998	1.042	0.978
1999	1.054	1.013
2000	1.047	1.095
2001	1.153	1.198
2002	1.302	1.330
2003	1.271	1.244
2004	1.297	1.288

- (b) The experience provides the best estimate of the future. See the prefiled testimony of D. Appel.
- (c) The actual premium to surplus ratio for the property and casualty industry on a countrywide basis (based upon the latest A. M. Best data available at this time) is as follows:

(000's omitted)

STATUTORY CAPITAL AND SURPLUS, 2004	\$402,263,558
STATUTORY CAPITAL AND SURPLUS, 2003	\$353,848,845
AVERAGE STATUTORY CAPITAL AND SURPLUS (2002)	378,056,202
NET PREMIUMS EARNED (2003)	425,514,764
PREMIUM/SURPLUS RATIO	1.126

The actual level of capital and surplus needed to support premium writings without endangering the solvency of a company is dependent upon (among others) the financial structure and investments unique to each company, the relationship of the company with affiliated companies as a group (and the experience of the affiliated companies), the mix of business of each company, and the conditions of the economy as they affect each company's individual circumstances. The Rate Bureau is advised that the National Association of Insurance Commissioners, as one of several criteria, generally considers that a premium to surplus ratio for an individual company of 3 to 1 warrants close regulatory attention and monitoring with respect to the company's solvency position.

- (d) The Rate Bureau has not allocated surplus by state and by line in preparing this filing. The Rate Bureau has treated surplus in this manner because each dollar of surplus is available to cover losses in excess of premium for each and every line.

STATISTICAL DATA TO COMPLY WITH NORTH CAROLINA
REQUIREMENTS FOR A DWELLING FIRE AND EXTENDED COVERAGE RATE FILING
AS PER 11 NCAC 10.1105

14. OTHER INFORMATION REQUIRED BY THE COMMISSIONER

See attached Exhibits (14)(a), (b), (c) and (d).

See the pre-filed testimony of D. Appel, J. Vander Weide and R. Curry.

Not applicable to Dwelling Fire and Extended Coverage insurance.

The following changes in methodology from those used in the June 26, 2003 filing have been incorporated into this filing:

- the rate level change indications are derived using pure-premium method instead of loss ratio method
- loading for cost of reinsurance varies by territory
- short term hurricane event set utilized for net cost of reinsurance/risk load
- underwriting profit provisions were conservatively selected such that, even when combined with all sources of investment income, the proforma returns on GAAP equity they generate are not excessive

See also the pre-filed testimony of R. Curry, D. Border and D. Appel.

DWELLING POLICY PROGRAM MANUAL

INTRODUCTION

The Dwelling Policy Program provides property and related coverages using the forms and endorsements referred to in this Manual.

The rates, rules, forms and endorsements of the company shall apply in all cases not provided for in this Manual.

This program does not apply to Farm Property. Refer to the company for its method of insuring farm property.

The Dwelling Policy Program Manual contains the rules, classifications and rating provisions for the issuance of the Dwelling Policy. The rules are essentially the same as those contained in the previous Dwelling 77 Manual. However, they have been restructured and rearranged to facilitate a countrywide manual format. The Manual is divided into two Sections, countrywide GENERAL RULES and STATE RULES AND RATES.

The countrywide GENERAL RULES Section contains rules common to most states. Any departures, additions, etc. to these rules, unique to individual jurisdictions, are contained in the STATE RULES AND RATES Section.

The GENERAL RULES do **not** contain premiums, rates, charges or credits expressed in dollars and cents. They do, however, contain rating factors that are applied to state premiums.

A. GENERAL RULES are grouped into the following categories:

1. Coverage and Definition type rules,
2. Servicing type rules,
3. Base Premium Computation rules,
4. Adjusted Base Premium Computation rules, and
5. Additional Coverages and Increased Limits rules.

B. STATE RULES AND RATES are grouped into the following categories:

1. Exceptions to General Rules and Additional Rules,
2. Special State Requirements,
3. Territory Definitions,
4. Key Premium/Key Factor Tables, and
5. Premiums, Rates, Charges and Credits.

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

TABLE OF CONTENTS

RULE NO.		PAGE NO.
101.	Forms, Coverages, Minimum Limits of Liability	DP-1
102.	Perils Insured Against	DP-2
103.	Eligibility	DP-3
104.	Protection Classification Codes and Information	DP-3
105.	Seasonal Dwelling Definition	DP-4-6
106.	Construction Definitions	DP-4-6
107.	Single Building Definition	DP-4-6
108.	Rates/Loss Costs	DP-4-6
201.	Policy Period	DP-7
202.	Changes or Cancellations	DP-7
203.	Manual Premium Revision	DP-7
204.	Multiple Locations	DP-7
205.	Multiple Policies	DP-7
206.	Minimum Premium	DP-8-10
207.	Transfer or Assignment	DP-8-10
208.	Waiver of Premium	DP-8-10
209.	Whole Dollar Premium Rule	DP-8-10
210.	Refer to Company	DP-8-10
301.	Base Premium Computation	DP-11
302.	Vandalism & Malicious Mischief	DP-11
303.	Ordinance or Law Coverage	DP-11, 12-14
304.	Permitted Incidental Occupancies	DP-12-14
401.	Superior Construction	DP-15
402.	Cov. C – Personal Property In Buildings Subject to Commercial Class Rates or Specific Rates	DP-15
403.	Dwelling Under Construction	DP-15
404.	Mobile or Trailer Homes	DP-15
405.	Townhouse or Row House	DP-15, DP-16
406.	Deductibles	DP-16-18
407.	Automatic Increase In Insurance	DP-18
408.	Protective Devices	DP-18
409.	Actual Cash Value Loss Settlement Windstorm or Hail Losses to Roof Surfacing	DP-18
500.	Miscellaneous Rates	DP-19
501.	Coverage B – Other Structures	DP-19
502.	Coverage D – Fair Rental Value/ Coverage E – Additional Living Expense	DP-19, DP-20
503.	Ordinance or Law Coverage – Coverage B – Specific Structures, Building Items and Improvements, Alterations and Additions	DP-20
504.	Improvements, Alterations and Additions – Tenants and Co-op Unit-Owners	DP-20
505.	Building Items – Condo Unit-Owners	DP-21
506.	Loss Assessment Property Coverage	DP-21
507.	Fire Department Service Charge	DP-21
508.	Trees, Shrubs and Other Plants	DP-21, DP-22
509.	Earthquake Coverage	DP-22
510.	Theft Coverage	DP-22, DP-23
511.	Sinkhole Collapse Coverage	DP-23
512.	Windstorm or Hail Coverage – Awnings, Signs and Outdoor Radio and Television Equipment	DP-23, DP-24
513.	Water Back Up and Sump Overflow	DP-24

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

"Reserved For Future Use"

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

INDEX

RULE NO.		PAGE NO.
	Actual Cash Value Loss Settlement Windstorm or Hail Losses to Roof Surfacing	DP-18
409.	Additional Coverages and Increased Limits	DP-19-24
–	Additional Living Expense – Coverage E	DP-19,20
502.	Additions, Alterations and Improvements (Tenants and Co-Op Unit-Owners).....	DP-20
504.	Adjusted Base Premium Computation	DP-15-18
–	Alarm Credits, Fire (See Protective Devices).....	DP-18
408.	Alterations, Additions and Improvements (Tenants and Co-Op Unit-Owners).....	DP-20
504.	Automatic Increase In Insurance.....	DP-18
407.	Automatic Sprinkler Credits (See Protective Devices).....	DP-18
408.	Awnings, Signs and Outdoor Radio and Television Equipment (See Windstorm or Hail).....	DP-23
512.	Base Premium Computation	DP-11
301.	Building Additions and Alterations.....	DP-20
504.	Building Items – Condominium Unit-Owners.....	DP-21
505.	Changes or Cancellations	DP-7
202.	Condominium Unit-Owners, Building Items.....	DP-21
505.	Construction Definitions	DP-4-6
106.	Contingent Liability (See Ordinance or Law).....	DP-11,12-14
303.	Co-op Unit-Owners – Improvements, Alterations and Additions.....	DP-20
504.	Course of Construction (See Dwellings Under Construction).....	
403.	Adjusted Base Premium Factors.....	DP-15
–	Coverage and Definitions	DP-1-6
	Coverage B – Other Structures	
501.A.	Blanket Coverage	DP-19
501.B.	Specific Structure Coverage	DP-19
512.	Wind or Hail Coverage.....	DP-23
501.C.	Rented to Others	DP-19
	Coverage C – Personal Property – In Buildings Subject to Commercial Class Rates Or Specific Rates.....	DP-15
402.	Coverage D – Fair Rental Value	DP-19,20
502.	Coverage E – Additional Living Expense	DP-19,20
502.	Coverage Eligibility	DP-3
103.	Coverage A – Dwelling	DP-3
103.A.	Coverage A – Dwelling on a Mobile or Trailer Home.....	DP-3
103.B.	Coverage B – Other Structures	DP-3
103.C.	Coverage C – Personal Property.....	DP-3
103.D.	Coverage D – Loss of Fair Rental Value	DP-3
103.E.	Coverage E – Additional Living Expense.....	DP-3
103.F.		
406.	Deductibles – (Basic & Optional).....	DP-16-18
510.	Deductibles – Theft	DP-22,23
201.	Deferred Premium Payment Plan (See Policy Period).....	DP-7
303.	Demolition Costs Coverage (See Ordinance or Law).....	DP-11,12-14
	Dwelling Under Construction	
403.	Adjusted Base Premium Factors.....	DP-15
509.	Earthquake	DP-22

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

INDEX

RULE NO.		PAGE NO.
502.	Fair Rental Value – Coverage D	DP-19, 20
408.	Fire Alarm Credits (See Protective Devices)	DP-18
507.	Fire Department Service Charge	DP-21
408.	Fire Protection System Credits (See Protective Devices)	DP-18
106.D.	Fire Resistive (See Construction Definition)	DP-4-6
401.	Rating Rule (See Superior Construction)	DP-15
	Improvements, Alterations and Additions	
504.	(Tenants and Co-Op Unit-Owners)	DP-20
304.	Incidental Occupancies, Permitted	DP-12-14
304.	Coverage on Contents	DP-12-14
304.	Offices, Schools or Studios	DP-12-14
304.	Merchandise in Storage	DP-12-14
304.	Small Service Occupancies	DP-12-14
	Increased Cost of Construction	
303.	(See Ordinance or Law)	DP-11,12-14
	Inflation Guard Coverage	
407.	(See Automatic Increase in Insurance)	DP-18
	Installment Payment Plan	
201.	(See Policy Period)	DP-7
301.	Interpolation (See Base Premium Computation)	DP-11
301.	Key Premium/Key Factor Display (See Base Premium Computation)	DP-11
506.	Loss Assessment Property Coverage	DP-21
203.	Manual Premium Revision	DP-7
	Masonry Non-Combustible Construction	
106.D	(See Construction Definitions)	DP-4-6
401.	Rating Factors (See Superior Construction)	DP-15
304.	Merchandise in Storage (See Permitted Incidental Occupancies)	DP-12-14
101.	Minimum Limits of Liability	DP-1
206.	Minimum Premium	DP-8-10
500.	Miscellaneous Rates	DP-19
404.	Mobile or Trailer Homes	DP-15
204.	Multiple Locations	DP-7
	Multiple Policies	
205.	(Same Property written in two or more Dwelling Policies in one or more companies)	DP-7
	Non-Combustible Construction	
106.D.	(See Construction Definitions)	DP-4-6
401.	Rating Factors – (See Superior Construction)	DP-15
303.	Ordinance or Law Coverage	DP-11,12-14
	Ordinance or Law Coverage	
503.	Coverage B – Specific Structures, Building Items and Improvements, Alterations and Additions	DP-20
501.	Other Structures – Coverage B (Refer to "Coverage B" in this index)	DP-19
512.	Outdoor Radio and Television Equipment, Awnings and Signs (See Windstorm or Hail)	DP-23
102.	Perils Insured Against	DP-2
304.	Permitted Incidental Occupancies	DP-12-14
	Personal Property – Coverage C	
	In Buildings Subject to Commercial Class Rates or	
402.	Specific Rates	DP-15
508.	Plants, Shrubs and Trees	DP-21,22
101.A.	Policy Forms	DP-1
201.	Policy Period	DP-7
201.	Premium Payment Plan, Deferred (See Policy Period)	DP-7
208.	Premium Waiver	DP-8-10
104.	Protection Classification Codes and Information	DP-3
408.	Protective Devices Credits	DP-18

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

INDEX

RULE NO.		PAGE NO.
108.	Rates/Loss Costs	DP-4-6
210.	Refer to Company	DP-8-10
502.	Rental Value – Coverage D	DP-19,20
405.	Row House or Townhouse	DP-15,16
105.	Seasonal Occupancy	DP-4-6
401.	Semi-Wind Resistive (See Superior Construction)	DP-15
–	Servicing Type Rules	DP-7-10
508.	Shrubs, Trees and Plants	DP-21,22
	Signs, Outdoor Radio and Television Equipment, and Awnings (See Windstorm or Hail)	DP-23
512.	Single Building Definition	DP-4-6
511.	Sinkhole Collapse	DP-23
408.	Smoke Detector Credits (See Protective Devices)	DP-18
408.	Sprinkler Credits (See Protective Devices)	DP-18
106.D.	Superior Construction (See Construction Definitions)	DP-4-6
401.	Rating Factors (See Superior Construction)	DP-15
504.	Tenants Improvements, Additions or Alterations	DP-20
510.	Theft	DP-22,23
405.	Townhouse or Row House	DP-15,16
404.	Trailer or Mobile Homes	DP-15
207.	Transfer or Assignment	DP-8-10
508.	Trees, Plants and Shrubs	DP-21,22
302.	Vacant Dwellings (See V.&M.M.)	DP-11
302.	Vandalism & Malicious Mischief	DP-11
208.	Waiver of Premium	DP-8-10
513.	Water Back Up and Sump Overflow	DP-24
209.	Whole Dollar Premium Rule	DP-8-10
401.	Wind Resistive (See Superior Construction)	DP-15
512.	Windstorm or Hail (Awnings, Signs and Outdoor Radio and Television Equipment)	DP-23
409.	Windstorm or Hail (Roof Surfacing)	DP-18
406.B.2	Windstorm or Hail Deductibles	DP-16-18

101. FORMS, COVERAGES, MINIMUM LIMITS OF LIABILITY

A. Forms

The Dwelling Policy Program makes available the following policy forms:

1. **DP 00 01** – Basic Form
2. **DP 00 02** – Broad Form
3. **DP 00 03** – Special Form

B. Coverages

1. Forms **DP 00 02** and **DP 00 03** provide the following Coverages. These Coverages are written as separate items in the policy or in separate policies:

Coverage A – Dwelling

Coverage B – Other Structures

Coverage C – Personal Property

Coverage D – Fair Rental Value

Coverage E – Additional Living Expense

2. Form **DP 00 01** provides Coverages A through D; Coverage E is available by endorsement.

C. Minimum Limits of Liability

The following coverages are subject to a minimum limit of liability:

Coverages	Minimum Limit
1. Coverage A – Dwelling	\$12,000 (Form DP 00 02) \$15,000 (Form DP 00 03)
2. Coverage C – Personal Property	\$4,000 without Coverage A (Forms DP 00 02 and DP 00 03)
3. There are no minimum limits for Form DP 00 01 .	

DWELLING POLICY PROGRAM MANUAL

102. PERILS INSURED AGAINST

The following is a general description of the coverages provided by the individual Dwelling Policy Forms. The policy should be consulted for exact contract conditions.

Perils Insured Against	DP 00 01 BASIC FORM	DP 00 02 BROAD FORM	DP 00 03 SPECIAL FORM
Fire or Lightning, Internal Explosion	Yes	Yes	Yes
Extended Coverage meaning Windstorm or Hail, Explosion, Riot or Civil Commotion, Aircraft, Vehicles, Smoke, Volcanic Eruption	Optional*	Yes	Yes
Vandalism or Malicious Mischief	Optional**	Yes	Yes
Damage By Burglars, Falling Objects, Weight of Ice, Snow or Sleet, Accidental Discharge of Water or Steam, Sudden Cracking of a Steam or Hot Water Heating System, Freezing, Sudden Damage from Artificial Electric Currents	No	Yes	Yes
Additional Risks with Certain Exceptions (Special Coverage)	No	No	Yes Coverage A and B Only

* May only be written with the perils of Fire or Lightning, Internal Explosion.

** May only be written with Extended Coverage.

DWELLING POLICY PROGRAM MANUAL

103. ELIGIBILITY

A Dwelling Policy may be issued to provide insurance under:

- A. Coverage A – on a dwelling building:
1. Used solely for residential purposes except that certain incidental occupancies or up to 5 roomers or boarders are permitted;
2. Containing not more than four apartments; and
3. Which may be in a townhouse or row house structure; or
4. In course of construction.
B. Coverage A – on a mobile or trailer home:
1. Using Form DP 00 01 only;
2. Used solely for residential purposes except that certain incidental occupancies or up to 5 roomers or boarders are permitted;
3. Containing not more than one apartment;
4. For a policy period of not longer than one year; and
5. At the permanent location described in the policy.
C. Coverage B:
1. At the same location as the dwelling eligible for insurance under Coverage A;
2. Not used for business purposes except a permitted incidental occupancy or when rented for use as a private garage;
3. At a separate location when used in connection with the insured location but not for business purposes.
D. Coverage C in:
1. A dwelling, mobile or trailer home eligible under Coverage A; or
2. A dwelling with rental apartments including furnishings, equipment and appliances in halls or utility rooms; or
3. Any apartment, cooperative or condominium unit used as private living quarters of the insured or rented to others.

- E. Coverage D for the loss of the fair rental value of:
1. A building eligible for insurance under Coverages A or B; or
2. Private living quarters eligible under Coverage C.
F. Coverage E for the additional living expenses incurred to maintain the insured's household.

104. PROTECTION CLASSIFICATION CODES AND INFORMATION

A. Codes

Table with 3 columns: Protection Class, Code. Rows 1-10 mapping classes to codes (e.g., 1 to 01, 2 to 02).

B. Protection Information

The Protection Class listings in the Public Protection Classification Manual apply to risks insured under Dwelling Program Policies.

- 1. The protection class indicated applies in a municipality or classified area where a single class of fire protection is available throughout (8, 7, 6, etc.).
2. In a classified area where two or more classifications are shown (e.g. 6/9), the classification is determined as follows:

Table with 2 columns: Distance To Fire Station, Class. Rows a, b, c mapping distances to classes (*, 9, 10).

- 3. All other properties are Class 10.

DWELLING POLICY PROGRAM MANUAL
GENERAL RULES

105. SEASONAL DWELLING DEFINITION

A seasonal dwelling is a dwelling with continuous unoccupancy of three or more consecutive months during any one year period.

106. CONSTRUCTION DEFINITIONS

A. Frame

Exterior wall of wood or other combustible construction, including wood iron-clad, stucco on wood or plaster on combustible supports. (Use Construction Code 1)

Aluminum or plastic siding over frame. (Use Construction Code 5)

B. Masonry Veneer

Exterior walls of combustible construction veneered with brick or stone. (Use Construction Code 2)

C. Masonry

Exterior walls constructed of masonry materials such as adobe, brick, concrete, gypsum block, hollow concrete block, stone, tile or similar materials and floors and roof of combustible construction. (Disregarding floors resting directly on the ground). (Use Construction Code 3)

D. Superior Construction

(Use Construction Code 4)

1. Non-Combustible

Exterior walls and floors and roof constructed of, and supported by metal, asbestos, gypsum, or other noncombustible materials.

2. Masonry Non-Combustible

Exterior walls constructed of masonry materials (as described in C. above) and floors and roof of metal or other non-combustible materials.

3. Fire Resistive

Exterior walls and floors and roof constructed of masonry or other fire resistive materials.

Note

Mixed (Masonry/Frame) – a combination of both frame and masonry construction shall be classed and coded as frame when the exterior walls of frame construction (including gables) exceed 33 1/3% of the total exterior wall area; otherwise class and code as masonry.

107. SINGLE BUILDING DEFINITION

- A. All buildings or sections of buildings which are accessible through unprotected openings shall be considered as a single building.
- B. Buildings which are separated by space shall be considered separate buildings.
- C. Buildings or sections of buildings which are separated by:
 - 1. A 6 inch reinforced concrete or an 8 inch masonry party wall; or
 - 2. A documented minimum two hour non-combustible wall which has been laboratory tested for independent structural integrity under fire conditions;

Which pierces or rises to the underside of the roof and which pierces or extends to the innerside of the exterior wall shall be considered separate buildings. Accessibility between buildings with independent walls or through masonry party walls described above shall be protected by at least a Class A Fire Door installed in a masonry wall section.

108. RATES/LOSS COSTS

- A. This Manual contains ISO loss costs or individual company rates. A loss cost is that portion of the premium which covers only losses and the costs associated with settling losses.
- B. All rules in this Manual are designed to be utilized with rates. All references in the rules and examples to rates and/or premiums (including base premiums) shall be interpreted to mean those established by the individual insurance company.
- C. Rules in this Manual reference state rates. The caption state "Rate Page" is used for consistency with the rules. Pages which contain loss costs are clearly marked in the border as containing loss costs not rates.
- D. Each insurance company must provide manualholders with either its own rates or with procedures to convert ISO loss costs to rates and/or premiums. If an insurer provides its own rates, use them in place of the loss costs in this Manual. If an insurer does not provide its own rates, manualholders must convert the ISO loss costs in the manual to rates and/or premiums before applying any rules. Refer to the company for specific instructions – including rounding procedures – on how to do this.

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

201. POLICY PERIOD

The policy may be written for a period of:

- A. One year and may be extended for successive policy periods by extension certificate based upon the forms, premiums and endorsements then in effect for the company.
- B. Three years prepaid at three times the annual premium.
- C. Three years in annual installments. Each annual installment shall be the annual premium then in effect for the company.

Use Endorsement **DP 04 32** Deferred Premium Payment.

For maintaining common anniversary dates, a policy may be written for a period less than one year or less than three years on a pro rata basis.

202. CHANGES OR CANCELLATIONS

If insurance is increased, cancelled or reduced, the additional or return premium shall be computed on a pro rata basis.

203. MANUAL PREMIUM REVISION

A manual premium revision shall be made in accordance with the following procedures:

- A. The effective date of such revision shall be as announced.
- B. The revision shall apply to any policy or endorsement in the manner outlined in the announcement of the revision.
- C. Unless otherwise provided at the time of the announcement of the premium revision, the revision shall not affect:
 - 1. In-force policy forms, endorsements or premiums, until the policy is renewed; or
 - 2. In the case of a Deferred Premium Payment Plan, in-force policy premiums, until the anniversary following the effective date of the revision.

204. MULTIPLE LOCATIONS

A policy may be issued to provide insurance at more than one described location in the same state provided:

- A. The same form and deductible applies at each location;
- B. A separate policy declarations page is completed for each location; or

C. The policy declarations page is completed by:

- 1. Showing the total policy premium for all locations in the premium payments section.
- 2. Showing the deductible by entry of the deductible amount and adding "at each location".
- 3. Inserting the form number that applies.
- 4. Adding an appropriate reference to the Additional Dwelling Declarations or company equivalent.

205. MULTIPLE POLICIES

Does not affect coding.

A. Insurance may be provided on the same property under two or more Dwelling policies in one or more companies as follows:

- 1. The same form and endorsements must apply to all policies.
- 2. The same deductible amount must apply to all policies.

Use Endorsement **DP 04 30** Premium Sharing – Two or More Policies.

B. Premium

The premium for each policy is developed as follows:

- 1. Compute the premium for the total limits of liability from the manual of the company issuing each policy.
- 2. Allocate the premium determined in B.1. above based on the ratio of each policy's limit of liability to the total limits of liability for all policies.

Example (two policies – two companies)

\$50,000 Coverage A Limit (Premiums shown are for illustration only.)

	Company A	Company B
Each Company's Percentage Share	70%	30%
Premium for \$50,000 Cov. A.	\$240	\$200
Each Company's Policy Premium	\$168 (70% of \$240)	\$60 (30% of \$200)
Total Premium	(168 + 60) = \$228	

DWELLING POLICY PROGRAM MANUAL
GENERAL RULES

206. MINIMUM PREMIUM

- Refer to Statistical Plan for coding requirements.
- A. For prepaid policies the minimum annual premium shown on the state rate pages shall be charged for each policy.
 - B. When policies are written under a premium payment plan, no payment shall be less than the minimum premium shown on the state rate pages for each annual period.
 - C. The minimum premium may include all chargeable endorsements or coverages for Fire or Fire and Allied Lines if written at inception of the policy.
 - D. The minimum annual premium shall **not** include charges for Theft or Earthquake Coverage, except when Earthquake is the only peril covered under the policy.

207. TRANSFER OR ASSIGNMENT

Subject to the consent of the company, all rules of this manual and any necessary adjustments of premium, a policy may be endorsed to effect:

- A. Transfer to another location within the same state; or
- B. Assignment from one insured to another in the event of transfer of title of the dwelling.

208. WAIVER OF PREMIUM

Does not affect coding.

When a policy is endorsed after the inception date, refer to the state rate pages for the amount of additional or return premium that may be waived.

209. WHOLE DOLLAR PREMIUM RULE

Does not affect coding.

- A. Each premium shown on the policy and endorsements shall be rounded to the nearest whole dollar. A premium of fifty cents (\$.50) or more shall be rounded to the next higher whole dollar.
- B. In the event of cancellation by the company, the return premium may be carried to the next higher whole dollar.

210. REFER TO COMPANY

Whenever a risk is rated on a refer to company basis each company is responsible for complying with regulatory or statutory rate filing requirements.

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

301. BASE PREMIUM COMPUTATION

To compute the BASE PREMIUM, use the Key Premiums and Key Factors that are displayed in the state rate pages.

A. Fire (All Forms), E.C. (DP 00 01), Broad Form (DP 00 02), or Special Form (DP 00 03)

Coverage A – Dwelling/
Coverage C – Personal Property

1. From the Key Premium Table, select the Key Premium for the classifications or coverages that apply to the risk.
2. From the Key Factor Table, determine the Key Factor for the desired limit of liability. If the desired limit of liability is not shown in the table, **interpolate** as illustrated in Paragraph B. of this rule.
3. Multiply the Key Premium by the Key Factor and round to the nearest whole dollar to develop the BASE PREMIUM (\$.50 or more rounded to the next higher whole dollar).

B. Interpolation Example

When the desired limit of liability is **less** than the highest limit shown, interpolate the Key Factors using the nearest limit above and below the desired limit.

Example

\$25,500 desired limit; the nearest limits are \$25,000 and \$26,000.

For \$25,000 the Key Factor is 1.082; for \$26,000 the Key Factor is 1.098. Figure the difference between the two Key Factors and divide by 10. This provides a factor per \$100.

$$\begin{array}{r} 1.098 \\ -1.082 \\ \hline .016 \div 10 = .0016 \end{array}$$

Multiply the factor per \$100 times five, and add 1.082: the Key Factor for \$25,000:

$$\begin{array}{r} .0016 \\ \times 5 \\ \hline .0080 + 1.082 = 1.090 \end{array}$$

The result, 1.090, is the Key Factor for this example.

302. VANDALISM & MALICIOUS MISCHIEF – DP 00 01

Develop the BASE PREMIUM by multiplying the same limit of liability selected for Extended Coverage by the V.&M.M. rate shown on the state rate pages.

303. ORDINANCE OR LAW COVERAGE – ALL FORMS

A. Applicability by Form

1. DP 00 01

Coverage is **not** automatically included in this form but may be added by endorsement. See B. below for rating instructions.

Use Ordinance or Law Coverage Code 1.

2. DP 00 02 and DP 00 03

A limited amount of coverage is automatically included at each Described Location to pay for the increased costs necessary to comply with the enforcement of an ordinance or law. This amount is equal to 10% of the limit of liability that applies to:

- a. Coverage A or Unit-Owner Building Items if the insured is an owner of a Described Location; or
- b. Coverage B if the insured is an owner of a Described Location which is not insured for Coverage A or Unit-Owner Building Items; or
- c. Improvements, Alterations and Additions if the insured is a tenant of a Described Location.

This amount may be increased by endorsement. See B. below for rating instructions.

Use Ordinance or Law Coverage Code 2.

B. New or Increased Coverage

1. The policy may be endorsed to add (DP 00 01) or increase (DP 00 02/03) basic Ordinance or Law Coverage to accommodate the increased costs known or estimated by the insured for material and labor to repair or replace the damaged property and to demolish the undamaged portion of damaged property and clear the site of resulting debris according to the ordinance or law.

Use Ordinance or Law Coverage Code indicated in the tables below instead of codes 1 or 2.

2. For Form DP 00 01, use Endorsement DP 04 74, Ordinance or Law Coverage. For Forms DP 00 02 or DP 00 03, use Endorsement DP 04 71, Ordinance or Law – Increased Amount of Coverage.

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

**303. ORDINANCE OR LAW COVERAGE – ALL FORMS
(Cont'd)**

3. Premium

a. Described Location including Coverage A

(1) DP 00 01

(a) Fire and Extended Coverage

The premium is computed by multiplying the BASE PREMIUM by the appropriate factor shown below:

**Percentage of
Coverage A**

Total Amount	O/L Cov. Code	Factors
10%	2	1.10
25%	3	1.25
50%	4	1.45
75%	5	1.70
100%	6	1.90

For each add'l 25% increment, add: 9 .20

(b) Vandalism & Malicious Mischief

Multiply the rate per \$1,000 used to determine the V.&M.M. BASE PREMIUM, by the dollar amount of coverage added above.

(2) DP 00 02 or DP 00 03 – Fire, Broad or Special Forms

The premium is computed by multiplying the BASE PREMIUM by the appropriate factor shown below:

**Percentage of
Coverage A**

Increase in Amount	Total Amount	O/L Cov. Code	Factors
15%	25%	3	1.15
40%	50%	4	1.35
65%	75%	5	1.60
90%	100%	6	1.80

For each add'l 25% increment, add: 9 .20

b. Described Location not including Coverage A, but including Coverage B – Specific Structures, Unit-Owner Building Items, and/or Improvements, Alterations and Additions.

See Rule 503. for rating instructions.

304. PERMITTED INCIDENTAL OCCUPANCIES

A. One of the incidental occupancies described in B. below is permitted in a premises eligible for coverage under a Dwelling Policy, if:

1. The policy provides insurance under Coverage A, B or C;
2. The incidental occupancy is operated by the insured who is the owner or a resident of the premises; and
3. There are no more than two persons at work in the incidental occupancy.

Use Endorsement **DP 04 20** Permitted Incidental Occupancies.

B. Permitted Incidental Occupancies

1. Offices, Schools or Studios meaning offices for business or professional purposes, and private schools or studios for music, dance, photography and other instructional purposes.
2. Small Service Occupancies meaning occupancies primarily for service rather than sales. For example: barber or beauty shop, tailor or dressmaker, telephone exchanges or shoe repair shops using handwork only.
3. Storage of merchandise if the value of the merchandise does not exceed \$10,000.

C. The amounts of insurance for the contents of the incidental occupancy and merchandise in storage shall be stated as separate contents items in the policy declarations.

D. Premium

Determine the Coverage C BASE PREMIUM under Rule 301., using the single Key Factor for the total amount of insurance for:

1. Household personal property,
2. Contents of the incidental occupancy, and
3. Merchandise in storage.

DWELLING POLICY PROGRAM MANUAL

401. SUPERIOR CONSTRUCTION

- A. Refer to the Construction Definition rule in this manual for details.
- B. For E.C. rating purposes a dwelling classified as:
 - 1. Fire Resistive is considered Wind Resistive.
 - 2. Masonry Non-Combustible is considered Semi-Wind Resistive.
- C. **Premium:**
Multiply the Masonry **BASE PREMIUM** by the appropriate factor noted below:

	Fire	E.C., Broad & Special Forms
Fire Resistive & Masonry Non-Comb.	.50	.50
Non-Combustible	.50	1.00
Construction Code 4		

402. COVERAGE C – PERSONAL PROPERTY IN BUILDINGS SUBJECT TO COMMERCIAL CLASS RATES OR SPECIFIC RATES

A. Fire

Use the appropriate factor shown below if the building is classified in Div. 5 of the Commercial Lines Manual, Rule 85, paragraph:

	B.1. or B.2.* specifically**	B.3. or is rated
1. Fire Resistive, Masonry Non-Comb. & Non-Comb.		
Multiply the Masonry Cov. C BASE PREM. by	.50	1.00
2. All Other Construction		
Multiply the Masonry Cov. C or Frame BASE PREM. by	1.00	2.00

B. E.C., V&MM, Broad or Special Form

Multiply the Cov. C **BASE PREMIUM** by 1.00.

* Does not affect coding.
** Construction Code 8

403. DWELLING UNDER CONSTRUCTION

- A. Two methods are provided for insuring this exposure.
 - 1. Named Insured Is The Intended Occupant.**
A builder (contractor) may be designated as an additional insured. The policy may be cancelled upon completion of the dwelling.
Use Endorsement **DP 11 43** Dwelling Under Construction.
 - 2. Named Insured Is Not The Intended Occupant.**
The policy shall specify building is in course of construction and permission is granted to complete.
For other coverage bases, refer to the Commercial Lines Manual.
- B. **Premium:**
 - 1. Multiply the Coverage A Owner Occupied **BASE PREMIUM** by .65.
Status Code 1
 - 2. Multiply the Coverage A Non-Owner Occupied **BASE PREMIUM** by 1.00
Status Code 5

404. MOBILE OR TRAILER HOMES – DP 00 01 ONLY

Construction Code 6
Refer to the state rate pages.

405. TOWNHOUSE OR ROW HOUSE

- A. Determine the total number of individual family units within a Fire Division. For example, a 2 family dwelling attached to a 1 family dwelling is considered **3 individual family units** within a Fire Division if both dwellings are not separated by a fire wall. Four attached 2 family dwellings are considered **8 individual family units** within a Fire Division if they are not separated by fire walls.
A policy may be issued for:
 - 1. Coverage A when the dwelling contains 1, 2, 3 or 4 individual family units within a Fire Division.
 - 2. Coverage C in a dwelling with 1 or more individual family units within a Fire Division.

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

405. TOWNHOUSE OR ROW HOUSE (Cont'd)

B. Premium

No. of Indiv. Family Units	Use Cov. A* or C BASE PREMIUM for
1, 2, 3 or 4	1, 2, 3 or 4 families
5 or more	5 or more families

*Refer to Commercial Lines Manual for building coverage when it contains 5 or more individual family units within a Fire Division.

Code according to total No. of families within a Fire Division.

406. DEDUCTIBLES

All policies are subject to a deductible that applies to loss from all perils. A separate deductible type applies to Earthquake Coverage.

For Theft Coverage, the deductible amount may differ from the deductible amount that applies to Fire and Allied Lines perils.

Refer to the Earthquake and Theft Coverage rules for the applicable deductible provision.

A. Base Deductible

\$250 Deductible. (Size Code 25).

B. Optional Deductibles

1. All Perils Deductibles

Multiply the BASE PREMIUM for the Base Deductible by the appropriate factors:

Ded.	Size Code	Fire	E.C., V.&M.M., Broad & Special Forms
\$ 100*	10	1.05	1.10
\$ 500	50	.97	.91
\$ 1,000	82	.95	.76
\$ 2,500	86	.88	.50

*Refer to the state rate pages for the minimum annual additional premium charge that applies per policy.

The Deductible Size is coded separately for Fire, E.C., etc., and Theft.

2. Windstorm or Hail Deductibles

The following deductible options are used in conjunction with a deductible applicable to all other perils covered under E.C., Broad or Special Forms:

a. Percentage Deductibles

- (1) A percentage deductible of 1%, 2% or 5% of the limit of liability that applies to Coverages A, B, D or E, whichever is greatest, is available when the dollar amount of the percentage deductible selected exceeds the amount of the All Other Perils deductible. This option is not available for policies covering only personal property.
- (2) Attach Endorsement **DP 03 12** – Windstorm or Hail Percentage Deductible to the policy and enter on the policy declarations the percentage amount that applies to Windstorm or Hail and the dollar amount that applies to all other perils.

Example

Deductible – \$250 except Windstorm or Hail 2% of the Coverage A limit.

- (3) In the event of a Windstorm or Hail loss to covered property, the dollar amount is deducted from the total of the loss for all coverages.

Example

Cov.	Limit of Liability	1% Ded.	Amount of Loss	
			Before Ded.	After Ded.
A	\$100,000	\$1,000	\$7,500	–
B	–	–	3,000	–
C	35,000	–	–	–
D	18,500	–	660	–
E	–	–	–	–
			\$11,160	\$10,160

(4) Factors

The factors displayed below incorporate the factors for the All Perils Deductibles shown in B.1. above. Do NOT use the factors for the All Perils Deductibles when rating a policy with a higher Windstorm or Hail deductible.

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

406. DEDUCTIBLES (Cont'd)

(5) Deductible Factors

Multiply the E.C., Broad or Special Form BASE PREMIUM for the Base Deductible for each coverage insured under the policy by the appropriate factor listed below for the deductible amounts selected:

**COVERAGES A, B, D or E and
COVERAGE OPTIONS FOR
BUILDINGS AND NON-BUILDING
STRUCTURES**

All Other Perils Ded. Amt.	Windstorm or Hail De- ductible Amounts		
	1%	2%	5%
\$ 100	.99	.92	.82
250	.93	.86	.77
500	.88	.81	.71
1,000	.72	.72	.63
2,500	.49	.49	.48

(Windstorm or Hail Size Code 01, 02, 05)

**COVERAGE C and OTHER PER-
SONAL PROPERTY COVERAGE OP-
TIONS** (Only use when policy also
covers building or non-building struc-
tures)

All Other Perils Ded. Amt.	Windstorm or Hail 1%, 2% or 5% Deductible	
	\$ 100	1.07
250	.99	
500	.90	
1,000	.72	
2,500	.49	

(Windstorm or Hail Size Code 01, 02, 05)

b. Higher Fixed-Dollar Deductibles

- (1) Deductible amounts of \$1,000, \$2,000 and \$5,000 are available when the dollar amount of the higher fixed-dollar deductible selected exceeds the amount of the All Other Perils deductible. This option is **not** available for policies covering only personal property.

- (2) Separately enter, on the policy declarations, the deductible amounts that apply to Windstorm or Hail and All Other Perils.

Example

Deductible – \$250 except \$1,000 for Windstorm or Hail.

- (3) The deductible factors for Coverages A, B, D or E and coverage options for buildings and non-building structures differ by the deductible amounts that apply to Windstorm or Hail and to other perils.

The deductible factors for Coverage C and other personal property coverage options differ by the deductible amount that applies to other perils. They do not differ by the amount of the Windstorm or Hail deductible.

(4) Factors

The factors displayed below incorporate the factors for the All Perils Deductibles shown in B.1. above. Do NOT use the factors for the All Perils Deductibles when rating a policy with a higher Windstorm or Hail deductible.

(5) Deductible Factors

Multiply the E.C., Broad or Special Form BASE PREMIUM for the Base Deductible for each coverage insured under the policy by the appropriate factor listed below for the deductible amounts selected:

**COVERAGES A, B, D or E and
COVERAGE OPTIONS FOR
BUILDINGS AND NON-BUILDING
STRUCTURES**

All Other Perils Ded. Amt.	Windstorm or Hail Deductible Amounts		
	\$1000	\$2000	\$5000
\$ 100	.95	.87	.83
250	.89	.81	.77
500	.84	.76	.72
1,000	–	.68	.64
2,500	–	–	.49

(Windstorm or Hail Size Code 51, 52, 55)

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

406. DEDUCTIBLES (Cont'd)

COVERAGE C and OTHER PERSONAL PROPERTY COVERAGE OPTIONS (Only use when policy also covers building or non-building structures)

All Other Perils Ded. Amt.	Windstorm or Hail Deductible Amounts \$1000, \$2000 or \$5000
\$ 100	.97
250	.90
500	.82
1,000	.68
2,500	.49
(Windstorm or Hail Size Code 51, 52, 55)	

407. AUTOMATIC INCREASE IN INSURANCE

Does not affect coding.

- A. The policy may be endorsed to provide automatic annual increases in the Coverage A and B limits of liability. Apply a factor to the BASE PREMIUM as follows:

Amount of Annual Increase	Factor
4%	1.02
6%	1.03
8%	1.04
Each Add'l 4% over 8% add:	.02

- B. The premium for a 3 year policy is 3.2 times the annual policy premium.

Use Endorsement **DP 04 11** Automatic Increase In Insurance.

408. PROTECTIVE DEVICES

Does not affect coding.

Approved and properly maintained installations of fire alarms and automatic sprinklers in the dwelling may be recognized for a reduced premium – developed by applying the selected factors to the Fire BASE PREMIUM.

Factor

Type of Installation*	Dwelling	Mobile or Trailer Home
Central Station Reporting Fire Alarm	.90 to 1.00	.92 to 1.00
Fire Department Reporting Fire Alarm	.93 to 1.00	.95 to 1.00
Local Fire Alarm	.95	.97
Automatic Sprinklers in All Areas Including Attics, Bathrooms, Closets, Attached Structures	.80 to .90	.90 to .95
Automatic Sprinklers in All Areas Except Attic, Bathroom, Closet and Attached Structure Areas that Are Protected By a Fire Detector	.90 to 1.00	.95 to 1.00

*Refer to Company for eligibility, types of systems and devices, installations, and available credits.

Use Endorsement **DP 04 70** Premises Alarm or Fire Protection System.

409. ACTUAL CASH VALUE LOSS SETTLEMENT WINDSTORM OR HAIL LOSSES TO ROOF SURFACING – DP 00 02, DP 00 03 AND DP 00 01 WITH DP 00 08

Does not affect coding.

- A. The policy provides settlement for building losses on a repair or replacement cost basis, subject to certain conditions.
- B. The policy may be endorsed to provide loss settlement exclusively on an Actual Cash Value basis for roof surfacing when damage is caused by the peril of Windstorm or Hail.
- C. To develop a premium for this option, multiply the BASE PREMIUM by a factor of .98.

Use Endorsement **DP 04 75** – Actual Cash Value Loss Settlement – Windstorm or Hail Losses to Roof Surfacing – **DP 00 02, DP 00 03 and DP 00 01** with **DP 00 08**.

DWELLING POLICY PROGRAM MANUAL
GENERAL RULES

500. MISCELLANEOUS RATES

This rule is reserved to provide rates on the state rate pages for various rating rules in this Manual.

501. COVERAGE B – OTHER STRUCTURES

Coding Note: When the policy does not include Coverage A or C, use Exception Code 7; otherwise Amount of Insurance Code should reflect the increased exposure.

- A. Coverage for other structures described as covered under Coverage B is automatically provided on a blanket basis for up to 10% of the Coverage A limit.

1. Under **DP 00 01**, use of this option reduces the Coverage A limit for the same loss.
2. Under **DP 00 02** or **DP 00 03**, this limit is additional insurance.

The blanket limit may not be increased.

- B. Coverage may be purchased for specific structures. See C. below.

C. Premium

1. Structure Rented to Others for Dwelling Purposes

Rate each structure separately as a Coverage A Dwelling, Non-Owner-Occupied under Rule **301**.

2. Structure Not Rented to Others for Dwelling Purposes

Enter the limit of liability and description of each structure in the Coverages Declarations of the policy at inception or by **DP 12 10** Change Endorsement after policy inception.

- a. Policy includes Cov. A or structure does not have permitted incidental occupancy or is at same described location as the dwelling:

- (1) Fire, E.C., Broad and Special Forms
Refer to the state rate pages Rule **500**.
– Miscellaneous Rates.

- (2) V.&M.M. (**DP 00 01**)
Refer to the state rate pages Rule **302**.
– V.&M.M.

- b. Policy does not include Cov. A or structure has permitted incidental occupancy or is not at same described location as the dwelling:

- (1) Fire, E.C., Broad and Special Forms
Rate each structure separately as a Coverage A item under Rule **301**, using the 1 Family Key Premium.

- (2) V.&M.M. (**DP 00 01**)
Refer to the state rate pages Rule **302**.
– V.&M.M.

502. COVERAGE D – FAIR RENTAL VALUE
COVERAGE E – ADDITIONAL LIVING EXPENSE

Coding Note: When the policy does not include Coverage A or C, use Exception Code 7; otherwise does not affect coding.

- A. Coverage is provided in the forms on a limited basis as follows:

1. DP 00 01

- a. Coverage D

Up to 10% of the Cov. A limit is available. Use of this option reduces the Cov. A limit for the same loss.

- b. Coverage E

Not automatically included in form. It may be added as noted in B. below.

2. DP 00 02 or DP 00 03

Coverage D and E combined – Up to 10% of the Cov. A limit is available for Cov. D and Cov. E. combined as additional insurance.

- B. Coverage may be increased or added as follows:

ALL FORMS

Coverage D

The amount recoverable each month under this coverage shall be based on the lost rental income less any expenses that do not continue during untenability.

Enter amount of increase in policy declarations at inception or in **DP 12 10** – Change Endorsement, after policy inception.

For **DP 00 01**, however, the amount recoverable each month is limited to a fraction of the total rental value amount insured under the policy. This fraction is equal to:

$$\frac{1}{\text{\# of mos. dwelling rented per year}}$$

Enter the fraction in the policy declarations or **DP 12 10**.

Example for **DP 00 01**:

\$6,000 = Rental Value Coverage in Form (10% of Cov. A limit of \$60,000)

2,000 = Add'l Insurance (Shown under Cov. D in policy declarations)

8,000 = Total Rental Value Amount Insured

Scenario A – Dwelling is rented for entire year...
fraction = 1/12. \$8,000 X 1/12 = Up to \$666.66 available each month.

Scenario B – Dwelling is rented 8 months per year... fraction = 1/8. \$8,000 X 1/8 = Up to \$1,000 available each month.

DWELLING POLICY PROGRAM MANUAL
GENERAL RULES

**502. COVERAGE D – FAIR RENTAL VALUE
COVERAGE E – ADDITIONAL LIVING EXPENSE**
(Cont'd)

Coverage E

Enter initial limit (DP 00 01) or amount of increase (DP 00 02 or DP 00 03) in policy declarations at inception or in DP 12 10 – Change Endorsement after policy inception.

Always show "up to 25% per month" in the policy or endorsement declarations.

Use DP 04 14 Additional Living Expense for DP 00 01.

C. Premium

1. Policy includes Cov. A or Cov. C.
 - a. Fire, E.C., Broad and Special Forms
Refer to the state rate pages Rule 500. – Miscellaneous Rates.
 - b. V.&M.M. (DP 00 01)
Refer to the state rate pages Rule 302. – V.&M.M.
2. Policy does not include Cov. A or Cov. C.
 - a. Fire, E.C., Broad and Special Forms
 - (1) 1-4 Family Dwelling
Multiply the Cov. A Key Premium by the Cov. A Key Factor, for:
 - (a) The Cov. D limit, times .53; or
 - (b) The Cov. E limit, times 1.00
 - (2) 5 or More Family Dwelling
Calculate the premium as instructed above using the 4 Family Key Premium.
 - b. V.&M.M. (DP 00 01)
Refer to the state rate pages Rule 302. – V.&M.M.

**503. ORDINANCE OR LAW COVERAGE
COVERAGE B – SPECIFIC STRUCTURES,
BUILDING ITEMS AND IMPROVEMENTS,
ALTERATIONS AND ADDITIONS**

- A. For DP 00 01, the policy may be endorsed to add an amount of Ordinance or Law Coverage equal to the amounts noted below. For Form DP 00 02 or DP 00 03, the basic 10% of coverage may be initially increased to the amounts noted below:
 1. 50% of the total Coverage B or Unit-Owner Building Items limit; or
 2. 100% of the Improvements, Alterations and Additions limit.

B. These amounts may be further increased in 25% increments.

C. Premium

1. The premium for this additional coverage is determined based on the dollar amount of coverage added for DP 00 01, or the dollar amount of increase, represented by the increased percentage selected above the basic limit for DP 00 02 or DP 00 03.
2. Refer to the state rate page Rule 500. – Miscellaneous Rates for the rate for each additional \$1,000 of insurance.

**504. IMPROVEMENTS, ALTERATIONS AND ADDITIONS
TENANT AND CO-OP UNIT-OWNER DP 00 01 OR
DP 00 02**

Does not affect coding.

- A. Named perils coverage is automatically provided in the forms for up to 10% of the Coverage C limit.
 1. Under DP 00 01, use of this option reduces the Coverage C limit for the same loss.
 2. Under DP 00 02, this limit is additional insurance.

This limit may be increased for an additional premium.
- B. For Form DP 00 02, coverage may be extended to Special Coverage for an additional premium.
- C. Coverage may be written without Coverage A, B, C, D or E.
- D. **Premium**
 1. Fire, E.C., Broad and Special Forms
 - a. If the policy includes Cov. A, B, C, D or E, refer to the state rate pages Rule 500. – Miscellaneous Rates.
 - b. If the policy does not include Cov. A, B, C, D or E, multiply the Cov. A, 4 Family, Owner-Occupied Key Premium (for the territory, protection and construction applying to the described location) by the Cov. A Key Factor for the amount of insurance desired.

2. V.&M.M. (DP 00 0 1)

Refer to the state rate pages Rule 302. – V.&M.M.

Use Endorsement DP 04 31 Improvements, Alterations and Additions for Named Perils Coverage.

Use Endorsements DP 04 31 Improvements Alterations and Additions and DP 04 65 for Special Coverage.

DWELLING POLICY PROGRAM MANUAL
GENERAL RULES

505. BUILDING ITEMS
CONDO UNIT-OWNER – DP 00 01 OR DP 00 02

Does not affect coding.

- A.** Building items are not covered in the forms.
Named Perils or Special Coverage is available for an additional premium.
- B.** Coverage may be written without Coverage A, B, C, D or E.
- C. Premium**
- 1.** Fire, E.C., Broad and Special Forms
 - a.** If the policy includes Cov. A, B, C, D or E, refer to the state rate pages Rule **500.** – Miscellaneous Rates.
 - b.** If the policy does not include Cov. A, B, C, D or E, multiply the Cov. A., 4 Family, Owner-Occupied Key Premium (for the territory, protection and construction applying to the described location) by the Cov. A Key Factor for the amount of insurance desired.

2. V.&M.M. (DP 00 01)

Refer to the state rate pages Rule **302.** – V.&M.M.

Use Form **DP 00 01** or **DP 00 02** and Endorsement **DP 17 66** Unit-Owners Coverage for Named Perils Coverage.

Use Form **DP 00 02** and Endorsements **DP 17 66** Unit-Owners Coverage and **DP 04 65** for Special Coverage.

506. LOSS ASSESSMENT PROPERTY COVERAGE CO-OP OR CONDO UNIT-OWNER OR TENANT – DP 00 01 OR DP 00 02
DWELLING BUILDING OWNER – ALL FORMS

Does not affect coding.

- A.** Coverage for property loss assessment, for which the insured may be liable, is not included in the forms.

Coverage is available for an additional premium for all insured perils.

Note

When coverage is desired for the peril of Earthquake, refer to Rule **509. C.** in the General Rules for policy writing and rating instructions.

- B.** Coverage may be written without Coverage A, B, C, D or E.

Use Endorsement **DP 04 63** Loss Assessment Property Coverage.

C. Premium

- 1.** Fire, E.C., Broad and Special Forms
 - a.** If the policy includes Cov. A, B, C, D or E, refer to the state rate pages Rule **500.** – Miscellaneous Rates.
 - b.** If the policy does not include Cov. A, B, C, D, or E, multiply the Cov. A., 4 Family, Owner-Occupied Key Premium (for the territory, protection and construction applying to the described location) by the Cov. A Key Factor for the amount of insurance desired.
- 2. V.&M.M. (DP 00 01)**
Refer to the state rate pages Rule **302.** – V.&M.M.

507. FIRE DEPARTMENT SERVICE CHARGE

Does not affect coding.

The limit of \$500 provided under the policy may be increased subject to the rules and rates of the company.

508. TREES, SHRUBS AND OTHER PLANTS

Coding Note: When the policy does not include Coverage A or C, use Exception Code 7; otherwise Amount of Insurance Code should reflect the increased exposure.

A. DP 00 01

- 1.** Coverage for Trees, Shrubs and Other Plants is not provided in this form. However, for an additional premium, coverage is available for specified perils on two bases, with and without the peril of windstorm or hail. Coverage is limited to a \$500 per item maximum.

Declare on the endorsement or elsewhere in the policy, as directed by the company, whether the peril of windstorm or hail applies.

- 2.** This coverage may be written without Coverage A, B, C, D or E.

Use Endorsement **DP 04 17** Trees, Shrubs and Other Plants.

DWELLING POLICY PROGRAM MANUAL
GENERAL RULES

508. TREES, SHRUBS AND OTHER PLANTS (Cont'd)

B. DP 00 02 or DP 00 03

1. Up to 5% of the Cov. A limit is available in the form (subject to a \$500 per item maximum) for specified perils as additional insurance.

2. Windstorm or Hail

Coverage for Windstorm or Hail is available up to 5% of Cov. A limit (subject to a \$500 per item maximum) for an additional premium.

Use Endorsement **DP 04 18** Windstorm or Hail.

C. Premium

1. Fire, E.C., Broad and Special Forms

Refer to the state rate pages Rule **508**.

2. V.&M.M. (DP 00 01)

Refer to the state rate pages Rule **302**. – V.&M.M.

509. EARTHQUAKE COVERAGE

Coding Note: Code as separate Earthquake record by Subline Code 60 (460 if 150 character format).

- A. When added to the Fire policy, this peril shall apply to the same coverages and for the same limits that apply to the peril of Fire.

Use Endorsement **DP 04 69** Earthquake Coverage.

- B. When a policy is written to cover only the peril of Earthquake:

1. Use Form **DP 00 01** (Actual Cash Value Loss Settlement) or **DP 00 02** (Replacement Cost Coverage);

2. Refer to company for Endorsements; and

3. Multiply the rates in this rule by a **factor** of 1.10.

C. Loss Assessment Coverage

When the policy is extended to cover loss assessment resulting from loss by this peril, the limit of liability shall be based on the insured's proportionate interest in total value of all collectively owned buildings and structures of the corporation or association of property owners. Refer to company for rates.

Use Endorsement **DP 04 68** Loss Assessment Coverage for Earthquake.

D. Deductible

The base deductible is 5% of the limit of liability for Coverage A, B or C, whichever is greatest and is subject to a \$250 minimum. This deductible may be increased for a premium credit.

In the event of an Earthquake loss to covered property, the dollar amount is deducted from the total of the loss for Coverages A, B and C.

E. Premium for Base Deductible

Develop the premium as follows:

1. From the state rate pages:

- a. Determine the Earthquake Zone
- b. Determine if Rate Table A, and/or B applies
- c. Select the rate according to construction from the Rate Table; and

2. Multiply the rate determined above by the amounts of insurance for:

- a. Coverages A, B, C, D & E
- b. Improvements, Alterations and Additions – Increased Limits
- c. Other Building Coverage options (i.e. Bldg. Items Coverage)
- d. Other Personal Property Coverage (i.e. Merchandise in Storage)
- e. Ordinance or Law total amount of insurance (includes basic, and if applicable, increased amounts).

F. Premium for Higher Deductibles

Multiply the base premium as determined above by the appropriate factor below:

Deductible Percentage	Factor	
	Frame & Superior	Masonry
10%	.89	.95
15%	.78	.89
20%	.67	.84
25%	.56	.79

510. THEFT COVERAGE

- A. A Fire policy insuring Coverages A or C may be extended, for an additional premium, to provide On and Off-Premises Coverage for the perils of Theft and Vandalism and Malicious Mischief (V.&M.M.) resulting from theft.

1. Owner-Occupied Dwellings, Co-op or Condo Units; and Apartments Occupied By Tenant (Named Insured).

- a. The policy may be extended to provide On or Off-Premises Coverage.

- b. The minimum limit of liability is \$1,000 each for On and Off -Premises Coverage.

- c. Off-Premises Coverage is **only** available when On-Premises Coverage is purchased.

The limit of liability shall not be greater than that selected for On-Premises Coverage.

Use Endorsement **DP 04 72** Broad Theft Coverage.

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

510. THEFT COVERAGE (Cont'd)

2. Non-Owner-Occupied Dwellings, Co-op or Condo Units; and Apartments Occupied by Tenant (Other than Named Insured).
 - a. The policy may be extended to provide On-Premises Coverage **only**.
 - b. The minimum limit of liability is \$1,000.
- Use Endorsement **DP 04 73** Limited Theft Coverage.

B. Premium

Rates for the base deductible are displayed in the state rate pages.

Compute the premiums separately for each premises in the manner and sequence that follows:

1. Theft and V.&M.M.
 - a. Owner-Occupied Dwellings, etc.

Code as separate record with subline 41 (441 if 150 character format) for On-Premises Only and subline 42 (442 if 150 character format) for both On and Off Premises Coverage.

Compute the premiums for the desired limit of liability separately for On and Off Premises Coverage.
 - b. Non-Owner-Occupied Dwellings, etc. (On-Premises Only)

Code as separate record with subline 41 (441 if 150 character format).

Multiply the On-Premises premium computed above by a factor of 1.50.

2. Burglar Alarm Discount (On-Premises Only)

Does not affect coding.

Approved and properly maintained installations of burglar alarms in the dwelling may be recognized for a reduced premium – developed by applying the selected factors to the premiums computed in B.1.a. or B.1.b. above.

Type of Installation*	Factor
Central Station Reporting Burglar Alarm	.95 to 1.00
Police Station Reporting Burglar Alarm	.97 to 1.00
Local Burglar Alarm	.98

* Refer to company for eligibility, types of systems and devices, installations and available credits.

Use Endorsement **DP 04 70** Premises Alarm or Fire Protection System.

C. Deductibles

1. Base Deductible

\$250 Deductible. (Size Code 25)
2. Optional Deductibles

To compute the premium for this provision, multiply the premium for the Base Deductible computed in B.1. above by the factor listed below:

Ded.	Size Code	Factor
\$ 100*	10	1.20
500	50	.95
1,000	82	.80
2,500	86	.65

* Refer to the state rate pages for the minimum annual additional premium charge that applies per policy.

511. SINKHOLE COLLAPSE COVERAGE

Does not affect coding.

The policy may be extended, at an additional premium, to provide Sinkhole Collapse Coverage. Multiply the appropriate rate per \$1,000 shown on the state rate pages by the:

- A. Coverage A, B and/or C amounts of insurance;
- B. Improvements, Alterations and Additions – Increased Limits;
- C. Other Building or Structure Options (e.g. Bldg. Items Coverage);
- D. Other Personal Property Coverage Options (e.g. Merchandise in Storage);
- E. Ordinance or Law Coverage, basic amount and, if applicable, increased amount of coverage.

Use Endorsement **DP 04 99** Sinkhole Collapse.

512. WINDSTORM OR HAIL COVERAGE – AWNINGS, SIGNS & OUTDOOR RADIO AND TELEVISION EQUIPMENT

Coding Note: When the policy does not include Coverage A or C, use Exception Code 7; otherwise Amount of Insurance Code should reflect the increased exposure.

The peril of Windstorm or Hail does **not** cover:

- A. Awnings, Signs and Outdoor Radio and Television Equipment in **DP 00 01** or **DP 00 02**;
- B. Outdoor Radio and Television Equipment in **DP 00 03**;

whether or not attached to a Dwelling Building or Other Structure.

It may be covered for an additional premium. Refer to the state rate pages.

Use Endorsement **DP 04 19** Windstorm or Hail, Radio and Television Antennas, Awnings and Signs.

**DWELLING POLICY PROGRAM MANUAL
GENERAL RULES**

513. WATER BACK UP AND SUMP OVERFLOW

Code as a separate record with Exception Code 1

- A. The policy may be endorsed to provide coverage for loss resulting from water which backs up through sewers or drains or which overflows from a sump. The limit of liability available under this option is \$5,000.
- B. A deductible of \$250 applies. No other deductible option is available.
- C. Charge the rate shown in the state rate pages.

Use Endorsement **DP 04 95** Water Back Up and Sump Overflow.

EXCEPTIONS TO GENERAL RULES

103. ELIGIBILITY

Paragraph **B.4.** is replaced by the following:

- B.4.** For a policy period of not longer than three years; and

104. PROTECTION CLASSIFICATION CODES AND INFORMATION

This rule is replaced by the following:

A. Codes

Protection Class	Code
1	01
2	02
3	03
4	04
5	05
6	06
7	07
8	08
9E	XX
9S	79
10	13

B. Protection Information

The Protection Class listings in the Community Mitigation Classification manual apply to risks insured under Dwelling Program policies.

- Unless otherwise specifically classified, properties located within the corporate limits of a municipality shall take the protection class of the municipality.
- In a classified area where two or more classifications are shown (e.g. 6/9 or 9S), the classification is determined as follows:

Distance To Fire Station	Class
a. 5 road miles or less with hydrant within 1,000 feet	*
* First protection class (e.g. 6/9...use Class 6)	
b. 5 road miles or less with hydrant beyond 1,000 feet	9 or 9S
c. Over 5 road miles	10

In a classified area where two or more classifications are shown and an "E" is designated, (e.g. 6/9E), the classification is determined as follows:

Distance To Fire Station	Class
a. 5 road miles or less with hydrant within 1,000 feet	*
* First protection class (e.g. 6/9E...use Class 6)	
b. Between 5 and 6 road miles	9E
c. Over 6 road miles	10

- Rural Fire Protection Districts are areas which have been inspected and for which protection classes are published.
- All other properties are class 10.

108. RATES/LOSS COSTS

This rule does not apply.

201. POLICY PERIOD

Paragraph **C.** is replaced by the following:

- C.** Three years in annual installments. Each annual installment shall be the annual premium then in effect for the company.

206. MINIMUM PREMIUM

Paragraph **D.** does not apply.

302. VANDALISM AND MALICIOUS MISCHIEF – DP 00 01

The following is added:

Does not affect coding.

The 30 day limit of vacancy may be extended. The charge for the additional period of vacancy shall be based on the difference between the premiums for vacant and non-vacant buildings, and shall be figured pro rata for the period allowed in the endorsement.

Use Endorsement **DP 04 40** Vandalism and Malicious Mischief Vacancy.

406. DEDUCTIBLES

The first three paragraphs of this rule are replaced by the following:

All policies are subject to a deductible that applies to loss from all perils, except Earthquake. A separate deductible type applies to Earthquake Coverage.

Refer to the Earthquake Coverage rule for the applicable deductible provision.

Paragraph **B.1.** is replaced by the following:

1. All Perils Deductible

Multiply the BASE PREMIUM for the Base Deductible by the appropriate factors:

Ded.	Size Code	Factors
\$ 100*	10	1.05
\$ 500	50	.95
\$1,000	82	.89
\$2,500	86	.81

* Refer to the state rate pages for the minimum annual additional premium charge that applies per location.

The Deductible Size is coded separately for Fire, E.C., etc.

406. DEDUCTIBLES (Cont'd)

The first three paragraphs of this rule are replaced by the following:

All policies are subject to a deductible that applies to loss from all perils, except Earthquake. A separate deductible type applies to Earthquake Coverage.

Refer to the Earthquake Coverage rule for the applicable deductible provision.

Paragraph **B.1.** is replaced by the following:

1. All Perils Deductible

Multiply the BASE PREMIUM for the Base Deductible by the appropriate factors:

Ded.	Size Code	Factors
\$ 100*	10	1.05
\$ 500	50	.95
\$1,000	82	.89
\$2,500	86	.81

* Refer to the state rate pages for the minimum annual additional premium charge that applies per location.

The Deductible Size is coded separately for Fire, E.C., etc.

Paragraph **B.2.a.(5)** is deleted and replaced by the following:

(5) Deductible Factors

In Territories 05, 06, 42 and 43 only, when the property is located in an area serviced by the North Carolina Insurance Underwriting Association (NCIUA), additional calculations must be performed to ensure that the premium credit applied to the deductible is **not** greater than the premium credit that would be applied if the peril of Windstorm or Hail were excluded from the policy.

(a) Property Not Located in Area Serviced by the NCIUA

Multiply the E.C., Broad or Special Form BASE PREMIUM for the Base Deductible for each coverage insured under the policy by the factor selected for the desired windstorm or hail deductible options from the tables below.

(b) Property Is Located in Area Serviced by the NCIUA

To determine if an "adjusted deductible credit" or the calculated deductible credit applies, complete each of the following steps:

Step 1. Multiply the windstorm or hail exclusion credit shown in the state rate pages, under Additional Rule – Windstorm or Hail Exclusion, by the Key Factor, for the same amount of insurance used to determine the E.C., Broad or Special Form BASE PREMIUM.

Step 2. Multiply the result determined in Step 1. by .9 to determine the "adjusted deductible credit".

Step 3. Select the factor for the desired windstorm or hail deductible option from the tables below and subtract the factor from unity (1.00).

Step 4. Multiply the factor determined in Step 3. above by the E.C., Broad or Special Form BASE PREMIUM. The result is the windstorm or hail deductible credit.

Step 5. Compare the results in Steps 2. and 4. If the result in:

Step 2. is **less than** the result in Step 4., to compute the premium, subtract the "adjusted deductible credit" from the E.C., Broad or Special Form BASE PREMIUM.

Step 2. is **greater than or equal to** Step 4., multiply the E.C., Broad or Special Form BASE PREMIUM by the factor for the desired windstorm or hail deductible option.

COVERAGES A, B, D or E and COVERAGE OPTIONS FOR BUILDINGS AND NON-BUILDING STRUCTURES

All Other Perils Ded. Amt.	Windstorm or Hail Deductible Amounts		
	1%	2%	5%
\$ 100	.99	.92	.82
250	.93	.86	.77
500	.88	.81	.71
1,000	.72	.72	.63
2,500	.49	.49	.48

406. DEDUCTIBLES (Cont'd)

COVERAGE C AND OTHER PERSONAL PROPERTY COVERAGE OPTIONS (Only use when policy also covers building or non-building structures)

Ded. Amt.	Windstorm or Hail Deductibles	
	1%	2% or 5%
\$ 100	1.07	
250	.99	
500	.90	
1,000	.72	
2,500	.49	

Paragraph B.2.b.(5) is deleted and replaced by the following:

(5) Deductible Factors

In Territories 05, 06, 42 and 43 only, when the property is located in an area serviced by the North Carolina Insurance Underwriting Association (NCIUA), additional calculations must be performed to ensure that the premium credit applied to the deductible is **not** greater than the premium credit that would be applied if the peril of Windstorm or Hail were excluded from the policy.

(a) Property Not Located in Area Served by the NCIUA

Multiply the E.C., Broad or Special Form BASE PREMIUM for the Base Deductible for each coverage insured under the policy by the factor selected for the desired windstorm or hail deductible options from the tables below.

(b) Property Is Located in Area Served by the NCIUA

To determine if an "adjusted deductible credit" or the calculated deductible credit applies, complete each of the following steps:

Step 1. Multiply the windstorm or hail exclusion credit shown in the state rate pages, under Additional Rule – Windstorm or Hail Exclusion, by the Key Factor, for the same amount of insurance used to determine the E.C., Broad or Special Form BASE PREMIUM.

Step 2. Multiply the result determined in Step 1. by .9 to determine the "adjusted deductible credit".

Step 3. Select the factor for the desired windstorm or hail deductible option from the tables below and subtract the factor from unity (1.00).

Step 4. Multiply the factor determined in Step 3. above by the E.C., Broad or Special Form BASE PREMIUM. The result is the windstorm or hail deductible credit.

Step 5. Compare the results in Steps 2. and 4. If the result in:

Step 2. is **less than** the result in Step 4., to compute the premium, subtract the "adjusted deductible credit" from the E.C., Broad or Special Form BASE PREMIUM.

Step 2. is **greater than or equal to** Step 4., multiply the E.C., Broad or Special Form BASE PREMIUM by the factor for the desired windstorm or hail deductible option.

COVERAGES A, B, D or E and COVERAGE OPTIONS FOR BUILDINGS AND NON-BUILDING STRUCTURES

Ⓐ 272x2981Y

Other Perils Ded. Amt.	Windstorm or Hail Deductible Amounts		
	\$1,000	\$2,000	\$5,000
\$ 100	.95	.87	.83
250	.89	.81	.77
500	.84	.76	.72
1,000	–	.68	.64
2,500	–	–	.49

COVERAGE C and OTHER PERSONAL PROPERTY COVERAGE OPTIONS (Only use when policy also covers building or non-building structures)

All Other Perils Ded. Amt.	Windstorm or Hail Deductible Amounts	
	\$1,000, \$2,000 or \$5,000	
\$ 100	.97	
250	.90	
500	.82	
1,000	.68	
2,500	.49	

407. AUTOMATIC INCREASE IN INSURANCE

This rule is replaced by the following:

Does not affect coding.

A. Automatic Increase In Insurance Endorsement – DP 32 11

- The policy may be endorsed to provide automatic annual increases in the Coverage A, B and C limits of liability. Apply a factor to the BASE PREMIUM as follows:

Amount of Annual Increase	Factor
4%	1.02
6%	1.03
8%	1.04
Each Add'l 4% over 8% add:	.02

- The premium for a 3 year policy is 3.2 times the annual policy premium.
- Use Automatic Increase in Insurance Endorsement DP 32 11.

B. Inflation Guard Endorsement – DP 32 70

- The policy may be extended to automatically adjust the limit of liability applicable to Coverage A under the Dwelling Policy. This limit will be adjusted at the same rate as the change in the Index shown on the Declarations, billing notice or named on the form.
- There is no additional charge for this endorsement. Companies electing to use this endorsement must use it exclusively and are required to notify the North Carolina Rate Bureau of their election.
- The following Indexes have been approved by the Department of Insurance and may be used with the approved Inflation Guard Endorsement.
 - Marshall & Swift Boeckh (MS/B) Residential Cost Index published by the American Appraisal Company, Inc.
 - Composite Construction Cost Index published by the U.S. Department of Commerce.
 - Consumer Price Index published by the U.S. Department of Labor.
 - Marshall & Swift Boeckh (MS/B) Construction Cost Index published Marshall & Swift Boeckh (MS/B).
 - RSMeans CostWorks Valuator published by RSMeans.
- Use Inflation Guard Endorsement DP 32 70.

408. PROTECTIVE DEVICES

This rule is replaced by the following:

Does not affect coding.

Alarms, Smoke Detectors, Fire Extinguishers And Automatic Sprinklers

Approved and properly maintained installations of fire alarms, smoke detectors, automatic sprinklers and fire extinguishers in the dwelling may be recognized for a reduced premium – developed by applying the selected factors to the fire BASE PREMIUM.

Type of Installation*	Factor	
	Dwelling	Mobile or Trailer Home
Central Station Reporting Fire Alarm	.90	.92
Fire Department Reporting Fire Alarm	.93	.95
Local Fire Alarm Smoke Detectors	.95	.97
Automatic Sprinklers in all areas including attics, bathrooms, closets, attached structures	.80	.90
Automatic Sprinklers in all areas except attic, bathroom, closet and attached structure areas that are protected by a fire detector	.90	.95
Fire Extinguishers – see below for description	.95	.95

* Refer to Company for eligibility, types of systems and devices, installation, and available credits.

A premium credit for Fire Extinguishers shall be allowed if the dwelling has, installed on each floor and basement in a readily accessible place, at least:

- One fire extinguisher classified and labeled as 2-A (classified as A-1 prior to July 1, 1956), or
 - Two fire extinguishers classified and labeled as 1-A (classified as A-2 prior to July, 1956).
- The extinguishers must be maintained in good, working order.
Use Endorsement DP 32 50 Premises Alarm Or Fire Protection System.

409. ACTUAL CASH VALUE LOSS SETTLEMENT WINDSTORM OR HAIL LOSSES TO ROOF SURFACING – DP 00 02, DP 00 03 AND DP 00 01 WITH DP 00 08

This rule does not apply.

507. FIRE DEPARTMENT SERVICE CHARGE

This rule is replaced by the following:

Does not affect coding.

The limit of \$500 provided under the policy may be increased. Refer to the state rate pages.

509. EARTHQUAKE

Paragraph **B.** does not apply.

510. THEFT COVERAGE

This rule is deleted.

Refer to the Theft Insurance program filed by or on behalf of the company insuring the risk.

512. WINDSTORM OR HAIL COVERAGE – AWNINGS, SIGNS & OUTDOOR RADIO AND TELEVISION EQUIPMENT

This rule is replaced by the following:

512. WINDSTORM OR HAIL COVERAGE – MISCELLANEOUS PROPERTIES

Coding Note

When the policy does not include Coverage **A** or **C**, use Exception Code 7; otherwise Amount of Insurance Code should reflect the increased exposure.

A. The peril of Windstorm or Hail does **not** cover damage to the following properties whether attached to or separated from a dwelling or other structure on the Described Location:

1. Signs or cloth awnings, including their supports;
2. Radio or television antennas or aerials, including their lead-in wiring, masts or towers;
3. Swimming pools;
4. Screens, including their supports, around a swimming pool, patio or other areas;
5. Fences, property line and similar walls, including seawalls;
6. Bathhouses, cabanas, greenhouses, hothouses, pergolas, slathouses, trellises;
7. Outdoor equipment used to service the Described Location; or
8. Structures located over water, whether or not permanently attached to the ground, including the property in or on the structure.

B. Damage to these properties may be covered for an additional premium. Separately describe each property item and corresponding limit of liability on Endorsement **DP 32 19**, Windstorm or Hail – Miscellaneous Properties, or the Declarations Page.

C. Greenhouses and/or Hothouses

1. When the structure, greenhouse (hothouse) glass and any flowers and plants contained in the structure are insured as a **single** item:
 - a. Include, in the limit of liability for each structure, the value of all glass, as computed in 1.c. below, and the value of any flowers and plants in that structure;
 - b. Add the "Glass Condition of Insurance", in Paragraph **3.a.** of this rule, to Endorsement **DP 32 19** or the Declarations Page; and

- c. Specify, in the "Glass Condition of Insurance", the dollar amount of all glass being insured. This amount is determined by multiplying the agreed value per square foot of glass by the number of square feet of all insured glass.

2. When the structure, greenhouse (hothouse) glass or the flowers and plants contained in the structure are **separately** insured, specify the limit of liability **separately** for each structure, all glass and the flowers and plants in that structures.

When glass is separately insured:

- a. Add the "Glass Condition of Insurance", in Paragraph **3.b.** of this rule, to Endorsement **DP 32 19** or the Declarations Page; and
- b. Specify, in the "Glass Condition of Insurance", the agreed value per square foot of glass and the number of square feet of all glass. The limit of liability of all glass being insured is determined by multiplying these two amounts.

3. Glass Condition of Insurance

- a. Use this Condition when glass is **NOT** separately insured:

"Windstorm or Hail Coverage for Greenhouse (Hothouse) Glass

It is understood by you and us that, in the event greenhouse (hothouse) glass is broken or destroyed by the peril of Windstorm or Hail, we will pay no more than the least of the following amounts:

A. \$ _____. This dollar amount for greenhouse (hothouse) glass is determined by multiplying:

1. The agreed value per square foot of greenhouse (hothouse) glass, \$_____, by
2. The number of square feet of all insured greenhouse (hothouse) glass, _____;

B. An amount computed by:

1. Dividing the number of square feet of all broken or destroyed greenhouse (hothouse) glass by the total number of square feet of insured greenhouse (hothouse) glass, and
2. Multiplying the amount computed in **B.1.** above by the dollar amount for greenhouse (hothouse) glass stated in **A.** above; or

C. The actual cost to repair or replace the broken or destroyed greenhouse (hothouse) glass.

512. WINDSTORM OR HAIL COVERAGE – MISCELLANEOUS PROPERTIES (Cont'd)

Also, if greenhouse (hothouse) glass is covered by other insurance, we will pay no more than the proportion of a loss that the dollar amount for such greenhouse (hothouse) glass stated in A. above bears to the total amount of insurance covering that glass".

- b. Use this Condition when glass IS separately insured:

"Windstorm or Hail Coverage for Greenhouse (Hothouse) Glass

It is understood by you and us that, in the event greenhouse (hothouse) glass is broken or destroyed by the peril of Windstorm or Hail, we will pay no more than the least of the following amounts:

- A. The limit of liability declared above for greenhouse (hothouse) glass, which is determined by multiplying:
 1. The agreed value per square foot of greenhouse (hothouse) glass, \$ _____, by
 2. The number of square feet of all insured greenhouse (hothouse) glass, _____;
- B. An amount computed by:
 1. Dividing the number of square feet of all broken or destroyed greenhouse (hothouse) glass by the total number of square feet of insured greenhouse (hothouse) glass, and
 2. Multiplying the amount computed in B.1. above by the limit of liability for greenhouse (hothouse) glass declared above; or
- C. The actual cost to repair or replace the broken or destroyed greenhouse (hothouse) glass.

Also, if greenhouse (hothouse) glass is covered by other insurance, we will pay no more than the proportion of loss that our limit of liability for such greenhouse (hothouse) glass bears to the total amount of insurance covering that glass".

D. Premium

Refer to the state rate pages.

513. WATER BACK UP AND SUMP OVERFLOW

This rule does not apply.

SPECIAL STATE REQUIREMENTS—NORTH CAROLINA—DWELLING PROPERTY MANUAL

PRIMARY INSURANCE NOTICE

1. Endorsement

Coverage:	DP 00 01	DP 00 & DP 00 03
A	DP 32 80	DP 32 83
B	DP 32 81	DP 32 84
C	DP 32 82	DP 32 85

Use the appropriate Primary Insurance Endorsement(s), specified above, only with a North Carolina Joint Underwriting Association (NCJUA) or North Carolina Insurance Underwriting Association (NCIUA) policy insuring a dwelling building covered under Coverage A, structures covered under Coverage B or personal property covered under Coverage C.

These endorsements replace the Other Insurance Condition in the policy form and make the NCJUA or NCIUA policy primary insurance for the insured property specified on the endorsement. Primary Insurance may be written for Coverages A, B and/or C. When a Primary Insurance Endorsement is not attached to the policy, the Other Insurance Condition in the policy form is unchanged.

2. Rating

A. Primary Insurance

1. When the Coverage A, B or C Limit of Liability is less than 100% of actual cash value or replacement value, divide the selected limit by the ACV or replacement value, whichever applies. The result is the "Percent of Total Value".
2. Go to the First Loss Table below and select the factor in Column 2 that corresponds to the "Percent of Total Value" computed in 1. above
3. Multiply the total value of the dwelling (actual or replacement) by the factor selected in 2. above.
4. Use the resulting product as the limit for computing the Coverage A, B or C premium.

B. Coverage A Example

Replacement Value of Dwelling: \$6,000,000

Primary Policy – Coverage A Limit: \$1,500,000

1. Divide Coverage A Limit by Replacement Value limit (\$1,500,000/\$6,000,000 = 25% or 25.00 Percent of Total Value).
2. Find Factor that corresponds to Percent of Total Value.
3. Multiply Replacement Value by Factor from Column 2 (\$6,000,000)(71.2) = \$4,272,000.
4. Use resulting product to compute Coverage A premium (Rate the policy as if \$4,272,000 is the Coverage A limit to be insured)

Note: This procedure is used to determine the appropriate exposure basis for primary insurance. It does not increase the amount of coverage available.

FIRST LOSS TABLE

(Used When Primary Coverage Provided)

% of Total Value	Factor
1.00	22.4
1.10	22.9
1.20	23.5
1.30	24.1
1.40	24.7
1.50	25.2
1.60	25.8
1.70	26.4
1.80	27.0
1.90	27.5
2.00	28.1
2.10	28.4
2.20	28.7
2.30	29.0
2.40	29.3
2.50	29.6
2.60	29.8
2.70	30.1
2.80	30.4
2.90	30.7
3.00	31.0
3.10	31.6
3.20	32.1
3.30	32.7
3.40	33.3
3.50	33.9
3.60	34.4
3.70	35.0
3.80	35.6
3.90	36.2
4.00	36.7
4.10	37.3
4.20	37.9
4.30	38.5
4.40	39.0
4.50	39.6
4.60	40.2
4.70	40.8
4.80	41.3
4.90	41.9
5.00	42.5
6.00	44.8
7.00	47.1
7.50	48.2
8.00	49.4
9.00	51.7

% of Total Value	Factor
10.00	54.0
11.00	55.1
12.00	56.3
13.00	57.4
14.00	58.6
15.00	59.7
16.00	60.9
17.00	62.0
18.00	63.2
19.00	64.3
20.00	65.5
21.00	66.0
22.00	67.8
23.00	68.9
24.00	70.1
25.00	71.2
26.00	72.0
27.00	72.1
28.00	73.4
29.00	74.1
30.00	74.8
31.00	75.6
32.00	76.3
33.00	77.0
34.00	77.3
35.00	77.6
36.00	78.0
37.00	78.4
38.00	78.8
39.00	79.2
40.00	79.5
41.00	79.9
42.00	80.2
43.00	80.4
44.00	80.8
45.00	81.1
46.00	81.5
47.00	81.8
48.00	82.1
49.00	82.4
50.00	82.7
51.00	83.0
52.00	83.2
53.00	83.4
54.00	83.7
55.00	83.9

% of Total Value	Factor
56.00	84.1
57.00	84.4
58.00	84.6
59.00	84.8
60.00	85.0
61.00	85.3
62.00	85.5
63.00	85.7
64.00	86.0
65.00	86.2
66.00	86.4
67.00	86.7
68.00	86.9
69.00	87.1
70.00	87.3
71.00	87.6
72.00	87.8
73.00	88.0
74.00	88.3
75.00	88.5
76.00	89.0
77.00	89.4
78.00	89.9
79.00	90.3
80.00	90.8
81.00	91.3
82.00	91.7
83.00	92.2
84.00	92.6
85.00	93.1
86.00	93.6
87.00	94.0
88.00	94.5
89.00	94.9
90.00	95.4
91.00	95.9
92.00	96.3
93.00	96.8
94.00	97.2
95.00	97.7
96.00	98.2
97.00	98.6
98.00	99.1
99.00	99.5
100.00	100.0

ADDITIONAL RULES**RESTRICTION OF INDIVIDUAL POLICIES**

If a Dwelling Policy would not be issued because of unusual circumstances or exposures, the named insured may request a restriction of the policy provided no reduction in premium is allowed. Such request shall be referred to the company.

WINDSTORM OR HAIL EXCLUSION – TERRITORIES 05, 06, 42 AND 43 ONLY

Paragraph A. is replaced by the following:

- A. The peril of Windstorm or Hail may be excluded if:
1. The property is located in an area eligible for such coverage from the North Carolina Underwriting Association; and
 2. A Windstorm or Hail Rejection Form is secured and maintained by the company.

Use Endorsement **DP 04 37** Windstorm or Hail Exclusion.

Subline Code 30 (430 if 150 character format). Exception Code 3.

- B. To compute the BASE PREMIUM:

1. Determine the Extended Coverage (E.C.), Broad or Special Form Key Premium as described in Rule **301**.
2. Subtract the Windstorm or Hail Exclusion Credit shown on the state rate pages from the E.C., Broad or Special Form Key Premium.
3. Multiply the E.C., Broad or Special Form Key Premium excluding Windstorm or Hail Coverage developed in Step 2. by the Key Factor for the desired limit of liability.

- C. When Endorsement **DP 04 37** is attached to the policy, enter the following on Declarations page:

"This policy does not provide coverage for the peril of Windstorm or Hail".

REPLACEMENT COST COVERAGE – DP 00 01 ONLY

- A. The policy may be endorsed to provide replacement cost coverage on buildings without deduction for depreciation.
- B. This rule is intended to have limited application. Use it **only** on those **DP 00 01** policies that currently use it. Do **not** use it on any new policies.

Use Endorsement **DP 32 62** Replacement Cost Endorsement.

INSTALLMENT PAYMENT PLAN

Annual Policy

When a policy is issued on an installment basis, the following rules apply:

- A. The first installment shall be due on the effective date of the policy and the due date of the last installment shall be no later than one month prior to the policy anniversary date.
- B. The premium calculated for the first installment payment, exclusive of installment charges, shall not be less than the pro rata charge for the period from the inception date of the policy to the due date of the next installment.
- C. The additional charge shown on the state rate pages shall be made for each installment.

UNPROTECTED DWELLINGS – PROTECTION CLASS 9, 9E, 9S OR 10

Use applicable Protection Codes.

A. Unprotected Dwellings

1. Unprotected dwellings are dwellings located in areas:
 - a. With no fire protection, in which case, Class 10 premiums apply; or
 - b. Designated as protection Class 9, 9E, 9S or 10, in which case, the premiums shown for these classifications apply.

2. Premium

Use the Fire Key Premium from the table designated "Without Endorsement **A** or **B**".

Paragraph **B**, Endorsement **A** or **B**, of this rule is deleted. These endorsements are being withdrawn.

C. Seasonal Dwelling

1. When the heating, plumbing and telephone facilities are suspended during the period of seasonal unoccupancy, attach Endorsement **DP 32 47** Seasonal Dwelling to the policy.

2. Premium

Multiply the premium developed in **B.2.** above by a factor of 1.10.

**UNPROTECTED DWELLINGS – PROTECTION
CLASS 9, 9E, 9S OR 10 (Cont'd)**

D. Vacancy Period Extension

The policy provides coverage for a vacant dwelling only if the period of vacancy does not exceed 60 consecutive days. This period may be extended by use of one of the two options below:

**1. Unoccupancy and/or Vacancy Permit –
Endorsement DP 32 52**

Premium

The additional premium for this option shall be the lower of the following calculations:

- a. Multiply the limits of liability shown in the policy for Coverages A, B and C and for other coverages by the rate displayed on the state rate page.
- b. Multiply the policy premium for all perils and coverages by a factor of .10 for each additional 30 consecutive day period (or fraction thereof) of vacancy.

**2. Two Thirds Vacancy Clause – Endorsement
DP 32 53**

There is no additional premium for this option, but, during the additional period of vacancy, policy limits are reduced by 33 1/3%.

E. Unoccupancy Period Extension

The policy provides coverage for an unoccupied dwelling only if the period of unoccupancy does not exceed 90 consecutive days. This period may be extended – at no additional charge – for successive periods of up to:

1. 90 consecutive days each, for non-seasonal dwellings, or
2. 10 months each, for seasonal dwellings.

Use Endorsement **DP 32 52** Vacancy and/or Unoccupancy Permit – Unprotected Dwellings.

**LOSS SETTLEMENT OPTIONS – DP 00 02 AND
DP 00 03 ONLY**

**A. Functional Replacement Cost Loss Settlement –
DP 00 02 and DP 00 03 Only**

Coding: To be determined.

1. The policy provides building loss settlement on a replacement cost basis if, at the time of loss, the amount of insurance on the damaged building represents at least 80% of the full replacement cost of the building immediately before the loss.
2. The policy may be endorsed to provide building loss settlement exclusively on a functional replacement cost basis if, at the time of loss, the amount of insurance on the damaged building is 80% or more of the functional replacement cost of the building immediately before the loss. Functional Replacement Cost means the amount which it would cost to repair or replace the damaged building with less costly common construction materials and methods which are functionally equivalent to obsolete, antique or custom construction materials and methods.
3. Develop the ~~BASE~~ **BASE PREMIUM** in accordance with Rule **301**. for the amount of insurance selected for this option.

Use Endorsement **DP 32 63** Functional Replacement Cost Loss Settlement Option – North Carolina.

LOSS SETTLEMENT OPTIONS – DP 00 02 AND DP 00 03 ONLY (Cont'd)

B. Actual Cash Value Loss Settlement

Coding: To be determined.

1. The policy provides building loss settlement on a replacement cost basis if, at the time of loss, the amount of insurance on the damaged building represents at least 80% of the full replacement cost of the building immediately before the loss.
2. The policy may be endorsed to provide building loss settlement exclusively on an actual cash value basis if, on the inception date of the policy, the Coverage A limit of liability selected by the insured is less than 80% of the full replacement cost of the dwelling.
3. When written in conjunction with this endorsement, Form **DP 00 02** may be used to insure a mobile or trailer home.
4. Dwelling Building **Other** Than Mobile or Trailer home:

The premium is computed by multiplying the BASE PREMIUM by the appropriate factor from the table below:

- a. Multiply the Coverage A limit of liability of the appropriate factor from the table shown below and round to the nearest \$1,000.

% of Replacement Value	Factor
20%	4.00
30%	2.67
40%	2.00
50%	1.60
60%	1.33
70%	1.14

- b. Develop a BASE PREMIUM in accordance with Rule **301.** for the amount of insurance computed in **B.4.a.** above.
- c. Multiply the premium determine in **B.4.b.** by the appropriate factor from the table noted below.

% of Replacement Value	Factor
20%	.73
30%	.74
40%	.75
50%	.76
60%	.77
70%	.78
80%	.80

5. Mobile or Trailer home:

To develop the BASE PREMIUM, multiply the premium developed in **301.** above by a factor of .98.

Use Endorsement **DP 04 76** Actual Cash Value Loss Settlement.

**DWELLING POLICY PROGRAM MANUAL
RATE PAGES**

NORTH CAROLINA (32)

- 206. MINIMUM PREMIUM – Paragraphs A., B. and C.**..... \$50.00
208. WAIVER OF PREMIUM – amount that may be waived..... \$ 3.00

301. BASE PREMIUM COMPUTATION – Refer to the Key Premium/Key Factor Tables beginning on page DP-R-4-8.
 Coding instructions for the Forms, Coverages, Occupancies, Constructions and Limits of Liability contained in these tables follow:

Subline Codes

Fire.....	10/410
E.C. without V.&M.M.	21/421
E.C. with V.&M.M.	22/422
Broad or Special Form:	
Combined Premium Reporting.....	21/421
Separate Premium Reporting:	
E.C. premium component.....	21/421
Remaining component.....	28/428

Form Codes

Form DP 00 01.....	1
Form DP 00 02.....	2
Form DP 00 03.....	3

Buildings & Contents Codes

Covs. A & C on same policy – Cov. A.....	1
– Cov. C.....	2
Cov. A Only.....	3
Cov. C Only.....	4

Occupancy "Status" Codes

	Non-Seasonal	Seasonal
Owner-Occupied:	1	3
Non-Owner-Occupied:	5	7

Number of Family Codes

1 Family.....	1
2 Families.....	3
3 or 4 Families.....	6
5 or more Families.....	8

Construction Codes

Frame.....	1
Masonry Veneer.....	2
Masonry.....	3
Aluminum or Plastic Siding.....	5

Limit of Liability Codes for Cov. A and C are recorded to the nearest \$1,000, e.g., \$10,400 = 010; \$10,500 = 011; \$125,000 = 125; \$998,500 & over = 999.

301. BASE PREMIUM COMPUTATION (Cont'd)

Fire – Coverages A and C – All Forms
 Owner-Occupied and Non-Owner-Occupied
 Non-Seasonal and Seasonal

KEY PREMIUMS

Prot. Class	Const. *	Prem. Group No.	1-5 Families	
			Cov.	
			A	C

Territory 32

1-4	M	1	30	16
	F	2	48	19
5-6	M	3	38	18
	F	4	53	22
7	M	5	44	20
	F	6	60	23
8	M	7	50	22
	F	8	68	28
9, 9e, 9s	M	9	97	36
	F	10	132	46
10	M	11	160	53
	F	12	196	64

Territory 34

1-4	M	1	29	14
	F	2	46	18
5-6	M	3	37	17
	F	4	50	20
7	M	5	42	19
	F	6	56	22
8	M	7	47	20
	F	8	65	26
9, 9e, 9s	M	9	92	35
	F	10	125	43
10	M	11	151	50
	F	12	185	61

* M = Masonry F = Frame Masonry Veneer is rated as Masonry.

Aluminum or Plastic Siding over Frame is rated as frame.

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.38	.35
2,000	.42	.48
3,000	.47	.61
4,000	.51	.74
5,000	.56	.87
6,000	.60	1.00
7,000	.65	1.13
8,000	.69	1.26
9,000	.74	1.39
10,000	.78	1.52
11,000	.82	1.65
12,000	.87	1.78
13,000	.92	1.91
14,000	.96	2.04
15,000	1.00	2.17
16,000	1.04	2.30
17,000	1.08	2.43
18,000	1.12	2.56
19,000	1.16	2.69
20,000	1.20	2.82
21,000	1.24	2.95
22,000	1.28	3.08
23,000	1.32	3.21
24,000	1.36	3.34
25,000	1.40	3.47
26,000	1.44	3.60
27,000	1.48	3.73
28,000	1.52	3.86
29,000	1.56	3.99
30,000	1.60	4.12
31,000	1.64	4.25
32,000	1.68	4.38
33,000	1.72	4.51
34,000	1.76	4.64
35,000	1.80	4.77
36,000	1.84	4.90
37,000	1.88	5.03
38,000	1.92	5.16
39,000	1.96	5.29
40,000	2.00	5.42
41,000	2.04	5.55
42,000	2.08	5.68
43,000	2.12	5.81
44,000	2.16	5.94
45,000	2.20	6.07
46,000	2.24	6.20
47,000	2.28	6.33
48,000	2.32	6.46
49,000	2.36	6.59
50,000	2.40	6.72
Each Add'l		
\$1,000	.04	.13

301. BASE PREMIUM COMPUTATION (Cont'd)

Fire – Coverages A and C – All Forms
Owner-Occupied and Non-Owner-Occupied
Non-Seasonal and Seasonal

KEY PREMIUMS

Prot. Class	Const. *	Prem. Group No.	1-5 Families	
			Cov.	
			A	C

Territory 36

Prot. Class	Const. *	Prem. Group No.	Cov. A	Cov. C
1-4	M	1	30	14
	F	2	48	18
5-6	M	3	38	18
	F	4	52	20
7	M	5	43	19
	F	6	59	23
8	M	7	49	20
	F	8	67	26
9, 9e, 9s	M	9	95	35
	F	10	130	44
10	M	11	156	50
	F	12	192	61

Territory 38

Prot. Class	Const. *	Prem. Group No.	Cov. A	Cov. C
1-4	M	1	29	13
	F	2	44	17
5-6	M	3	36	16
	F	4	49	18
7	M	5	41	18
	F	6	55	20
8	M	7	47	18
	F	8	62	24
9, 9e, 9s	M	9	90	31
	F	10	122	40
10	M	11	148	46
	F	12	181	55

* M = Masonry F = Frame Masonry Veneer is rated as Masonry.

Aluminum or Plastic Siding over Frame is rated as frame.

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.38	.35
2,000	.42	.48
3,000	.47	.61
4,000	.51	.74
5,000	.56	.87
6,000	.60	1.00
7,000	.65	1.13
8,000	.69	1.26
9,000	.74	1.39
10,000	.78	1.52
11,000	.82	1.65
12,000	.87	1.78
13,000	.92	1.91
14,000	.96	2.04
15,000	1.00	2.17
16,000	1.04	2.30
17,000	1.08	2.43
18,000	1.12	2.56
19,000	1.16	2.69
20,000	1.20	2.82
21,000	1.24	2.95
22,000	1.28	3.08
23,000	1.32	3.21
24,000	1.36	3.34
25,000	1.40	3.47
26,000	1.44	3.60
27,000	1.48	3.73
28,000	1.52	3.86
29,000	1.56	3.99
30,000	1.60	4.12
31,000	1.64	4.25
32,000	1.68	4.38
33,000	1.72	4.51
34,000	1.76	4.64
35,000	1.80	4.77
36,000	1.84	4.90
37,000	1.88	5.03
38,000	1.92	5.16
39,000	1.96	5.29
40,000	2.00	5.42
41,000	2.04	5.55
42,000	2.08	5.68
43,000	2.12	5.81
44,000	2.16	5.94
45,000	2.20	6.07
46,000	2.24	6.20
47,000	2.28	6.33
48,000	2.32	6.46
49,000	2.36	6.59
50,000	2.40	6.72
Each Add'l		
\$1,000	.04	.13

301. BASE PREMIUM COMPUTATION (Cont'd)

Fire – Coverages A and C – All Forms
Owner-Occupied and Non-Owner-Occupied
Non-Seasonal and Seasonal

KEY PREMIUMS

Prot. Class	Const. *	Prem. Group No.	1-5 Families	
			Cov.	
			A	C

Territory 39

1-4	M	1	25	14
	F	2	40	17
5-6	M	3	32	16
	F	4	43	18
7	M	5	36	17
	F	6	50	21
8	M	7	41	18
	F	8	56	24
9, 9e, 9s	M	9	81	32
	F	10	109	40
10	M	11	132	46
	F	12	161	56

Territory 41

1-4	M	1	31	16
	F	2	49	20
5-6	M	3	40	19
	F	4	53	22
7	M	5	44	20
	F	6	60	24
8	M	7	50	22
	F	8	68	29
9, 9e, 9s	M	9	98	37
	F	10	133	47
10	M	11	161	54
	F	12	197	66

* M = Masonry F = Frame Masonry Veneer is rated as Masonry.

Aluminum or Plastic Siding over Frame is rated as frame.

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.38	.35
2,000	.42	.48
3,000	.47	.61
4,000	.51	.74
5,000	.56	.87
6,000	.60	1.00
7,000	.65	1.13
8,000	.69	1.26
9,000	.74	1.39
10,000	.78	1.52
11,000	.82	1.65
12,000	.87	1.78
13,000	.92	1.91
14,000	.96	2.04
15,000	1.00	2.17
16,000	1.04	2.30
17,000	1.08	2.43
18,000	1.12	2.56
19,000	1.16	2.69
20,000	1.20	2.82
21,000	1.24	2.95
22,000	1.28	3.08
23,000	1.32	3.21
24,000	1.36	3.34
25,000	1.40	3.47
26,000	1.44	3.60
27,000	1.48	3.73
28,000	1.52	3.86
29,000	1.56	3.99
30,000	1.60	4.12
31,000	1.64	4.25
32,000	1.68	4.38
33,000	1.72	4.51
34,000	1.76	4.64
35,000	1.80	4.77
36,000	1.84	4.90
37,000	1.88	5.03
38,000	1.92	5.16
39,000	1.96	5.29
40,000	2.00	5.42
41,000	2.04	5.55
42,000	2.08	5.68
43,000	2.12	5.81
44,000	2.16	5.94
45,000	2.20	6.07
46,000	2.24	6.20
47,000	2.28	6.33
48,000	2.32	6.46
49,000	2.36	6.59
50,000	2.40	6.72
Each Add'l		
\$1,000	.04	.13

301. BASE PREMIUM COMPUTATION (Cont'd)

Fire – Coverages A and C – All Forms
Owner-Occupied and Non-Owner-Occupied
Non-Seasonal and Seasonal

KEY PREMIUMS

Prot. Class	Const. *	Prem. Group No.	1-5 Families	
			Cov.	
			A	C

Territory 42

1-4	M	1	22	13
	F	2	36	15
5-6	M	3	28	15
	F	4	39	17
7	M	5	33	16
	F	6	44	19
8	M	7	37	17
	F	8	51	22
9, 9e, 9s	M	9	72	29
	F	10	97	37
10	M	11	117	43
	F	12	144	51

Territory 43

1-4	M	1	22	12
	F	2	37	15
5-6	M	3	29	15
	F	4	39	17
7	M	5	34	16
	F	6	45	19
8	M	7	37	17
	F	8	52	22
9, 9e, 9s	M	9	73	29
	F	10	99	36
10	M	11	120	42
	F	12	147	51

* M = Masonry F = Frame Masonry Veneer is rated as Masonry.
Aluminum or Plastic Siding over Frame is rated as frame.

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.38	.35
2,000	.42	.48
3,000	.47	.61
4,000	.51	.74
5,000	.56	.87
6,000	.60	1.00
7,000	.65	1.13
8,000	.69	1.26
9,000	.74	1.39
10,000	.78	1.52
11,000	.82	1.65
12,000	.87	1.78
13,000	.92	1.91
14,000	.96	2.04
15,000	1.00	2.17
16,000	1.04	2.30
17,000	1.08	2.43
18,000	1.12	2.56
19,000	1.16	2.69
20,000	1.20	2.82
21,000	1.24	2.95
22,000	1.28	3.08
23,000	1.32	3.21
24,000	1.36	3.34
25,000	1.40	3.47
26,000	1.44	3.60
27,000	1.48	3.73
28,000	1.52	3.86
29,000	1.56	3.99
30,000	1.60	4.12
31,000	1.64	4.25
32,000	1.68	4.38
33,000	1.72	4.51
34,000	1.76	4.64
35,000	1.80	4.77
36,000	1.84	4.90
37,000	1.88	5.03
38,000	1.92	5.16
39,000	1.96	5.29
40,000	2.00	5.42
41,000	2.04	5.55
42,000	2.08	5.68
43,000	2.12	5.81
44,000	2.16	5.94
45,000	2.20	6.07
46,000	2.24	6.20
47,000	2.28	6.33
48,000	2.32	6.46
49,000	2.36	6.59
50,000	2.40	6.72
Each Add'l		
\$1,000	.04	.13

301. BASE PREMIUM COMPUTATION (Cont'd)
Fire – Coverages A and C – All Forms
Owner-Occupied and Non-Owner-Occupied
Non-Seasonal and Seasonal

KEY PREMIUMS

Prot. Class	Const. *	Prem. Group No.	1-5 Families	
			Cov.	
			A	C

Territory 44

1-4	M	1	23	12
	F	2	36	15
5-6	M	3	30	14
	F	4	40	17
7	M	5	33	17
	F	6	44	19
8	M	7	38	17
	F	8	51	22
9, 9e, 9s	M	9	73	30
	F	10	99	37
10	M	11	120	42
	F	12	147	51

Territory 45

1-4	M	1	28	14
	F	2	44	18
5-6	M	3	36	17
	F	4	48	20
7	M	5	41	19
	F	6	55	22
8	M	7	46	20
	F	8	62	25
9, 9e, 9s	M	9	90	34
	F	10	121	43
10	M	11	146	49
	F	12	180	60

* M = Masonry F = Frame Masonry Veneer is rated as Masonry.

Aluminum or Plastic Siding over Frame is rated as frame.

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.38	.35
2,000	.42	.48
3,000	.47	.61
4,000	.51	.74
5,000	.56	.87
6,000	.60	1.00
7,000	.65	1.13
8,000	.69	1.26
9,000	.74	1.39
10,000	.78	1.52
11,000	.82	1.65
12,000	.87	1.78
13,000	.92	1.91
14,000	.96	2.04
15,000	1.00	2.17
16,000	1.04	2.30
17,000	1.08	2.43
18,000	1.12	2.56
19,000	1.16	2.69
20,000	1.20	2.82
21,000	1.24	2.95
22,000	1.28	3.08
23,000	1.32	3.21
24,000	1.36	3.34
25,000	1.40	3.47
26,000	1.44	3.60
27,000	1.48	3.73
28,000	1.52	3.86
29,000	1.56	3.99
30,000	1.60	4.12
31,000	1.64	4.25
32,000	1.68	4.38
33,000	1.72	4.51
34,000	1.76	4.64
35,000	1.80	4.77
36,000	1.84	4.90
37,000	1.88	5.03
38,000	1.92	5.16
39,000	1.96	5.29
40,000	2.00	5.42
41,000	2.04	5.55
42,000	2.08	5.68
43,000	2.12	5.81
44,000	2.16	5.94
45,000	2.20	6.07
46,000	2.24	6.20
47,000	2.28	6.33
48,000	2.32	6.46
49,000	2.36	6.59
50,000	2.40	6.72
Each Add'l \$1,000	.04	.13

RATE PAGES

301. BASE PREMIUM COMPUTATION (Cont'd)

Fire – Coverages A and C – All Forms
 Owner-Occupied and Non-Owner-Occupied
 Non-Seasonal and Seasonal

KEY PREMIUMS

Prot. Class	Const. *	Prem. Group No.	1-5 Families	
			Cov.	
			A	C

Territory 46

Prot. Class	Const. *	Prem. Group No.	Cov. A	Cov. C
1-4	M	1	28	14
	F	2	44	18
5-6	M	3	36	17
	F	4	48	20
7	M	5	41	19
	F	6	55	22
8	M	7	46	20
	F	8	62	25
9, 9e, 9s	M	9	90	34
	F	10	121	43
10	M	11	146	49
	F	12	180	60

Territory 47

Prot. Class	Const. *	Prem. Group No.	Cov. A	Cov. C
1-4	M	1	28	14
	F	2	44	18
5-6	M	3	36	17
	F	4	48	20
7	M	5	41	19
	F	6	55	22
8	M	7	46	20
	F	8	62	25
9, 9e, 9s	M	9	90	34
	F	10	121	43
10	M	11	146	49
	F	12	180	60

* M = Masonry F = Frame Masonry Veneer is rated as Masonry.

Aluminum or Plastic Siding over Frame is rated as frame.

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.38	.35
2,000	.42	.48
3,000	.47	.61
4,000	.51	.74
5,000	.56	.87
6,000	.60	1.00
7,000	.65	1.13
8,000	.69	1.26
9,000	.74	1.39
10,000	.78	1.52
11,000	.82	1.65
12,000	.87	1.78
13,000	.92	1.91
14,000	.96	2.04
15,000	1.00	2.17
16,000	1.04	2.30
17,000	1.08	2.43
18,000	1.12	2.56
19,000	1.16	2.69
20,000	1.20	2.82
21,000	1.24	2.95
22,000	1.28	3.08
23,000	1.32	3.21
24,000	1.36	3.34
25,000	1.40	3.47
26,000	1.44	3.60
27,000	1.48	3.73
28,000	1.52	3.86
29,000	1.56	3.99
30,000	1.60	4.12
31,000	1.64	4.25
32,000	1.68	4.38
33,000	1.72	4.51
34,000	1.76	4.64
35,000	1.80	4.77
36,000	1.84	4.90
37,000	1.88	5.03
38,000	1.92	5.16
39,000	1.96	5.29
40,000	2.00	5.42
41,000	2.04	5.55
42,000	2.08	5.68
43,000	2.12	5.81
44,000	2.16	5.94
45,000	2.20	6.07
46,000	2.24	6.20
47,000	2.28	6.33
48,000	2.32	6.46
49,000	2.36	6.59
50,000	2.40	6.72
Each Add'l \$1,000	.04	.13

301. BASE PREMIUM COMPUTATION (Cont'd)

Fire – Coverages A and C – All Forms
 Owner-Occupied and Non-Owner-Occupied
 Non-Seasonal and Seasonal

KEY PREMIUMS

Prot. Class	Const. *	Prem. Group No.	1-5 Families	
			Cov.	
			A	C

Territory 53

1-4	M	1	24	13
	F	2	37	15
5-6	M	3	30	15
	F	4	41	17
7	M	5	34	16
	F	6	45	18
8	M	7	39	17
	F	8	52	22
9, 9e, 9s	M	9	75	29
	F	10	100	36
10	M	11	122	42
	F	12	150	51

Territory 57

1-4	M	1	28	14
	F	2	44	18
5-6	M	3	35	17
	F	4	48	19
7	M	5	41	19
	F	6	54	22
8	M	7	46	19
	F	8	62	25
9, 9e, 9s	M	9	89	34
	F	10	121	42
10	M	11	145	49
	F	12	178	59

* M = Masonry F = Frame Masonry Veneer is rated as Masonry.

Aluminum or Plastic Siding over Frame is rated as frame.

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.38	.35
2,000	.42	.48
3,000	.47	.61
4,000	.51	.74
5,000	.56	.87
6,000	.60	1.00
7,000	.65	1.13
8,000	.69	1.26
9,000	.74	1.39
10,000	.78	1.52
11,000	.82	1.65
12,000	.87	1.78
13,000	.92	1.91
14,000	.96	2.04
15,000	1.00	2.17
16,000	1.04	2.30
17,000	1.08	2.43
18,000	1.12	2.56
19,000	1.16	2.69
20,000	1.20	2.82
21,000	1.24	2.95
22,000	1.28	3.08
23,000	1.32	3.21
24,000	1.36	3.34
25,000	1.40	3.47
26,000	1.44	3.60
27,000	1.48	3.73
28,000	1.52	3.86
29,000	1.56	3.99
30,000	1.60	4.12
31,000	1.64	4.25
32,000	1.68	4.38
33,000	1.72	4.51
34,000	1.76	4.64
35,000	1.80	4.77
36,000	1.84	4.90
37,000	1.88	5.03
38,000	1.92	5.16
39,000	1.96	5.29
40,000	2.00	5.42
41,000	2.04	5.55
42,000	2.08	5.68
43,000	2.12	5.81
44,000	2.16	5.94
45,000	2.20	6.07
46,000	2.24	6.20
47,000	2.28	6.33
48,000	2.32	6.46
49,000	2.36	6.59
50,000	2.40	6.72
Each Add'l		
\$1,000	.04	.13

301. BASE PREMIUM COMPUTATION (Cont'd)

Fire – Coverages A and C – All Forms
Owner-Occupied and Non-Owner-Occupied
Non-Seasonal and Seasonal

KEY PREMIUMS

Prot. Class	Const. *	Prem. Group No.	1-5 Families	
			Cov.	
			A	C

Territory 60

1-4	M	1	22	11
	F	2	35	15
5-6	M	3	28	13
	F	4	38	16
7	M	5	31	16
	F	6	42	18
8	M	7	36	16
	F	8	49	21
9, 9e, 9s	M	9	69	28
	F	10	94	35
10	M	11	114	40
	F	12	140	48

Territory 5

1-4	M	21	14	7
	F	22	22	9
5-6	M	23	18	9
	F	24	24	10
7	M	25	20	10
	F	26	26	11
8	M	27	22	10
	F	28	30	13
9, 9e, 9s	M	29	44	18
	F	30	59	22
10	M	31	72	25
	F	32	89	30

* M = Masonry F = Frame Masonry Veneer is rated as Masonry.

Aluminum or Plastic Siding over Frame is rated as frame.

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.38	.35
2,000	.42	.48
3,000	.47	.61
4,000	.51	.74
5,000	.56	.87
6,000	.60	1.00
7,000	.65	1.13
8,000	.69	1.26
9,000	.74	1.39
10,000	.78	1.52
11,000	.82	1.65
12,000	.87	1.78
13,000	.92	1.91
14,000	.96	2.04
15,000	1.00	2.17
16,000	1.04	2.30
17,000	1.08	2.43
18,000	1.12	2.56
19,000	1.16	2.69
20,000	1.20	2.82
21,000	1.24	2.95
22,000	1.28	3.08
23,000	1.32	3.21
24,000	1.36	3.34
25,000	1.40	3.47
26,000	1.44	3.60
27,000	1.48	3.73
28,000	1.52	3.86
29,000	1.56	3.99
30,000	1.60	4.12
31,000	1.64	4.25
32,000	1.68	4.38
33,000	1.72	4.51
34,000	1.76	4.64
35,000	1.80	4.77
36,000	1.84	4.90
37,000	1.88	5.03
38,000	1.92	5.16
39,000	1.96	5.29
40,000	2.00	5.42
41,000	2.04	5.55
42,000	2.08	5.68
43,000	2.12	5.81
44,000	2.16	5.94
45,000	2.20	6.07
46,000	2.24	6.20
47,000	2.28	6.33
48,000	2.32	6.46
49,000	2.36	6.59
50,000	2.40	6.72
Each Add'l \$1,000	.04	.13

301. BASE PREMIUM COMPUTATION (Cont'd)

Fire – Coverages A and C – All Forms
 Owner-Occupied and Non-Owner-Occupied
 Non-Seasonal and Seasonal

KEY PREMIUMS

Prot. Class	Const. *	Prem. Group No.	1-5 Families	
			Cov.	
			A	C

Territory 6

1-4	M	21	15	7
	F	22	24	10
5-6	M	23	18	9
	F	24	26	10
7	M	25	22	10
	F	26	29	11
8	M	27	25	10
	F	28	33	13
9, 9e, 9s	M	29	47	18
	F	30	64	22
10	M	31	78	26
	F	32	95	31

* M = Masonry F = Frame Masonry Veneer is rated as Masonry.

Aluminum or Plastic Siding over Frame is rated as frame.

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.38	.35
2,000	.42	.48
3,000	.47	.61
4,000	.51	.74
5,000	.56	.87
6,000	.60	1.00
7,000	.65	1.13
8,000	.69	1.26
9,000	.74	1.39
10,000	.78	1.52
11,000	.82	1.65
12,000	.87	1.78
13,000	.92	1.91
14,000	.96	2.04
15,000	1.00	2.17
16,000	1.04	2.30
17,000	1.08	2.43
18,000	1.12	2.56
19,000	1.16	2.69
20,000	1.20	2.82
21,000	1.24	2.95
22,000	1.28	3.08
23,000	1.32	3.21
24,000	1.36	3.34
25,000	1.40	3.47
26,000	1.44	3.60
27,000	1.48	3.73
28,000	1.52	3.86
29,000	1.56	3.99
30,000	1.60	4.12
31,000	1.64	4.25
32,000	1.68	4.38
33,000	1.72	4.51
34,000	1.76	4.64
35,000	1.80	4.77
36,000	1.84	4.90
37,000	1.88	5.03
38,000	1.92	5.16
39,000	1.96	5.29
40,000	2.00	5.42
41,000	2.04	5.55
42,000	2.08	5.68
43,000	2.12	5.81
44,000	2.16	5.94
45,000	2.20	6.07
46,000	2.24	6.20
47,000	2.28	6.33
48,000	2.32	6.46
49,000	2.36	6.59
50,000	2.40	6.72
Each Add'l \$1,000	.04	.13

"Reserved For Future Use"

301. BASE PREMIUM COMPUTATION (Cont'd)

Extended Coverage, Broad and Special Forms – Coverages A and C

KEY PREMIUMS*

Terr.	Coverage A			Coverage C		
	Forms DP 00			Forms DP 00		
	01	02	03	01	02	03
05,06	137	145	226	23	25	49
32	24	30	40	2	3	4
34	28	35	46	2	3	4
36	16	23	26	1	2	2
38	14	20	23	1	2	2
39	16	23	26	1	2	2
41	36	45	59	5	7	11
42,43	80	89	132	13	15	28
44	22	31	36	2	3	4
45	34	42	56	4	5	9
46	28	35	46	3	4	6
47	32	40	53	3	4	6
53	25	31	41	2	3	4
57	21	29	35	2	3	4
60	20	28	33	2	3	4

* Rating Notes

- DP 00 01, Key Premiums are Non-Seasonal and Seasonal.
- DP 00 02 and DP 00 03, Key Premiums are Non-Seasonal only and include the charge for E.C. and V.&M.M. perils. To develop the Seasonal BASE PREMIUM, multiply the following factors by the DP 00 01 E.C. BASE PREMIUM:

	Territory 42, 43		Territory 32, 34, 41, 45-47, 53	
	DP 00 02	DP 00 03	DP 00 02	DP 00 03
Cov. A	1.495	1.65	1.60	1.65
Cov. C	1.590	2.15	2.10	2.15

	Territory 36, 38, 39, 44, 60		Territory 05, 06	
	DP 00 02	DP 00 03	DP 00 02	DP 00 03
Cov. A	1.60	1.65	1.263	1.65
Cov. C	2.10	2.15	1.300	2.15

	Territory 57	
	DP 00 02	DP 00 03
Cov. A	1.60	1.65
Cov. C	2.10	2.15

◆ Use this limit of liability to develop premiums for policy amounts less than \$1,000.

KEY FACTORS

Limit of Liability	Cov. A	Cov. C
\$ 1,000 ◆	.24	.17
2,000	.29	.33
3,000	.34	.50
4,000	.40	.67
5,000	.45	.83
6,000	.51	1.00
7,000	.56	1.17
8,000	.62	1.34
9,000	.67	1.50
10,000	.72	1.67
11,000	.78	1.84
12,000	.83	2.00
13,000	.89	2.17
14,000	.94	2.33
15,000	1.00	2.50
16,000	1.05	2.67
17,000	1.10	2.84
18,000	1.16	3.00
19,000	1.21	3.17
20,000	1.27	3.34
21,000	1.32	3.51
22,000	1.37	3.67
23,000	1.43	3.84
24,000	1.48	4.00
25,000	1.54	4.17
26,000	1.59	4.34
27,000	1.64	4.51
28,000	1.69	4.68
29,000	1.74	4.85
30,000	1.79	5.02
31,000	1.84	5.19
32,000	1.89	5.36
33,000	1.94	5.53
34,000	1.99	5.70
35,000	2.04	5.87
36,000	2.09	6.04
37,000	2.14	6.21
38,000	2.19	6.38
39,000	2.24	6.55
40,000	2.29	6.72
41,000	2.34	6.89
42,000	2.39	7.06
43,000	2.44	7.23
44,000	2.49	7.40
45,000	2.54	7.57
46,000	2.59	7.74
47,000	2.64	7.91
48,000	2.69	8.08
49,000	2.74	8.25
50,000	2.79	8.42
Each Add'l		
\$1,000	.05	.17

302. VANDALISM & MALICIOUS MISCHIEF – (DP 00 01)

Rate per \$1,000

Not Seasonal or Vacant	\$.17
Seasonal & Not Vacant	1.40
Vacant	9.30
In Course of Construction19

404. MOBILE OR TRAILER HOMES – (DP 00 01)

Use the One Family, Coverage A or C, Frame BASE PREMIUM.

406. DEDUCTIBLES

B. \$100 Deductible

Minimum Additional Charge	\$25.00
---------------------------------	---------

500. MISCELLANEOUS RATES

The following rates per \$1,000 apply to all occupancies, territories, construction and protection classifications, unless otherwise specified:

Fire: Protection Class 1-8	\$ 2.50
9, 9E, 9S & 10.....	4.50
Extended Coverage (DP 00 01).....	1.00
Broad Form (DP 00 02)	1.50
Special Form (DP 00 03 or End. DP 04 65)	2.00

507. FIRE DEPARTMENT SERVICE CHARGE

Additional rate per \$1,000 of insurance	\$15.00
--	---------

508. TREES, SHRUBS AND OTHER PLANTS

C.1. The following rates per \$1,000 apply to all occupancies, territories, construction and protection classifications, unless otherwise specified:

(DP 00 01)

Fire: Protection Class 1-8	\$ 2.50
9, 9E, 9S & 10.....	4.50

Extended Coverage

a. (DP 00 01) – All Specified Perils

Territory	Including Wind or Hail	Excluding Wind or Hail
05-06	\$57.00	\$1.00
42-43	29.00	1.00
32-35, 41	15.00	1.00
36-40	13.10	1.00

b. Windstorm or Hail (DP 00 02/03)

Territory	
05-06	\$56.00
42-43	28.00
32-35, 41	14.00
36-40	12.10

509. EARTHQUAKE COVERAGE

E.1. Base Deductible – Rate per \$1,000

Zone Frame+ Masonry+ Superior

Table A

Coverages A, B, D or E Improvements, etc. & Other				
Building Options	3	\$.36	\$ 1.72	\$.68
	4	.23	1.05	.39
	5	.18	.57	.27

Table B

Coverage C & Other	3	\$.36	\$ 1.43	\$.36
Personal Property	4	.23	.82	.23
Options	5	.18	.57	.18

+ If exterior Masonry Veneer is covered, rate as Masonry; if not covered – rate as Frame.

Zone Definitions

Zone 3

Anson	Davie	Richmond
Brunswick	Gaston	Robeson
Cabarrus	Iredell	Rowan
Catawba	Lincoln	Scotland
Cleveland	Mecklenburg	Stanly
Columbus	Montgomery	Union

Zone 4

Alexander	Forsyth	Pender
Alleghany	Graham	Polk
Ashe	Haywood	Randolph
Avery	Henderson	Rutherford
Bladen	Hoke	Surry
Buncombe	Jackson	Swain
Burke	Macon	Transylvania
Caldwell	Madison	Watauga
Cherokee	McDowell	Wilkes
Clay	Mitchell	Yad ☠rt' ■
Cumberland	Moore	Yancey
Davidson	New Hanover	

Zone 5

Balance of state

510. THEFT COVERAGE

Rate per \$1,000

B.1.a. On-Premises	Not Applicable
Off-Premises	Not Applicable

511. SINKHOLE COLLAPSE COVERAGE

Rate per \$1,000

Cov. A or B and Other Bldg. Options	\$.30
Cov. C or Personal Property Options10

512. WINDSTORM OR HAIL COVERAGE –
MISCELLANEOUS PROPERTIES

B. Rates per \$1,000

	Territories			
	05 & 06	42 & 43	32-35,41	36-40
1. Signs				
a. All Metal	\$ 33.60	\$ 16.80	\$ 12.10	\$ 11.20
b. Other Construction	112.00	56.00	44.30	38.70
2. Cloth Awnings	56.00	28.00	14.00	12.10
3. Radio or Television Equipment	112.00	56.00	44.30	32.70
4. Swimming Pools				
a. Construction of Pool & Related Structures:				
(1) Masonry, Uncovered	\$.94	\$.47	\$.37	\$.28
(2) Masonry, With Combustible Superstructures (Including Roof) and/or Fencing				
(a) Pool Only	.94	.47	.37	.28
(b) Superstructure and/or Fencing	32.60	16.30	11.20	8.40
(3) Other Construction With or Without Roof	32.60	16.30	11.20	8.40
b. Inflated Enclosure or Covering of Plastic Material	168.00	84.00	65.30	56.00

Note

If any part of a pool's enclosure or roof is made of plastic film or cloth, supported on wood framing, the entire pool is subject to the rates displayed for Inflated Enclosure or Covering of Plastic Material.

5. Screens, Including Supports	32.60	16.30	11.20	8.40
6. Fences & Walls				
a. Masonry, Iron or Reinforced Concrete	2.80	1.40	1.12	1.03
b. Other Construction	56.00	28.00	14.00	12.10
7. Bathhouses, Cabanas, Pergolas, Slathouses, Trellises; Structures Over Water				
a. Masonry	\$ 4.67	\$ 2.33	\$ 1.49	\$ 1.31
b. Other Construction				
(1) Fully Enclosed	6.53	3.27	1.96	1.68
(2) Not Fully Enclosed	17.72	8.86	7.00	6.53

**512. WINDSTORM OR HAIL COVERAGE –
MISCELLANEOUS PROPERTIES (Cont'd)**

	Territories			
	05 & 06	42 & 43	32-35,41	36-40
8. Outdoor Equipment	\$ 4.80	\$ 2.40	\$ 2.12	\$ 2.03
C. Greenhouses or Hothouses				
Rates per \$1,000				
1. Structures Including Glass, Flowers & Plants	130.60	65.30	61.10	60.60
or				
2. If insured separately:				
a. Structure	11.56	5.78	4.67	4.48
b. Glass	66.20	33.10	31.30	30.80
c. Flowers & Plants	87.80	43.90	40.60	40.10

ADDITIONAL RULE(S)

INSTALLMENT PAYMENT PLAN

C. Additional Charge Per Installment \$3.00

**UNPROTECTED DWELLINGS – PROTECTION CLASS
9, 9E, 9S OR 10**

D.1. Additional Rate Per \$1,000 of
Insurance \$1.50

**WINDSTORM OR HAIL EXCLUSION –
TERRITORIES 05, 06, 42 AND 43 ONLY**

Territories 05 and 06

B.2. Building Credit \$124
Contents Credit \$ 20

Territories 42 and 43

B.2. Building Credit \$59
Contents Credit \$10

**DWELLING POLICY PROGRAM MANUAL
TERRITORY PAGES**

NORTH CAROLINA (32)

1. TERRITORY DEFINITIONS – (For all Coverages and Perils Other than Earthquake).

A. Cities

City of	County of	Code
Charlotte	Mecklenburg	38
Durham	Durham	32
Greensboro	Guilford	36
Raleigh	Wake	32
Winston-Salem	Forsyth	36

B. Other Than Cities

County of	Code
Alamance	57
Alexander	60
Alleghany	60
Anson	44
Ashe	60
Avery	60
Beaufort	43
Bertie	45
Bladen	41
Brunswick	42
Buncombe	60
Burke	60
Cabarrus	60
Caldwell	60
Camden	43
Carteret	43
Caswell	46
Catawba	60
Chatham	53
Cherokee	60
Chowan	43
Clay	60
Cleveland	60
Columbus	41
Craven	43
Cumberland	34
Currituck	43
Dare	43
Davidson	57
Davie	60
Duplin	45
Durham	53
Edgecombe	47
Forsyth	57
Franklin	47
Gaston	39
Gates	45
Graham	60
Granville	46
Greene	45
Guilford	57
Halifax	47
Harnett	47

County of	Code
Haywood	60
Henderson	60
Hertford	45
Hoke	47
Hyde	43
Iredell	60
Jackson	60
Johnston	47
Jones	43
Lee	47
Lenoir	45
Lincoln	60
Macon	60
Madison	60
Martin	45
McDowell	60
Mecklenburg	39
Mitchell	60
Montgomery	44
Moore	47
Nash	47
New Hanover	42
Northampton	47
Onslow	42
Orange	53
Pamlico	43
Pasquotank	43
Pender	42
Perquimans	43
Person	46
Pitt	45
Polk	60
Randolph	57
Richmond	44
Robeson	41
Rockingham	60
Rowan	60
Rutherford	60
Sampson	45
Scotland	47
Stanly	60
Stokes	60
Surry	60
Swain	60
Transylvania	60
Tyrrell	43
Union	39
Vance	46
Wake	53
Warren	46
Washington	43
Watauga	60
Wayne	45
Wilkes	60
Wilson	47
Yadkin	57
Yancey	60

Beach Area – Localities south and east of the Inland Waterway from the South Carolina Line to Fort Macon (Beaufort Inlet), thence south and east of Core, Pamlico, Roanoke and Currituck Sounds to the Virginia Line, being those portions of land generally known as the "Outer Bank".

Beach Areas in Carteret, Currituck, Dare and Hyde counties: 05

Beach areas in Brunswick, New Hanover, Onslow and Pender counties: 06

**DWELLING POLICY
SAMPLE FORMS PORTFOLIO
NORTH CAROLINA INDEX**

ISO forms effective in North Carolina as of 12-01-2005 by Form Number.

Current Form Number And Edition Date	Form Title
DP 00 01 07 88	DWELLING PROPERTY 1 - BASIC FORM
DP 00 02 07 88	DWELLING PROPERTY 2 - BROAD FORM
DP 00 03 07 88	DWELLING PROPERTY 3 - SPECIAL FORM
DP 03 12 05 94	WINDSTORM OR HAIL PERCENTAGE DEDUCTIBLE
DP 04 14 07 88	ADDITIONAL LIVING EXPENSE (FORM DP 00 01 ONLY)
DP 04 17 06 94	TREES, SHRUBS AND OTHER PLANTS (FORM DP 00 01 ONLY)
DP 04 18 07 88	WINDSTORM OR HAIL BROAD FORM AND SPECIAL FORM
DP 04 20 07 88	PERMITTED INCIDENTAL OCCUPANCIES
DP 04 30 07 88*	PREMIUM SHARING TWO OR MORE POLICIES
DP 04 31 07 88	IMPROVEMENTS, ALTERATIONS AND ADDITIONS
DP 04 37 03 95	WINDSTORM OR HAIL EXCLUSION
DP 04 40 07 88	VANDALISM AND MALICIOUS MISCHIEF VACANCY
DP 04 41 07 88	ADDITIONAL INSURED - DESCRIBED LOCATION
DP 04 63 06 94	LOSS ASSESSMENT PROPERTY COVERAGE
DP 04 65 07 88	SPECIAL COVERAGE
DP 04 68 07 88	LOSS ASSESSMENT COVERAGE FOR EARTHQUAKE
DP 04 69 06 94	EARTHQUAKE
DP 04 71 06 94	ORDINANCE OR LAW - INCREASED AMOUNT OF COVERAGE FORMS DP 00 02 AND DP 00 03 ONLY
DP 04 74 06 94	ORDINANCE OR LAW COVERAGE FORM DP 00 01 ONLY
DP 04 76 05 96	ACTUAL CASH VALUE LOSS SETTLEMENT
DP 04 99 07 88	SINKHOLE COLLAPSE
DP 11 43 07 88	DWELLING UNDER CONSTRUCTION
DP 12 10 07 88	CHANGE ENDORSEMENT
DP 12 76 07 88	DWELLING - RATING INFORMATION
DP 17 66 07 88	UNIT-OWNERS COVERAGE
DP 32 01 06 05*	SPOUSE ACCESS - NORTH CAROLINA
DP 32 11 07 92*	AUTOMATIC INCREASE IN INSURANCE - NORTH CAROLINA (1)
DP 32 19 07 92*	WINDSTORM OR HAIL MISCELLANEOUS PROPERTIES (1)
DP 32 32 12 05*	SPECIAL PROVISIONS - NORTH CAROLINA
DP 32 46 07 92*	INSERT (1)
DP 32 47 07 92*	SEASONAL DWELLING - NORTH CAROLINA (1)
DP 32 48 07 92*	DWELLING IN PUBLIC PROTECTION CLASSES 9, 9S AND 10 "B" - NORTH CAROLINA (1)
DP 32 49 07 92*	DWELLING IN PUBLIC PROTECTION CLASSES 9, 9S AND 10 "A" - NORTH CAROLINA (1)
DP 32 50 07 92*	PREMISES ALARM OR FIRE PROTECTION SYSTEM (1)
DP 32 52 07 92*	VACANCY AND/OR UNOCCUPANCY PERMIT - UNPROTECTED DWELLINGS NORTH CAROLINA (1)

* State Specific Form

**DWELLING POLICY
SAMPLE FORMS PORTFOLIO
NORTH CAROLINA INDEX**

ISO forms effective in North Carolina as of 12-01-2005 by Form Number.

Current Form Number And Edition Date	Form Title
DP 32 53 07 92*	TWO THIRDS VACANCY CLAUSE - UNPROTECTED DWELLINGS NORTH CAROLINA (1)
DP 32 61 07 92*	WINDSTORM EXTERIOR PAINT AND WATERPROOFING EXCLUSION - NORTH CAROLINA (1)
DP 32 62 07 92*	REPLACEMENT COST - NORTH CAROLINA (1)
DP 32 63 05 96*	FUNCTIONAL REPLACEMENT COST LOSS SETTLEMENT
DP 32 70 08 02*	INFLATION GUARD ENDORSEMENT - NORTH CAROLINA
DP 32 80 02 01*	PRIMARY INSURANCE FOR COVERAGE A - NORTH CAROLINA (FORM DP-1)
DP 32 81 02 01*	PRIMARY INSURANCE FOR COVERAGE B - NORTH CAROLINA (FORM DP-1)
DP 32 82 02 01*	PRIMARY INSURANCE FOR COVERAGE C - NORTH CAROLINA (FORM DP-1)
DP 32 83 02 01*	PRIMARY INSURANCE FOR COVERAGE A - NORTH CAROLINA (FORM DP-2 OR DP-3)
DP 32 84 02 01*	PRIMARY INSURANCE FOR COVERAGE B - NORTH CAROLINA (FORM DP-2 OR DP-3)
DP 32 85 02 01*	PRIMARY INSURANCE FOR COVERAGE C - NORTH CAROLINA (FORM DP-2 OR DP-3)

* State Specific Form

AGREEMENT

We will provide the insurance described in this policy in return for the premium and compliance with all applicable provisions of this policy.

DEFINITIONS

In this policy, "you" and "your" refer to the "named insured" shown in the Declarations and the spouse if a resident of the same household. "We," "us" and "our" refer to the Company providing this insurance.

COVERAGES

This insurance applies to the Described Location, Coverages for which a Limit of Liability is shown and Perils Insured Against for which a Premium is stated.

COVERAGE A – Dwelling

We cover:

1. the dwelling on the Described Location shown in the Declarations, used principally for dwelling purposes, including structures attached to the dwelling;
2. materials and supplies located on or next to the Described Location used to construct, alter or repair the dwelling or other structures on the Described Location; and
3. if not otherwise covered in this policy, building equipment and outdoor equipment used for the service of and located on the Described Location.

This coverage does not apply to land, including land on which the dwelling is located.

COVERAGE B – Other Structures

We cover other structures on the Described Location, set apart from the dwelling by clear space. This includes structures connected to the dwelling by only a fence, utility line, or similar connection.

This coverage does not apply to land, including land on which the other structures are located.

We do not cover other structures:

1. used in whole or in part for commercial, manufacturing or farming purposes; or
2. rented or held for rental to any person not a tenant of the dwelling, unless used solely as a private garage.

COVERAGE C – Personal Property

We cover personal property, usual to the occupancy as a dwelling and owned or used by you or members of your family residing with you while it is on the Described Location. At your request, we will cover personal property owned by a guest or servant while the property is on the Described Location.

Property Not Covered. We do not cover:

1. accounts, bank notes, bills, bullion, coins, currency, deeds, evidences of debt, gold other than goldware, letters of credit, manuscripts, medals, money, notes other than bank notes, passports, personal records, platinum, securities, silver other than silverware, tickets and stamps;
2. animals, birds or fish;
3. aircraft and parts. Aircraft means any contrivance used or designed for flight, except model or hobby aircraft not used or designed to carry people or cargo;
4. motor vehicles or all other motorized land conveyances. This includes:
 - a. their equipment and accessories; or
 - b. any device or instrument for the transmitting, recording, receiving or reproduction of sound or pictures which is operated by power from the electrical system of motor vehicles or all other motorized land conveyances, including:
 - (1) accessories or antennas; or
 - (2) tapes, wires, records, discs or other media for use with any such device or instrument;while in or upon the vehicle or conveyance.

We do cover vehicles or conveyances not subject to motor vehicle registration which are:

- a. used to service the Described Location; or
 - b. designed for assisting the handicapped;
5. watercraft, other than rowboats and canoes;
6. data, including data stored in:
- a. books of account, drawings or other paper records; or
 - b. electronic data processing tapes, wires, records, discs or other software media.
- However, we do cover the cost of blank recording or storage media, and of pre-recorded computer programs available on the retail market;
7. credit cards or fund transfer cards.

If you remove personal property from the Described Location to a newly acquired principal residence, the Coverage C limit of liability will apply at each residence for the 30 days immediately after you begin to move the property there. This time period will not extend beyond the termination of this policy. Our liability is limited to the proportion of the limit of liability that the value at each residence bears to the total value of all personal property covered by this policy.

COVERAGE D – Fair Rental Value

If a loss to property described in Coverage A, B or C by a Peril Insured Against under this policy makes that part of the Described Location rented to others or held for rental by you unfit for its normal use, we cover its:

Fair Rental Value, meaning the fair rental value of that part of the Described Location rented to others or held for rental by you less any expenses that do not continue while that part of the Described Location rented or held for rental is not fit to live in.

Payment will be for the shortest time required to repair or replace that part of the Described Location rented or held for rental.

If a civil authority prohibits you from use of the Described Location as a result of direct damage to a neighboring location by a Peril Insured Against in this policy, we cover the Fair Rental Value loss for no more than two weeks.

The periods of time referenced above are not limited by the expiration of this policy.

We do not cover loss or expense due to cancellation of a lease or agreement.

OTHER COVERAGES

1. **Other Structures.** You may use up to 10% of the Coverage A limit of liability for loss by a Peril Insured Against to other structures described in Coverage B.

Payment under this coverage reduces the Coverage A limit of liability by the amount paid for the same loss.

2. **Debris Removal.** We will pay your reasonable expense for the removal of:

- a. debris of covered property if a Peril Insured Against causes the loss; or
- b. ash, dust or particles from a volcanic eruption that has caused direct loss to a building or property contained in a building.

Debris removal expense is included in the limit of liability applying to the damaged property.

3. **Improvements, Alterations and Additions.** If you are a tenant of the Described Location, you may use up to 10% of the Coverage C limit of liability for loss by a Peril Insured Against to improvements, alterations and additions, made or acquired at your expense, to that part of the Described Location used only by you.

Payment under this coverage reduces the Coverage C limit of liability by the amount paid for the same loss.

4. **World-Wide Coverage.** You may use up to 10% of the Coverage C limit of liability for loss by a Peril Insured Against to property covered under Coverage C while anywhere in the world. This coverage does not apply to property of guests or servants or to rowboats or canoes.

Payment under this coverage reduces the Coverage C limit of liability by the amount paid for the same loss.

5. **Rental Value.** You may use up to 10% of the Coverage A limit of liability for loss of fair rental value as described in Coverage D. We will pay only 1/12 of this 10% for each month the rented part of the Described Location is unfit for its normal use.

Payment under this coverage reduces the Coverage A limit of liability by the amount paid for the same loss.

6. **Reasonable Repairs.** In the event that covered property is damaged by an applicable Peril Insured Against, we will pay the reasonable cost incurred by you for necessary measures taken solely to protect against further damage. If the measures taken involve repair to other damaged property, we will pay for those measures only if that property is covered under this policy and the damage to that property is caused by an applicable Peril Insured Against.

This coverage:

- a. does not increase the limit of liability that applies to the covered property;
- b. does not relieve you of your duties, in case of a loss to covered property, as set forth in Condition 4.b.

7. **Property Removed.** We insure covered property against direct loss from any cause while being removed from a premises endangered by a Peril Insured Against and for no more than 5 days while removed.

This coverage does not change the limit of liability that applies to the property being removed.

8. **Fire Department Service Charge.** We will pay up to \$500 for your liability assumed by contract or agreement for fire department charges incurred when the fire department is called to save or protect covered property from a Peril Insured Against. We do not cover fire department service charges if the property is located within the limits of the city, municipality or protection district furnishing the fire department response.

This coverage is additional insurance. No deductible applies to this coverage.

PERILS INSURED AGAINST

Unless the loss is excluded in the General Exclusions, we insure for direct physical loss to the property covered caused by:

1A. Fire or lightning.

1B. Internal Explosion, meaning explosion occurring in the dwelling or other structure covered on the Described Location or in a structure containing personal property covered.

Explosion does not mean:

- a. electric arcing;
- b. breakage of water pipes; or
- c. breakage or operation of pressure relief devices.

This peril does not include loss by explosion of steam boilers, or steam pipes, if owned or leased by you or operated under your control.

When a Premium for Extended Coverage is shown in the Declarations, Perils 2 through 8 are made part of Perils Insured Against.

2. Windstorm or hail.

This peril does not include loss:

- a. to the inside of a building or the property contained in a building caused by rain, snow, sleet, sand or dust unless the direct force of wind or hail damages the building causing an opening in a roof or wall and the rain, snow, sleet, sand or dust enters through this opening; or
- b. to the following property when outside of the building:
 - (1) awnings, signs, radio or television antennas or aerials including lead-in wiring, masts or towers; or
 - (2) canoes and rowboats.

3. Explosion.

This peril does not include loss by explosion of steam boilers or steam pipes, if owned or leased by you or operated under your control.

Explosion does not mean:

- a. electric arcing;
- b. breakage of water pipes; or
- c. breakage or operation of pressure relief devices.

This peril replaces Peril 1B.

4. Riot or civil commotion.

5. Aircraft, including self-propelled missiles and spacecraft.

6. Vehicles.

This peril does not include loss:

- a. caused by a vehicle owned or operated by you or a resident of the Described Location; or
- b. caused by any vehicle to fences, driveways and walks.

7. Smoke, meaning sudden and accidental damage from smoke.

This peril does not include loss caused by smoke from fireplaces or from agricultural smudging or industrial operations.

8. Volcanic Eruption other than loss caused by earthquake, land shock waves or tremors.

When a Premium for Vandalism or Malicious Mischief is shown in the Declarations, the following is made part of Perils Insured Against.

9. Vandalism or malicious mischief.

This peril does not include loss:

- a. to glass or safety glazing material constituting a part of the building other than glass building blocks;
- b. by pilferage, theft, burglary or larceny, but we will be liable for damage to the building covered caused by burglars; or
- c. to property on the Described Location if the dwelling has been vacant for more than 30 consecutive days immediately before the loss. A dwelling being constructed is not considered vacant.

GENERAL EXCLUSIONS

- A. We do not insure for loss caused directly or indirectly by any of the following. Such loss is excluded regardless of any other cause or event contributing concurrently or in any sequence to the loss.
1. **Ordinance or Law**, meaning enforcement of any ordinance or law regulating the use, construction, repair, or demolition of a building or other structure, unless specifically provided under this policy.
 2. **Earth Movement**, meaning earthquake including land shock waves or tremors before, during or after a volcanic eruption; landslide; mine subsidence mudflow; earth sinking, rising or shifting; unless direct loss by:
 - a. fire; or
 - b. explosion;ensues and then we will pay only for the ensuing loss.
 3. **Water Damage**, meaning:
 - a. flood, surface water, waves, tidal water, overflow of a body of water, or spray from any of these, whether or not driven by wind;
 - b. water which backs up through sewers or drains or which overflows from a sump; or
 - c. water below the surface of the ground, including water which exerts pressure on or seeps or leaks through a building, sidewalk, driveway, foundation, swimming pool or other structure.
- Direct loss by fire or explosion resulting from water damage is covered.
4. **Power Failure**, meaning the failure of power or other utility service if the failure takes place off the Described Location. But, if a Peril Insured Against ensues on the Described Location, we will pay only for that ensuing loss.
 5. **Neglect**, meaning your neglect to use all reasonable means to save and preserve property at and after the time of a loss.
 6. **War**, including undeclared war, civil war, insurrection, rebellion, revolution, warlike act by a military force or military personnel, destruction or seizure or use for a military purpose, and including any consequence of any of these. Discharge of a nuclear weapon will be deemed a warlike act even if accidental.
 7. **Nuclear Hazard**, to the extent set forth in the Nuclear Hazard Clause of the Conditions.
 8. **Intentional Loss**, meaning any loss arising out of any act committed:
 - a. by or at the direction of you or any person or organization named as an additional insured; and
 - b. with the intent to cause a loss.
- B. We do not cover loss to lawns, plants, shrubs or trees outside of buildings.

CONDITIONS

1. **Policy Period.** This policy applies only to loss which occurs during the policy period.
2. **Insurable Interest and Limit of Liability.** Even if more than one person has an insurable interest in the property covered, we will not be liable in any one loss:
 - a. for an amount greater than the interest of a person insured under this policy; or
 - b. for more than the applicable limit of liability.
3. **Concealment or Fraud.** The entire policy will be void if, whether before or after a loss, you have:
 - a. intentionally concealed or misrepresented any material fact or circumstance;
 - b. engaged in fraudulent conduct; or
 - c. made false statements;relating to this insurance.
4. **Your Duties After Loss.** In case of a loss to covered property, you must see that the following are done:
 - a. give prompt notice to us or our agent;
 - b.(1) protect the property from further damage;
 - (2) make reasonable and necessary repairs to protect the property; and
 - (3) keep an accurate record of repair expenses;
 - c. prepare an inventory of damaged personal property showing the quantity, description, actual cash value and amount of loss. Attach all bills, receipts and related documents that justify the figures in the inventory;
 - d. as often as we reasonably require:
 - (1) show the damaged property;
 - (2) provide us with records and documents we request and permit us to make copies; and
 - (3) submit to examination under oath, while not in the presence of any other named insured, and sign the same;
 - e. send to us, within 60 days after our request, your signed, sworn proof of loss which sets forth, to the best of your knowledge and belief:
 - (1) the time and cause of loss;
 - (2) your interest and that of all others in the property involved and all liens on the property;
 - (3) other insurance which may cover the loss;
 - (4) changes in title or occupancy of the property during the term of the policy;
 - (5) specifications of damaged buildings and detailed repair estimates;
 - (6) the inventory of damaged personal property described in 4c;
 - (7) receipts for additional living expenses incurred and records that support the fair rental value loss.
5. **Loss Settlement.** Covered property losses are settled at actual cash value at the time of loss but not more than the amount required to repair or replace the damaged property.
6. **Loss to a Pair or Set.** In case of loss to a pair or set we may elect to:
 - a. repair or replace any part to restore the pair or set to its value before the loss; or
 - b. pay the difference between actual cash value of the property before and after the loss.
7. **Glass Replacement.** Loss for damage to glass caused by a Peril Insured Against will be settled on the basis of replacement with safety glazing materials when required by ordinance or law.
8. **Appraisal.** If you and we fail to agree on the amount of loss, either may demand an appraisal of the loss. In this event, each party will choose a competent appraiser within 20 days after receiving a written request from the other. The two appraisers will choose an umpire. If they cannot agree upon an umpire within 15 days, you or we may request that the choice be made by a judge of a court of record in the state where the Described Location is located. The appraisers will separately set the amount of loss. If the appraisers submit a written report of an agreement to us, the amount agreed upon will be the amount of loss. If they fail to agree, they will submit their differences to the umpire. A decision agreed to by any two will set the amount of loss.

Each party will:

- a. pay its own appraiser; and
- b. bear the other expenses of the appraisal and umpire equally.

9. **Other Insurance.** If property covered by this policy is also covered by other fire insurance, we will pay only the proportion of a loss caused by any peril insured against under this policy that the limit of liability applying under this policy bears to the total amount of fire insurance covering the property.

10. **Subrogation.** You may waive in writing before a loss all rights of recovery against any person. If not waived, we may require an assignment of rights of recovery for a loss to the extent that payment is made by us.

If an assignment is sought, the person insured must sign and deliver all related papers and cooperate with us.

11. **Suit Against Us.** No action can be brought unless the policy provisions have been complied with and the action is started within one year after the date of loss.

12. **Our Option.** If we give you written notice within 30 days after we receive your signed, sworn proof of loss, we may repair or replace any part of the damaged property with like property.

13. **Loss Payment.** We will adjust all losses with you. We will pay you unless some other person is named in the policy or is legally entitled to receive payment. Loss will be payable 60 days after we receive your proof of loss and:

- a. reach an agreement with you;
- b. there is an entry of a final judgment; or
- c. there is a filing of an appraisal award with us.

14. **Abandonment of Property.** We need not accept any property abandoned by you.

15. **Mortgage Clause.**

The word "mortgagee" includes trustee.

If a mortgagee is named in this policy, any loss payable under Coverage A or B will be paid to the mortgagee and you, as interests appear. If more than one mortgagee is named, the order of payment will be the same as the order of precedence of the mortgages.

If we deny your claim, that denial will not apply to a valid claim of the mortgagee, if the mortgagee:

- a. notifies us of any change in ownership, occupancy or substantial change in risk of which the mortgagee is aware;
- b. pays any premium due under this policy on demand if you have neglected to pay the premium; and
- c. submits a signed, sworn statement of loss within 60 days after receiving notice from us of your failure to do so. Policy conditions relating to Appraisal, Suit Against Us and Loss Payment apply to the mortgagee.

If we decide to cancel or not to renew this policy, the mortgagee will be notified at least 10 days before the date cancellation or nonrenewal takes effect.

If we pay the mortgagee for any loss and deny payment to you:

- a. we are subrogated to all the rights of the mortgagee granted under the mortgage on the property; or
- b. at our option, we may pay to the mortgagee the whole principal on the mortgage plus any accrued interest. In this event, we will receive a full assignment and transfer of the mortgage and all securities held as collateral to the mortgage debt.

Subrogation will not impair the right of the mortgagee to recover the full amount of the mortgagee's claim.

16. **No Benefit to Bailee.** We will not recognize any assignment or grant any coverage that benefits a person or organization holding, storing or moving property for a fee regardless of any other provision of this policy.

17. **Cancellation.**

- a. You may cancel this policy at any time by returning it to us or by letting us know in writing of the date cancellation is to take effect.

- b. We may cancel this policy only for the reasons stated below by letting you know in writing of the date cancellation takes effect. This cancellation notice may be delivered to you, or mailed to you at your mailing address shown in the Declarations.

Proof of mailing will be sufficient proof of notice.

- (1) When you have not paid the premium, we may cancel at any time by letting you know at least 10 days before the date cancellation takes effect.
- (2) When this policy has been in effect for less than 60 days and is not a renewal with us, we may cancel for any reason by letting you know at least 10 days before the date cancellation takes effect.
- (3) When this policy has been in effect for 60 days or more, or at any time if it is a renewal with us, we may cancel:
 - (a) if there has been a material misrepresentation of fact which if known to us would have caused us not to issue the policy; or
 - (b) if the risk has changed substantially since the policy was issued.This can be done by letting you know at least 30 days before the date cancellation takes effect.
- (4) When this policy is written for a period of more than one year, we may cancel for any reason at anniversary by letting you know at least 30 days before the date cancellation takes effect.

- c. When this policy is cancelled, the premium for the period from the date of cancellation to the expiration date will be refunded pro rata.

- d. If the return premium is not refunded with the notice of cancellation or when this policy is returned to us, we will refund it within a reasonable time after the date cancellation takes effect.

- 18. Non-Renewal.** We may elect not to renew this policy. We may do so by delivering to you, or mailing to you at your mailing address shown in the Declarations, written notice at least 30 days before the expiration date of this policy. Proof of mailing will be sufficient proof of notice.

- 19. Liberalization Clause.** If we make a change which broadens coverage under this edition of our policy without additional premium charge, that change will automatically apply to your insurance as of the date we implement the change in your state, provided that this implementation date falls within 60 days prior to or during the policy period stated in the Declarations.

This Liberalization Clause does not apply to changes implemented through introduction of a subsequent edition of our policy.

- 20. Waiver or Change of Policy Provisions.** A waiver or change of a provision of this policy must be in writing by us to be valid. Our request for an appraisal or examination will not waive any of our rights.

- 21. Assignment.** Assignment of this policy will not be valid unless we give our written consent.

- 22. Death.** If you die, we insure:

- a. your legal representatives but only with respect to the property of the deceased covered under the policy at the time of death;
- b. with respect to your property, the person having proper temporary custody of the property until appointment and qualification of a legal representative.

23. Nuclear Hazard Clause.

- a. "Nuclear Hazard" means any nuclear reaction, radiation or radioactive contamination, all whether controlled or uncontrolled or however caused, or any consequence of any of these.
- b. Loss caused by the nuclear hazard will not be considered loss caused by fire, explosion, or smoke, whether these perils are specifically named in or otherwise included within the Perils Insured Against.
- c. This policy does not apply to loss caused directly or indirectly by nuclear hazard, except that direct loss by fire resulting from the nuclear hazard is covered.

24. Recovered Property. If you or we recover any property for which we have made payment under this policy, you or we will notify the other of the recovery. At your option, the property will be returned to or retained by you or it will become our property. If the recovered property is returned to or retained by you, the loss payment will be adjusted based on the amount you received for the recovered property.

25. Volcanic Eruption Period. One or more volcanic eruptions that occur within a 72-hour period will be considered as one volcanic eruption.

AGREEMENT

We will provide the insurance described in this policy in return for the premium and compliance with all applicable provisions of this policy.

DEFINITIONS

In this policy, "you" and "your" refer to the "named insured" shown in the Declarations and the spouse if a resident of the same household. "We," "us" and "our" refer to the Company providing this insurance.

COVERAGES

This insurance applies to the Described Location, Coverages for which a Limit of Liability is shown and Perils Insured Against for which a Premium is stated.

COVERAGE A – Dwelling

We cover:

1. the dwelling on the Described Location shown in the Declarations, used principally for dwelling purposes, including structures attached to the dwelling;
2. materials and supplies located on or next to the Described Location used to construct, alter or repair the dwelling or other structures on the Described Location; and
3. if not otherwise covered in this policy, building equipment and outdoor equipment used for the service of and located on the Described Location.

This coverage does not apply to land, including land on which the dwelling is located.

COVERAGE B – Other Structures

We cover other structures on the Described Location, set apart from the dwelling by clear space. This includes structures connected to the dwelling by only a fence, utility line, or similar connection.

This coverage does not apply to land, including land on which the other structures are located.

We do not cover other structures:

1. used in whole or in part for commercial, manufacturing or farming purposes; or
2. rented or held for rental to any person not a tenant of the dwelling, unless used solely as a private garage.

COVERAGE C – Personal Property

We cover personal property, usual to the occupancy as a dwelling and owned or used by you or members of your family residing with you while it is on the Described Location. At your request, we will cover personal property owned by a guest or servant while the property is on the Described Location.

Property Not Covered. We do not cover:

1. accounts, bank notes, bills, bullion, coins, currency, deeds, evidences of debt, gold other than goldware, letters of credit, manuscripts, medals, money, notes other than bank notes, passports, personal records, platinum, securities, silver other than silverware, tickets and stamps;
 2. animals, birds or fish;
 3. aircraft and parts. Aircraft means any contrivance used or designed for flight, except model or hobby aircraft not used or designed to carry people or cargo;
 4. motor vehicles or all other motorized land conveyances. This includes:
 - a. their equipment and accessories; or
 - b. any device or instrument for the transmitting, recording, receiving or reproduction of sound or pictures which is operated by power from the electrical system of motor vehicles or all other motorized land conveyances, including:
 - (1) accessories or antennas; or
 - (2) tapes, wires, records, discs or other media for use with any such device or instrument;
- while in or upon the vehicle or conveyance.

We do cover vehicles or conveyances not subject to motor vehicle registration which are:

- a. used to service the Described Location; or
 - b. designed for assisting the handicapped;
5. watercraft, other than rowboats and canoes;
6. data, including data stored in:
- a. books of account, drawings or other paper records; or
 - b. electronic data processing tapes, wires, records, discs or other software media.
- However, we do cover the cost of blank recording or storage media, and of pre-recorded computer programs available on the retail market;
7. credit cards or fund transfer cards.

If you remove personal property from the Described Location to a newly acquired principal residence, the Coverage C limit of liability will apply at each residence for the 30 days immediately after you begin to move the property there. This time period will not extend beyond the termination of this policy. Our liability is limited to the proportion of the limit of liability that the value at each residence bears to the total value of all personal property covered by this policy.

COVERAGE D – Fair Rental Value

If a loss to property described in Coverage A, B or C by a Peril Insured Against under this policy makes that part of the Described Location rented to others or held for rental by you unfit for its normal use, we cover its:

Fair Rental Value, meaning the fair rental value of that part of the Described Location rented to others or held for rental by you less any expenses that do not continue while that part of the Described Location rented or held for rental is not fit to live in.

Payment will be for the shortest time required to repair or replace that part of the Described Location rented or held for rental.

If a civil authority prohibits you from use of the Described Location as a result of direct damage to a neighboring location by a Peril Insured Against in this policy, we cover the Fair Rental Value loss for no more than two weeks.

The periods of time referenced above are not limited by the expiration of this policy.

We do not cover loss or expense due to cancellation of a lease or agreement.

COVERAGE E – Additional Living Expense

If a loss to property described in Coverage A, B or C by a Peril Insured Against under this policy makes the Described Location unfit for its normal use, we cover your:

Additional Living Expense, meaning any necessary increase in living expenses incurred by you so that your household can maintain its normal standard of living.

Payment will be for the shortest time required to repair or replace the Described Location or, if you permanently relocate, the shortest time required for your household to settle elsewhere.

If a civil authority prohibits you from use of the Described Location as a result of direct damage to a neighboring location by a Peril Insured Against in this policy, we cover the Additional Living Expense loss for no more than two weeks.

The periods of time referenced above are not limited by the expiration of this policy.

We do not cover loss or expense due to cancellation of a lease or agreement.

OTHER COVERAGES

1. **Other Structures.** You may use up to 10% of the Coverage A limit of liability for loss by a Peril Insured Against to other structures described in Coverage B.

Use of this coverage does not reduce the Coverage A limit of liability for the same loss.

2. **Debris Removal.** We will pay your reasonable expense for the removal of:

- a. debris of covered property if a Peril Insured Against causes the loss; or
- b. ash, dust or particles from a volcanic eruption that has caused direct loss to a building or property contained in a building.

Debris removal expense is included in the limit of liability applying to the damaged property.

3. **Improvements, Alterations and Additions.** If you are a tenant of the Described Location, you may use up to 10% of the Coverage C limit of liability for loss by a Peril Insured Against to improvements, alterations and additions, made or acquired at your expense, to that part of the Described Location used only by you.

Use of this coverage does not reduce the Coverage C limit of liability for the same loss.

4. **World-Wide Coverage.** You may use up to 10% of the Coverage C limit of liability for loss by a Peril Insured Against to property covered under Coverage C except rowboats and canoes, while anywhere in the world.

Use of this coverage reduces the Coverage C limit of liability for the same loss.

5. **Rental Value and Additional Living Expense.** You may use up to 10% of the Coverage A limit of liability for loss of both fair rental value as described in Coverage D and additional living expense as described in Coverage E.

Use of this coverage does not reduce the Coverage A limit of liability for the same loss.

6. **Reasonable Repairs.** In the event that covered property is damaged by an applicable Peril Insured Against, we will pay the reasonable cost incurred by you for necessary measures taken solely to protect against further damage. If the measures taken involve repair to other damaged property, we will pay for those measures only if that property is covered under this policy and the damage to that property is caused by an applicable Peril Insured Against.

This coverage:

- a. does not increase the limit of liability that applies to the covered property;
- b. does not relieve you of your duties, in case of a loss to covered property, as set forth in Condition 4.b.

7. **Property Removed.** We insure covered property against direct loss from any cause while being removed from a premises endangered by a Peril Insured Against and for no more than 30 days while removed.

This coverage does not change the limit of liability that applies to the property being removed.

8. **Trees, Shrubs and Other Plants.** We cover trees, shrubs, plants or lawns, on the Described Location for loss caused by the following Perils Insured Against: Fire or lightning, Explosion, Riot or civil commotion, Aircraft, Vehicles not owned or operated by you or a resident of the Described Location or Vandalism or malicious mischief, including damage during a burglary or attempted burglary, but not theft of property.

The limit of liability for this coverage will not be more than 5% of the Coverage A limit of liability, or more than \$500 for any one tree, shrub or plant. We do not cover property grown for commercial purposes.

This coverage is additional insurance.

9. **Fire Department Service Charge.** We will pay up to \$500 for your liability assumed by contract or agreement for fire department charges incurred when the fire department is called to save or protect covered property from a Peril Insured Against. We do not cover fire department service charges if the property is located within the limits of the city, municipality or protection district furnishing the fire department response.

This coverage is additional insurance. No deductible applies to this coverage.

10. **Collapse.** We insure for risk of direct physical loss to covered property involving collapse of a building or any part of a building caused only by one or more of the following:

- a. Perils Insured Against in this policy;
- b. hidden decay;
- c. hidden insect or vermin damage;
- d. weight of contents, equipment, animals or people;
- e. weight of rain which collects on a roof;
- f. use of defective material or methods in construction, remodeling or renovation if the collapse occurs during the course of the construction, remodeling or renovation.

Loss to an awning, fence, patio, pavement, swimming pool, underground pipe, flue, drain, cesspool, septic tank, foundation, retaining wall, bulkhead, pier, wharf or dock is not included under items b, c, d, e and f unless the loss is a direct result of the collapse of a building.

Collapse does not include settling, cracking, shrinking, bulging or expansion.

This coverage does not increase the limit of liability applying to the damaged covered property.

11. **Glass or Safety Glazing Material.** We cover:

- a. the breakage of glass or safety glazing material which is part of a covered building, storm door or storm window; and
- b. damage to covered property by glass or safety glazing material which is part of a building, storm door or storm window.

This coverage does not include loss on the Described Location if the dwelling has been vacant for more than 30 consecutive days immediately before the loss. A dwelling being constructed is not considered vacant.

Loss for damage to glass will be settled on the basis of replacement with safety glazing materials when required by ordinance or law.

This coverage does not increase the limit of liability that applies to the damaged property.

PERILS INSURED AGAINST

We insure for direct physical loss to the property covered caused by a peril listed below unless the loss is excluded in the General Exclusions.

1. Fire or lightning.

2. Windstorm or hail.

This peril does not include loss:

- a. to the inside of a building or the property contained in a building caused by rain, snow, sleet, sand or dust unless the direct force of wind or hail damages the building causing an opening in a roof or wall and the rain, snow, sleet, sand or dust enters through this opening; or
- b. to the following property when outside of the building:
 - (1) awnings, signs, radio or television antennas or aerials including lead-in wiring, masts or towers;
 - (2) canoes and rowboats; or
 - (3) trees, shrubs, plants or lawns.

3. Explosion.

4. Riot or civil commotion.

5. Aircraft, including self-propelled missiles and spacecraft.

6. Vehicles.

This peril does not include loss to a fence, driveway, or walk caused by a vehicle owned or operated by you or a resident of the Described Location.

7. Smoke, meaning sudden and accidental damage from smoke.

This peril does not include loss caused by smoke from agricultural smudging or industrial operations.

8. Vandalism or malicious mischief.

This peril does not include loss:

- a. by pilferage, theft, burglary or larceny; or
- b. to property on the Described Location if the dwelling has been vacant for more than 30 consecutive days immediately before the loss. A dwelling being constructed is not considered vacant.

9. Damage by Burglars, meaning damage to covered property caused by Burglars.

This peril does not include:

- a. theft of property; or
- b. damage caused by burglars to property on the Described Location if the dwelling has been vacant for more than 30 consecutive days immediately before the damage occurs. A dwelling being constructed is not considered vacant.

10. Falling Objects.

This peril does not include loss:

- a. to the inside of a building or property contained in the building unless the roof or an outside wall of the building is first damaged by a falling object.
- b. to outdoor radio and television antennas and aerials including their lead-in wiring, masts and towers, outdoor equipment, awnings and fences.

Damage to the falling object itself is not covered.

11. Weight of ice, snow or sleet which causes damage to a building or property contained in the building.

This peril does not include loss to an awning, fence, patio, pavement, swimming pool, foundation, retaining wall, bulkhead, pier, wharf or dock.

12. Accidental discharge or overflow of water or steam from within a plumbing, heating, air conditioning or automatic fire protective sprinkler system or from within a household appliance. We also pay for tearing out and replacing any part of a covered building necessary to repair the system or appliance from which the water or steam escaped.

This peril does not include loss:

- a. to a building caused by constant or repeated seepage or leakage over a period of weeks, months or years;
- b. on the Described Location, if the dwelling has been vacant for more than 30 consecutive days immediately before the loss. A dwelling being constructed is not considered vacant;

- c. to the system or appliance from which the water or steam escaped;
- d. caused by or resulting from freezing except as provided in the peril of freezing below; or
- e. on the Described Location caused by accidental discharge or overflow which occurs off the Described Location.

In this peril, a plumbing system does not include a sump, sump pump or related equipment.

13. Sudden and accidental tearing apart, cracking, burning or bulging of a steam or hot water heating system, an air conditioning or automatic fire protective sprinkler system, or an appliance for heating water.

This peril does not include loss caused by or resulting from freezing except as provided in the peril of freezing below.

14. Freezing of a plumbing, heating, air conditioning or automatic fire protective sprinkler system or of a household appliance.

This peril does not include loss on the Described Location while the dwelling is vacant, unoccupied or being constructed, unless you have used reasonable care to:

- a. maintain heat in the building; or
- b. shut off the water supply and drain the system and appliances of water.

15. Sudden and accidental damage from artificially generated electrical current.

This peril does not include loss to a tube, transistor or similar electronic component.

16. Volcanic Eruption other than loss caused by earthquake, land shock waves or tremors.

GENERAL EXCLUSIONS

We do not insure for loss caused directly or indirectly by any of the following. Such loss is excluded regardless of any other cause or event contributing concurrently or in any sequence to the loss.

1. **Ordinance or Law**, meaning enforcement of any ordinance or law regulating the use, construction, repair, or demolition of a building or other structure, unless specifically provided under this policy.
2. **Earth Movement**, meaning earthquake including land shock waves or tremors before, during or after a volcanic eruption; landslide; mine subsidence; mudflow; earth sinking, rising or shifting; unless direct loss by:
 - a. fire;
 - b. explosion; or
 - c. breakage of glass or safety glazing material which is part of a building, storm door or storm window;
 ensues and then we will pay only for the ensuing loss.
3. **Water Damage**, meaning:
 - a. flood, surface water, waves, tidal water, overflow of a body of water, or spray from any of these, whether or not driven by wind;
 - b. water which backs up through sewers or drains or which overflows from a sump; or

- c. water below the surface of the ground, including water which exerts pressure on or seeps or leaks through a building, sidewalk, driveway, foundation, swimming pool or other structure.

Direct loss by fire or explosion resulting from water damage is covered.

4. **Power Failure**, meaning the failure of power or other utility service if the failure takes place off the Described Location. But, if a Peril Insured Against ensues on the Described Location, we will pay only for that ensuing loss.
5. **Neglect**, meaning your neglect to use all reasonable means to save and preserve property at and after the time of a loss.
6. **War**, including undeclared war, civil war, insurrection, rebellion, revolution, warlike act by a military force or military personnel, destruction or seizure or use for a military purpose, and including any consequence of any of these. Discharge of a nuclear weapon will be deemed a warlike act even if accidental.
7. **Nuclear Hazard**, to the extent set forth in the Nuclear Hazard Clause of the Conditions.
8. **Intentional Loss**, meaning any loss arising out of any act committed:
 - a. by or at the direction of you or any person or organization named as an additional insured; and
 - b. with the intent to cause a loss.

CONDITIONS

1. **Policy Period.** This policy applies only to loss which occurs during the policy period.
2. **Insurable Interest and Limit of Liability.** Even if more than one person has an insurable interest in the property covered, we will not be liable in any one loss:
 - a. for an amount greater than the interest of a person insured under this policy; or
 - b. for more than the applicable limit of liability.
3. **Concealment or Fraud.** The entire policy will be void if, whether before or after a loss, you have:
 - a. intentionally concealed or misrepresented any material fact or circumstance;
 - b. engaged in fraudulent conduct; or
 - c. made false statements;relating to this insurance.
4. **Your Duties After Loss.** In case of a loss to covered property, you must see that the following are done:
 - a. give prompt notice to us or our agent;
 - b. (1) protect the property from further damage;
 - (2) make reasonable and necessary repairs to protect the property; and
 - (3) keep an accurate record of repair expenses;
 - c. prepare an inventory of damaged personal property showing the quantity, description, actual cash value and amount of loss. Attach all bills, receipts and related documents that justify the figures in the inventory;
 - d. as often as we reasonably require:
 - (1) show the damaged property;
 - (2) provide us with records and documents we request and permit us to make copies; and
 - (3) submit to examination under oath, while not in the presence of any other named insured, and sign the same;
 - e. send to us, within 60 days after our request, your signed, sworn proof of loss which sets forth to the best of your knowledge and belief:
 - (1) the time and cause of loss;
 - (2) your interest and that of all others in the property involved and all liens on the property;
 - (3) other insurance which may cover the loss;
 - (4) changes in title or occupancy of the property during the term of the policy;
 - (5) specifications of damaged buildings and detailed repair estimates;
 - (6) the inventory of damaged personal property described in 4c;
 - (7) receipts for additional living expenses incurred and records that support the fair rental value loss.
5. **Loss Settlement.** Covered property losses are settled as follows:
 - a. (1) Personal property;
 - (2) Awnings, carpeting, household appliances, outdoor antennas and outdoor equipment, whether or not attached to buildings; and
 - (3) Structures that are not buildings; at actual cash value at the time of loss but not more than the amount required to repair or replace.
 - b. Buildings under Coverage A or B at replacement cost without deduction for depreciation, subject to the following:
 - (1) If, at the time of loss, the amount of insurance in this policy on the damaged building is 80% or more of the full replacement cost of the building immediately before the loss, we will pay the cost to repair or replace, after application of deductible and without deduction for depreciation, but not more than the least of the following amounts:
 - (a) the limit of liability under this policy that applies to the building;
 - (b) the replacement cost of that part of the building damaged for like construction and use on the same premises; or
 - (c) the necessary amount actually spent to repair or replace the damaged building.
 - (2) If, at the time of loss, the amount of insurance in this policy on the damaged building is less than 80% of the full replacement cost of the building immediately before the loss, we will pay the greater of the following amounts, but not more than the limit of liability under this policy that applies to the building:

- (a) the actual cash value of that part of the building damaged; or
 - (b) that proportion of the cost to repair or replace, after application of deductible and without deduction for depreciation, that part of the building damaged, which the total amount of insurance in this policy on the damaged building bears to 80% of the replacement cost of the building.
- (3) To determine the amount of insurance required to equal 80% of the full replacement cost of the building immediately before the loss, do not include the value of:
- (a) excavations, foundations, piers or any supports which are below the undersurface of the lowest basement floor;
 - (b) those supports in (a) above which are below the surface of the ground inside the foundation walls, if there is no basement; and
 - (c) underground flues, pipes, wiring and drains.
- (4) We will pay no more than the actual cash value of the damage unless:
- (a) actual repair or replacement is complete; or
 - (b) the cost to repair or replace the damage is both:
 - (i) less than 5% of the amount of insurance in this policy on the building; and
 - (ii) less than \$2500.
- (5) You may disregard the replacement cost loss settlement provisions and make claim under this policy for loss or damage to buildings on an actual cash value basis. You may then make claim within 180 days after loss for any additional liability on a replacement cost basis.
- 6. Loss to a Pair or Set.** In case of loss to a pair or set we may elect to:
- a. repair or replace any part to restore the pair or set to its value before the loss; or
 - b. pay the difference between actual cash value of the property before and after the loss.
- 7. Glass Replacement.** Loss for damage to glass caused by a Peril Insured Against will be settled on the basis of replacement with safety glazing materials when required by ordinance or law.
- 8. Appraisal.** If you and we fail to agree on the amount of loss, either may demand an appraisal of the loss. In this event, each party will choose a competent appraiser within 20 days after receiving a written request from the other. The two appraisers will choose an umpire. If they cannot agree upon an umpire within 15 days, you or we may request that the choice be made by a judge of a court of record in the state where the Described Location is located. The appraisers will separately set the amount of loss. If the appraisers submit a written report of an agreement to us, the amount agreed upon will be the amount of loss. If they fail to agree, they will submit their differences to the umpire. A decision agreed to by any two will set the amount of loss.
- Each party will:
- a. pay its own appraiser; and
 - b. bear the other expenses of the appraisal and umpire equally.
- 9. Other Insurance.** If property covered by this policy is also covered by other fire insurance, we will pay only the proportion of a loss caused by any peril insured against under this policy that the limit of liability applying under this policy bears to the total amount of fire insurance covering the property.
- 10. Subrogation.** You may waive in writing before a loss all rights of recovery against any person. If not waived, we may require an assignment of rights of recovery for a loss to the extent that payment is made by us.
- If an assignment is sought, the person insured must sign and deliver all related papers and cooperate with us.
- 11. Suit Against Us.** No action can be brought unless the policy provisions have been complied with and the action is started within one year after the date of loss.
- 12. Our Option.** If we give you written notice within 30 days after we receive your signed, sworn proof of loss, we may repair or replace any part of the damaged property with like property.
- 13. Loss Payment.** We will adjust all losses with you. We will pay you unless some other person is named in the policy or is legally entitled to receive payment. Loss will be payable 60 days after we receive your proof of loss and:
- a. reach an agreement with you;
 - b. there is an entry of a final judgment; or
 - c. there is a filing of an appraisal award with us.

14. Abandonment of Property. We need not accept any property abandoned by you.

15. Mortgage Clause.

The word "mortgagee" includes trustee.

If a mortgagee is named in this policy, any loss payable under Coverage A or B will be paid to the mortgagee and you, as interests appear. If more than one mortgagee is named, the order of payment will be the same as the order of precedence of the mortgages.

If we deny your claim, that denial will not apply to a valid claim of the mortgagee, if the mortgagee:

- a. notifies us of any change in ownership, occupancy or substantial change in risk of which the mortgagee is aware;
- b. pays any premium due under this policy on demand if you have neglected to pay the premium; and
- c. submits a signed, sworn statement of loss within 60 days after receiving notice from us of your failure to do so. Policy conditions relating to Appraisal, Suit Against Us and Loss Payment apply to the mortgagee.

If we decide to cancel or not to renew this policy, the mortgagee will be notified at least 10 days before the date cancellation or nonrenewal takes effect.

If we pay the mortgagee for any loss and deny payment to you:

- a. we are subrogated to all the rights of the mortgagee granted under the mortgage on the property; or
- b. at our option, we may pay to the mortgagee the whole principal on the mortgage plus any accrued interest. In this event, we will receive a full assignment and transfer of the mortgage and all securities held as collateral to the mortgage debt.

Subrogation will not impair the right of the mortgagee to recover the full amount of the mortgagee's claim.

16. No Benefit to Bailee. We will not recognize any assignment or grant any coverage that benefits a person or organization holding, storing or moving property for a fee regardless of any other provision of this policy.

17. Cancellation.

- a. You may cancel this policy at any time by returning it to us or by letting us know in writing of the date cancellation is to take effect.

- b. We may cancel this policy only for the reasons stated below by letting you know in writing of the date cancellation takes effect. This cancellation notice may be delivered to you, or mailed to you at your mailing address shown in the Declarations.

Proof of mailing will be sufficient proof of notice.

- (1) When you have not paid the premium, we may cancel at any time by letting you know at least 10 days before the date cancellation takes effect.
- (2) When this policy has been in effect for less than 60 days and is not a renewal with us, we may cancel for any reason by letting you know at least 10 days before the date cancellation takes effect.
- (3) When this policy has been in effect for 60 days or more, or at any time if it is a renewal with us, we may cancel:
 - (a) if there has been a material misrepresentation of fact which if known to us would have caused us not to issue the policy; or
 - (b) if the risk has changed substantially since the policy was issued.

This can be done by letting you know at least 30 days before the date cancellation takes effect.

- (4) When this policy is written for a period of more than one year, we may cancel for any reason at anniversary by letting you know at least 30 days before the date cancellation takes effect.

- c. When this policy is cancelled, the premium for the period from the date of cancellation to the expiration date will be refunded pro rata.
- d. If the return premium is not refunded with the notice of cancellation or when this policy is returned to us, we will refund it within a reasonable time after the date cancellation takes effect.

18. Non-Renewal. We may elect not to renew this policy. We may do so by delivering to you, or mailing to you at your mailing address shown in the Declarations, written notice at least 30 days before the expiration date of this policy. Proof of mailing will be sufficient proof of notice.

19. Liberalization Clause. If we make a change which broadens coverage under this edition of our policy without additional premium charge, that change will automatically apply to your insurance as of the date we implement the change in your state, provided that this implementation date falls within 60 days prior to or during the policy period stated in the Declarations.

This Liberalization Clause does not apply to changes implemented through introduction of a subsequent edition of our policy.

20. Waiver or Change of Policy Provisions. A waiver or change of a provision of this policy must be in writing by us to be valid. Our request for an appraisal or examination will not waive any of our rights.

21. Assignment. Assignment of this policy will not be valid unless we give our written consent.

22. Death. If you die, we insure:

- a. your legal representatives but only with respect to the property of the deceased covered under the policy at the time of death;
- b. with respect to your property, the person having proper temporary custody of the property until appointment and qualification of a legal representative.

23. Nuclear Hazard Clause.

- a. "Nuclear Hazard" means any nuclear reaction, radiation or radioactive contamination, all whether controlled or uncontrolled or however caused, or any consequence of any of these.
- b. Loss caused by the nuclear hazard will not be considered loss caused by fire, explosion, or smoke, whether these perils are specifically named in or otherwise included within the Perils Insured Against.
- c. This policy does not apply to loss caused directly or indirectly by nuclear hazard, except that direct loss by fire resulting from the nuclear hazard is covered.

24. Recovered Property. If you or we recover any property for which we have made payment under this policy, you or we will notify the other of the recovery. At your option, the property will be returned to or retained by you or it will become our property. If the recovered property is returned to or retained by you, the loss payment will be adjusted based on the amount you received for the recovered property.

25. Volcanic Eruption Period. One or more volcanic eruptions that occur within a 72-hour period will be considered as one volcanic eruption.

AGREEMENT

We will provide the insurance described in this policy in return for the premium and compliance with all applicable provisions of this policy.

DEFINITIONS

In this policy, "you" and "your" refer to the "named insured" shown in the Declarations and the spouse if a resident of the same household. "We," "us" and "our" refer to the Company providing this insurance.

COVERAGES

This insurance applies to the Described Location, Coverages for which a Limit of Liability is shown and Perils Insured Against for which a Premium is stated.

COVERAGE A – Dwelling

We cover:

1. the dwelling on the Described Location shown in the Declarations, used principally for dwelling purposes, including structures attached to the dwelling;
2. materials and supplies located on or next to the Described Location used to construct, alter or repair the dwelling or other structures on the Described Location; and
3. if not otherwise covered in this policy, building equipment and outdoor equipment used for the service of and located on the Described Location.

This coverage does not apply to land, including land on which the dwelling is located.

COVERAGE B – Other Structures

We cover other structures on the Described Location, set apart from the dwelling by clear space. This includes structures connected to the dwelling by only a fence, utility line, or similar connection.

This coverage does not apply to land, including land on which the other structures are located.

We do not cover other structures:

1. used in whole or in part for commercial, manufacturing or farming purposes; or
2. rented or held for rental to any person not a tenant of the dwelling, unless used solely as a private garage.

COVERAGE C – Personal Property

We cover personal property, usual to the occupancy as a dwelling and owned or used by you or members of your family residing with you while it is on the Described Location. At your request, we will cover personal property owned by a guest or servant while the property is on the Described Location.

Property Not Covered. We do not cover:

1. accounts, bank notes, bills, bullion, coins, currency, deeds, evidences of debt, gold other than goldware, letters of credit, manuscripts, medals, money, notes other than bank notes, passports, personal records, platinum, securities, silver other than silverware, tickets and stamps;
2. animals, birds or fish;
3. aircraft and parts. Aircraft means any contrivance used or designed for flight, except model or hobby aircraft not used or designed to carry people or cargo;
4. motor vehicles or all other motorized land conveyances. This includes:
 - a. their equipment and accessories; or
 - b. any device or instrument for the transmitting, recording, receiving or reproduction of sound or pictures which is operated by power from the electrical system of motor vehicles or all other motorized land conveyances, including:
 - (1) accessories or antennas; or
 - (2) tapes, wires, records, discs or other media for use with any such device or instrument;while in or upon the vehicle or conveyance.

We do cover vehicles or conveyances not subject to motor vehicle registration which are:

- a. used to service the Described Location; or
 - b. designed for assisting the handicapped;
5. watercraft, other than rowboats and canoes;
6. data, including data stored in:
- a. books of account, drawings or other paper records; or
 - b. electronic data processing tapes, wires, records, discs or other software media.
- However, we do cover the cost of blank recording or storage media, and of pre-recorded computer programs available on the retail market;
7. credit cards or fund transfer cards.

If you remove personal property from the Described Location to a newly acquired principal residence, the Coverage C limit of liability will apply at each residence for the 30 days immediately after you begin to move the property there. This time period will not extend beyond the termination of this policy. Our liability is limited to the proportion of the limit of liability that the value at each residence bears to the total value of all personal property covered by this policy.

COVERAGE D – Fair Rental Value

If a loss to property described in Coverage A, B or C by a Peril Insured Against under this policy makes that part of the Described Location rented to others or held for rental by you unfit for its normal use, we cover its:

Fair Rental Value, meaning the fair rental value of that part of the Described Location rented to others or held for rental by you less any expenses that do not continue while that part of the Described Location rented or held for rental is not fit to live in.

Payment will be for the shortest time required to repair or replace that part of the Described Location rented or held for rental.

If a civil authority prohibits you from use of the Described Location as a result of direct damage to a neighboring location by a Peril Insured Against in this policy, we cover the Fair Rental Value loss for no more than two weeks.

The periods of time referenced above are not limited by the expiration of this policy.

We do not cover loss or expense due to cancellation of a lease or agreement.

COVERAGE E – Additional Living Expense

If a loss to property described in Coverage A, B or C by a Peril Insured Against under this policy makes the Described Location unfit for its normal use, we cover your:

Additional Living Expense, meaning any necessary increase in living expenses incurred by you so that your household can maintain its normal standard of living.

Payment will be for the shortest time required to repair or replace the Described Location or, if you permanently relocate, the shortest time required for your household to settle elsewhere.

If a civil authority prohibits you from use of the Described Location as a result of direct damage to a neighboring location by a Peril Insured Against in this policy, we cover the Additional Living Expense loss for no more than two weeks.

The periods of time referenced above are not limited by the expiration of this policy.

We do not cover loss or expense due to cancellation of a lease or agreement.

OTHER COVERAGES

1. **Other Structures.** You may use up to 10% of the Coverage A limit of liability for loss by a Peril Insured Against to other structures described in Coverage B.

Use of this coverage does not reduce the Coverage A limit of liability for the same loss.

2. **Debris Removal.** We will pay your reasonable expense for the removal of:

- a. debris of covered property if a Peril Insured Against causes the loss; or
- b. ash, dust or particles from a volcanic eruption that has caused direct loss to a building or property contained in a building.

Debris removal expense is included in the limit of liability applying to the damaged property.

3. **Improvements, Alterations and Additions.** If you are a tenant of the Described Location, you may use up to 10% of the Coverage C limit of liability for loss by a Peril Insured Against to improvements, alterations and additions, made or acquired at your expense, to that part of the Described Location used only by you.

Use of this coverage does not reduce the Coverage C limit of liability for the same loss.

4. **World-Wide Coverage.** You may use up to 10% of the Coverage C limit of liability for loss by a Peril Insured Against to property covered under Coverage C except rowboats and canoes, while anywhere in the world.

Use of this coverage reduces the Coverage C limit of liability for the same loss.

5. Rental Value and Additional Living Expense. You may use up to 10% of the Coverage A limit of liability for loss of both fair rental value as described in Coverage D and additional living expense as described in Coverage E.

Use of this coverage does not reduce the Coverage A limit of liability for the same loss.

6. Reasonable Repairs. In the event that covered property is damaged by an applicable Peril Insured Against, we will pay the reasonable cost incurred by you for necessary measures taken solely to protect against further damage. If the measures taken involve repair to other damaged property, we will pay for those measures only if that property is covered under this policy and the damage to that property is caused by an applicable Peril Insured Against.

This coverage:

- a. does not increase the limit of liability that applies to the covered property;
- b. does not relieve you of your duties, in case of a loss to covered property, as set forth in Condition 4.b.

7. Property Removed. We insure covered property against direct loss from any cause while being removed from a premises endangered by a Peril Insured Against and for no more than 30 days while removed.

This coverage does not change the limit of liability that applies to the property being removed.

8. Trees, Shrubs and Other Plants. We cover trees, shrubs, plants or lawns, on the Described Location for loss caused by the following Perils Insured Against: Fire or lightning, Explosion, Riot or civil commotion, Aircraft, Vehicles not owned or operated by you or a resident of the Described Location or Vandalism or malicious mischief, including damage during a burglary or attempted burglary, but not theft of property.

The limit of liability for this coverage will not be more than 5% of the Coverage A limit of liability, or more than \$500 for any one tree, shrub or plant. We do not cover property grown for commercial purposes.

This coverage is additional insurance.

9. Fire Department Service Charge. We will pay up to \$500 for your liability assumed by contract or agreement for fire department charges incurred when the fire department is called to save or protect covered property from a Peril Insured Against. We do not cover fire department service charges if the property is located within the limits of the city, municipality or protection district furnishing the fire department response.

This coverage is additional insurance. No deductible applies to this coverage.

10. Collapse. We insure for risk of direct physical loss to covered property involving collapse of a building or any part of a building caused only by one or more of the following:

- a. Perils Insured Against in Coverage C – Personal Property. These perils apply to covered building and personal property for loss insured by this Other Coverage;
- b. hidden decay;
- c. hidden insect or vermin damage;
- d. weight of contents, equipment, animals or people;
- e. weight of rain which collects on a roof;
- f. use of defective material or methods in construction, remodeling or renovation if the collapse occurs during the course of the construction, remodeling or renovation.

Loss to an awning, fence, patio, pavement, swimming pool, underground pipe, flue, drain, cesspool, septic tank, foundation, retaining wall, bulkhead, pier, wharf or dock is not included under items b, c, d, e and f unless the loss is a direct result of the collapse of a building.

Collapse does not include settling, cracking, shrinking, bulging or expansion.

This coverage does not increase the limit of liability applying to the damaged covered property.

11. Glass or Safety Glazing Material. We cover:

- a. the breakage of glass or safety glazing material which is part of a covered building, storm door or storm window; and
- b. damage to covered property by glass or safety glazing material which is part of a building, storm door or storm window.

This coverage does not include loss on the Described Location if the dwelling has been vacant for more than 30 consecutive days immediately before the loss. A dwelling being constructed is not considered vacant.

Loss for damage to glass will be settled on the basis of replacement with safety glazing materials when required by ordinance or law.

This coverage does not increase the limit of liability that applies to the damaged property.

PERILS INSURED AGAINST

COVERAGE A – DWELLING and COVERAGE B – OTHER STRUCTURES

We insure against risk of direct loss to property described in Coverages A and B only if that loss is a physical loss to property; however, we do not insure loss:

1. involving collapse, other than as provided in Other Coverages 10;
2. caused by:
 - a. freezing of a plumbing, heating, air conditioning or automatic fire protective sprinkler system or of a household appliance, or by discharge, leakage or overflow from within the system or appliance caused by freezing. This exclusion applies only while the dwelling is vacant, unoccupied or being constructed unless you have used reasonable care to:
 - (1) maintain heat in the building; or
 - (2) shut off the water supply and drain the system and appliances of water;
 - b. freezing, thawing, pressure or weight of water or ice, whether driven by wind or not, to a:
 - (1) fence, pavement, patio or swimming pool;
 - (2) foundation, retaining wall or bulkhead; or
 - (3) pier, wharf or dock;
 - c. theft of property not part of a covered building or structure;
 - d. theft in or to a dwelling or structure under construction;
 - e. wind, hail, ice, snow or sleet to:
 - (1) outdoor radio and television antennas and aerials including their lead-in wiring, masts or towers; or
 - (2) trees, shrubs, plants or lawns;
 - f. vandalism and malicious mischief, theft or attempted theft if the dwelling has been vacant for more than 30 consecutive days immediately before the loss. A dwelling being constructed is not considered vacant;
 - g. constant or repeated seepage or leakage of water or steam over a period of weeks, months or years from within a plumbing, heating, air conditioning or automatic fire protective sprinkler system or from within a household appliance;
 - h. (1) wear and tear, marring, deterioration;
(2) inherent vice, latent defect, mechanical breakdown;
(3) smog, rust or other corrosion, mold, wet or dry rot;

(4) smoke from agricultural smudging or industrial operations;

(5) discharge, dispersal, seepage, migration release or escape of pollutants.

Pollutants means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed;

(6) settling, shrinking, bulging or expansion, including resultant cracking, of pavements, patios, foundations, walls, floors, roofs or ceilings; or

(7) birds, vermin, rodents, insects or domestic animals.

If any of these cause water damage not otherwise excluded, from a plumbing, heating, air conditioning or automatic fire protective sprinkler system or household appliance, we cover loss caused by the water including the cost of tearing out and replacing any part of a building necessary to repair the system or appliance. We do not cover loss to the system or appliance from which this water escaped.

3. excluded under General Exclusions.

Under items 1 and 2, any ensuing loss to property described in Coverages A and B not excluded or excepted in this policy is covered.

COVERAGE C – PERSONAL PROPERTY

We insure for direct physical loss to the property described in Coverage C caused by a peril listed below unless the loss is excluded in the General Exclusions.

1. Fire or lightning.

2. Windstorm or hail.

This peril does not include loss to:

a. property contained in a building caused by rain, snow, sleet, sand or dust unless the direct force of wind or hail damages the building causing an opening in a roof or wall and the rain, snow, sleet, sand or dust enters through this opening;

b. canoes and rowboats; or

c. trees, shrubs or plants.

3. Explosion.

4. Riot or civil commotion.

5. Aircraft, including self-propelled missiles and spacecraft.

6. Vehicles.

7. **Smoke**, meaning sudden and accidental damage from smoke.

This peril does not include loss caused by smoke from agricultural smudging or industrial operations.

8. **Vandalism or malicious mischief.**

This peril does not include loss by pilferage, theft, burglary or larceny.

9. **Damage by Burglars**, meaning damage to covered property caused by Burglars.

This peril does not include:

- a. theft of property; or
- b. damage caused by burglars to property on the Described Location if the dwelling has been vacant for more than 30 consecutive days immediately before the damage occurs. A dwelling being constructed is not considered vacant.

10. **Falling Objects.**

This peril does not include loss to property contained in the building unless the roof or an outside wall of the building is first damaged by a falling object.

Damage to the falling object itself is not covered.

11. **Weight of ice, snow or sleet** which causes damage to property contained in the building.

12. **Accidental discharge or overflow of water or steam** from within a plumbing, heating, air conditioning or automatic fire protective sprinkler system or from within a household appliance.

This peril does not include loss:

- a. to the system or appliance from which the water or steam escaped;
- b. caused by or resulting from freezing except as provided in the peril of freezing below; or
- c. on the Described Location caused by accidental discharge or overflow which occurs off the Described Location.

In this peril, a plumbing system does not include a sump, sump pump or related equipment.

13. **Sudden and accidental tearing apart, cracking, burning or bulging** of a steam or hot water heating system, an air conditioning or automatic fire protective sprinkler system, or an appliance for heating water.

This peril does not include loss caused by or resulting from freezing except as provided in the peril of freezing below.

14. **Freezing** of a plumbing, heating, air conditioning or automatic fire protective sprinkler system or of a household appliance.

This peril does not include loss on the Described Location while the dwelling is unoccupied or being constructed, unless you have used reasonable care to:

- a. maintain heat in the building; or
- b. shut off the water supply and drain the system and appliances of water.

15. **Sudden and accidental damage from artificially generated electrical current.**

This peril does not include loss to a tube, transistor or similar electronic component.

16. **Volcanic Eruption** other than loss caused by earthquake, land shock waves or tremors.

GENERAL EXCLUSIONS

1. We do not insure for loss caused directly or indirectly by any of the following. Such loss is excluded regardless of any other cause or event contributing concurrently or in any sequence to the loss.

a. **Ordinance or Law**, meaning enforcement of any ordinance or law regulating the use, construction, repair, or demolition of a building or other structure, unless specifically provided under this policy.

b. **Earth Movement**, meaning earthquake including land shock waves or tremors before, during or after a volcanic eruption; landslide; mine subsidence; mudflow; earth sinking, rising or shifting; unless direct loss by:

- (1) fire;
- (2) explosion; or

(3) breakage of glass or safety glazing material which is part of a building, storm door or storm window;

ensues and then we will pay only for the ensuing loss.

c. **Water Damage**, meaning:

(1) flood, surface water, waves, tidal water, overflow of a body of water, or spray from any of these, whether or not driven by wind;

(2) water which backs up through sewers or drains or which overflows from a sump; or

(3) water below the surface of the ground, including water which exerts pressure on or seeps or leaks through a building, sidewalk, driveway, foundation, swimming pool or other structure.

Direct loss by fire or explosion resulting from water damage is covered.

- d. **Power Failure**, meaning the failure of power or other utility service if the failure takes place off the Described Location. But, if a Peril Insured Against ensues on the Described Location, we will pay only for that ensuing loss.
- e. **Neglect**, meaning your neglect to use all reasonable means to save and preserve property at and after the time of a loss.
- f. **War**, including undeclared war, civil war, insurrection, rebellion, revolution, warlike act by a military force or military personnel, destruction or seizure or use for a military purpose, and including any consequence of any of these. Discharge of a nuclear weapon will be deemed a warlike act even if accidental.
- g. **Nuclear Hazard**, to the extent set forth in the Nuclear Hazard Clause of the Conditions.
- h. **Intentional Loss**, meaning any loss arising out of any act committed:
 - (1) by or at the direction of you or any person or organization named as an additional insured; and
 - (2) with the intent to cause a loss.

- 2. We do not insure for loss to property described in Coverages A and B caused by any of the following. However, any ensuing loss to property described in Coverages A and B not excluded or excepted in this policy is covered.

- a. **Weather conditions**. However, this exclusion only applies if weather conditions contribute in any way with a cause or event excluded in paragraph 1. above to produce the loss;
- b. **Acts or decisions**, including the failure to act or decide, of any person, group, organization or governmental body;
- c. **Faulty, inadequate or defective**;
 - (1) planning, zoning, development, surveying, siting;
 - (2) design, specifications, workmanship, repair, construction, renovation, remodeling, grading, compaction;
 - (3) materials used in repair, construction, renovation or remodeling; or
 - (4) maintenance;of part or all of any property whether on or off the Described Location.

CONDITIONS

- 1. **Policy Period**. This policy applies only to loss which occurs during the policy period.
- 2. **Insurable Interest and Limit of Liability**. Even if more than one person has an insurable interest in the property covered, we will not be liable in any one loss:
 - a. for an amount greater than the interest of a person insured under this policy; or
 - b. for more than the applicable limit of liability.
- 3. **Concealment or Fraud**. The entire policy will be void if, whether before or after a loss, you have:
 - a. intentionally concealed or misrepresented any material fact or circumstance;
 - b. engaged in fraudulent conduct; or
 - c. made false statements;relating to this insurance.
- 4. **Your Duties After Loss**. In case of a loss to covered property, you must see that the following are done:
 - a. give prompt notice to us or our agent;
 - b. (1) protect the property from further damage;
 - (2) make reasonable and necessary repairs to protect the property; and
 - (3) keep an accurate record of repair expenses;
- c. prepare an inventory of damaged personal property showing the quantity, description, actual cash value and amount of loss. Attach all bills, receipts and related documents that justify the figures in the inventory;
- d. as often as we reasonably require:
 - (1) show the damaged property;
 - (2) provide us with records and documents we request and permit us to make copies; and
 - (3) submit to examination under oath, while not in the presence of any other named insured, and sign the same;
- e. send to us, within 60 days after our request, your signed, sworn proof of loss which sets forth, to the best of your knowledge and belief:
 - (1) the time and cause of loss;
 - (2) your interest and that of all others in the property involved and all liens on the property;
 - (3) other insurance which may cover the loss;
 - (4) changes in title or occupancy of the property during the term of the policy;

- (5) specifications of damaged buildings and detailed repair estimates;
 - (6) the inventory of damaged personal property described in 4c;
 - (7) receipts for additional living expenses incurred and records that support the fair rental value loss.
- 5. Loss Settlement.** Covered property losses are settled as follows:
- a. (1) Personal property;
 - (2) Awnings, carpeting, household appliances, outdoor antennas and outdoor equipment, whether or not attached to buildings; and
 - (3) Structures that are not buildings;

at actual cash value at the time of loss but not more than the amount required to repair or replace.
 - b. Buildings under Coverage A or B at replacement cost without deduction for depreciation, subject to the following:
 - (1) If, at the time of loss, the amount of insurance in this policy on the damaged building is 80% or more of the full replacement cost of the building immediately before the loss, we will pay the cost to repair or replace, after application of deductible and without deduction for depreciation, but not more than the least of the following amounts:
 - (a) the limit of liability under this policy that applies to the building;
 - (b) the replacement cost of that part of the building damaged for like construction and use on the same premises; or
 - (c) the necessary amount actually spent to repair or replace the damaged building.
 - (2) If, at the time of loss, the amount of insurance in this policy on the damaged building is less than 80% of the full replacement cost of the building immediately before the loss, we will pay the greater of the following amounts, but not more than the limit of liability under this policy that applies to the building:
 - (a) the actual cash value of that part of the building damaged; or
 - (b) that proportion of the cost to repair or replace, after application of deductible and without deduction for depreciation, that part of the building damaged, which the total amount of insurance in this policy on the damaged building bears to 80% of the replacement cost of the building.
- (3) To determine the amount of insurance required to equal 80% of the full replacement cost of the building immediately before the loss, do not include the value of:
 - (a) excavations, foundations, piers or any supports which are below the undersurface of the lowest basement floor;
 - (b) those supports in (a) above which are below the surface of the ground inside the foundation walls, if there is no basement; and
 - (c) underground flues, pipes, wiring and drains.
 - (4) We will pay no more than the actual cash value of the damage unless:
 - (a) actual repair or replacement is complete; or
 - (b) the cost to repair or replace the damage is both:
 - (i) less than 5% of the amount of insurance in this policy on the building; and
 - (ii) less than \$2500.
 - (5) You may disregard the replacement cost loss settlement provisions and make claim under this policy for loss or damage to buildings on an actual cash value basis. You may then make claim within 180 days after loss for any additional liability on a replacement cost basis.
- 6. Loss to a Pair or Set.** In case of loss to a pair or set we may elect to:
- a. repair or replace any part to restore the pair or set to its value before the loss; or
 - b. pay the difference between actual cash value of the property before and after the loss.
- 7. Glass Replacement.** Loss for damage to glass caused by a Peril Insured Against will be settled on the basis of replacement with safety glazing materials when required by ordinance or law.
- 8. Appraisal.** If you and we fail to agree on the amount of loss, either may demand an appraisal of the loss. In this event, each party will choose a competent appraiser within 20 days after receiving a written request from the other. The two appraisers will choose an umpire. If they cannot agree upon an umpire within 15 days, you or we may request that the choice be made by a judge of a court of record in the state where the Described Location is located. The appraisers will separately set the amount of loss. If the appraisers submit a written report of an agreement to us, the amount agreed upon will be the amount of loss. If they fail to agree, they will submit their differences to the umpire. A decision agreed to by any two will set the amount of loss.

Each party will:

- a. pay its own appraiser; and
- b. bear the other expenses of the appraisal and umpire equally.

9. Other Insurance. If property covered by this policy is also covered by other fire insurance, we will pay only the proportion of a loss caused by any peril insured against under this policy that the limit of liability applying under this policy bears to the total amount of fire insurance covering the property.

10. Subrogation. You may waive in writing before a loss all rights of recovery against any person. If not waived, we may require an assignment of rights of recovery for a loss to the extent that payment is made by us.

If an assignment is sought, the person insured must sign and deliver all related papers and cooperate with us.

11. Suit Against Us. No action can be brought unless the policy provisions have been complied with and the action is started within one year after the date of loss.

12. Our Option. If we give you written notice within 30 days after we receive your signed, sworn proof of loss, we may repair or replace any part of the damaged property with like property.

13. Loss Payment. We will adjust all losses with you. We will pay you unless some other person is named in the policy or is legally entitled to receive payment. Loss will be payable 60 days after we receive your proof of loss and:

- a. reach an agreement with you;
- b. there is an entry of a final judgment; or
- c. there is a filing of an appraisal award with us.

14. Abandonment of Property. We need not accept any property abandoned by you.

15. Mortgage Clause.

The word "mortgagee" includes trustee.

If a mortgagee is named in this policy, any loss payable under Coverage A or B will be paid to the mortgagee and you, as interests appear. If more than one mortgagee is named, the order of payment will be the same as the order of precedence of the mortgages.

If we deny your claim, that denial will not apply to a valid claim of the mortgagee, if the mortgagee:

- a. notifies us of any change in ownership, occupancy or substantial change in risk of which the mortgagee is aware;

- b. pays any premium due under this policy on demand if you have neglected to pay the premium; and
- c. submits a signed, sworn statement of loss within 60 days after receiving notice from us of your failure to do so. Policy conditions relating to Appraisal, Suit Against Us and Loss Payment apply to the mortgagee.

If we decide to cancel or not to renew this policy, the mortgagee will be notified at least 10 days before the date cancellation or nonrenewal takes effect.

If we pay the mortgagee for any loss and deny payment to you:

- a. we are subrogated to all the rights of the mortgagee granted under the mortgage on the property; or
- b. at our option, we may pay to the mortgagee the whole principal on the mortgage plus any accrued interest. In this event, we will receive a full assignment and transfer of the mortgage and all securities held as collateral to the mortgage debt.

Subrogation will not impair the right of the mortgagee to recover the full amount of the mortgagee's claim.

16. No Benefit to Bailee. We will not recognize any assignment or grant any coverage that benefits a person or organization holding, storing or moving property for a fee regardless of any other provision of this policy.

17. Cancellation.

- a. You may cancel this policy at any time by returning it to us or by letting us know in writing of the date cancellation is to take effect.
- b. We may cancel this policy only for the reasons stated below by letting you know in writing of the date cancellation takes effect. This cancellation notice may be delivered to you, or mailed to you at your mailing address shown in the Declarations.

Proof of mailing will be sufficient proof of notice.

- (1) When you have not paid the premium, we may cancel at any time by letting you know at least 10 days before the date cancellation takes effect.
- (2) When this policy has been in effect for less than 60 days and is not a renewal with us, we may cancel for any reason by letting you know at least 10 days before the date cancellation takes effect.

(3) When this policy has been in effect for 60 days or more, or at any time if it is a renewal with us, we may cancel:

- (a) if there has been a material misrepresentation of fact which if known to us would have caused us not to issue the policy; or
- (b) if the risk has changed substantially since the policy was issued.

This can be done by letting you know at least 30 days before the date cancellation takes effect.

(4) When this policy is written for a period of more than one year, we may cancel for any reason at anniversary by letting you know at least 30 days before the date cancellation takes effect.

- c. When this policy is cancelled, the premium for the period from the date of cancellation to the expiration date will be refunded pro rata.
- d. If the return premium is not refunded with the notice of cancellation or when this policy is returned to us, we will refund it within a reasonable time after the date cancellation takes effect.

18. Non-Renewal. We may elect not to renew this policy. We may do so by delivering to you, or mailing to you at your mailing address shown in the Declarations, written notice at least 30 days before the expiration date of this policy. Proof of mailing will be sufficient proof of notice.

19. Liberalization Clause. If we make a change which broadens coverage under this edition of our policy without additional premium charge, that change will automatically apply to your insurance as of the date we implement the change in your state, provided that this implementation date falls within 60 days prior to or during the policy period stated in the Declarations.

This Liberalization Clause does not apply to changes implemented through introduction of a subsequent edition of our policy.

20. Waiver or Change of Policy Provisions. A waiver or change of a provision of this policy must be in writing by us to be valid. Our request for an appraisal or examination will not waive any of our rights.

21. Assignment. Assignment of this policy will not be valid unless we give our written consent.

22. Death. If you die, we insure:

- a. your legal representatives but only with respect to the property of the deceased covered under the policy at the time of death;
- b. with respect to your property, the person having proper temporary custody of the property until appointment and qualification of a legal representative.

23. Nuclear Hazard Clause.

- a. "Nuclear Hazard" means any nuclear reaction, radiation or radioactive contamination, all whether controlled or uncontrolled or however caused, or any consequence of any of these.
- b. Loss caused by the nuclear hazard will not be considered loss caused by fire, explosion, or smoke, whether these perils are specifically named in or otherwise included within the Perils Insured Against.
- c. This policy does not apply to loss caused directly or indirectly by nuclear hazard, except that direct loss by fire resulting from the nuclear hazard is covered.

24. Recovered Property. If you or we recover any property for which we have made payment under this policy, you or we will notify the other of the recovery. At your option, the property will be returned to or retained by you or it will become our property. If the recovered property is returned to or retained by you, the loss payment will be adjusted based on the amount you received for the recovered property.

25. Volcanic Eruption Period. One or more volcanic eruptions that occur within a 72-hour period will be considered as one volcanic eruption.

POLICY NUMBER:

DWELLING
DP 03 12 05 94

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WINDSTORM OR HAIL PERCENTAGE DEDUCTIBLE

Described Location*	Windstorm or Hail Percentage Deductible*
---------------------	---

For the premium charged, we will pay only that part of the total of the loss that exceeds the windstorm or hail percentage deductible stated in this endorsement. This deductible applies in the event of direct physical loss to property covered under this policy caused directly or indirectly by windstorm or hail. Such deductible applies regardless of any other cause or event contributing concurrently or in any sequence to the loss. No other deductible provision in the policy applies to direct physical loss caused by windstorm or hail.

In determining the amount, if any, that we will pay for loss or damage, we will deduct an amount equal to the percentage, corresponding to the described location(s) stated above, of the limit of liability that applies to Coverage A, B, D, or E, whichever is greatest, in the policy to which this endorsement is attached.

*Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

ADDITIONAL LIVING EXPENSE
Form DP 00 01 Only

For an additional premium, we cover, for the limit of liability shown in this policy for this coverage, the necessary increase in living expense incurred by you so that your household can maintain its normal standard of living when a loss to property described in Coverages A, B or C by a Peril Insured Against in this policy makes the Described Location unfit for its normal use.

Payment will be for the shortest time required to repair or replace the Described Location or, if you permanently relocate, the shortest time required for your household to settle elsewhere.

If a civil authority prohibits you from use of the Described Location as a result of direct damage to a neighboring location by a Peril Insured Against in this policy, we cover the Additional Living Expense loss for a period not exceeding two weeks during which use is prohibited.

The periods of time referenced above are not limited by the expiration of this policy.

We do not cover loss or expense due to cancellation of a lease or agreement.

All other provisions of this policy apply.

POLICY NUMBER:

DWELLING
DP 04 17 06 94

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**TREES, SHRUBS AND OTHER PLANTS
FORM DP 00 01 ONLY**

For an additional premium, we provide the following coverage:

1. If the Declarations show that the peril of Fire applies to this policy, we cover trees, shrubs, plants or lawns on the Described Location for loss caused by the following Perils Insured Against as described in this policy:
 - a. Fire and lightning; and
 - b. Internal Explosion.
2. If the Declarations show that the Extended Coverage perils apply to this policy, we cover trees, shrubs, plants or lawns on the Described Location for loss caused by the following Extended Coverage perils as described in this policy:
 - a. Explosion (This peril replaces peril 1.b. above);
 - b. Riot or civil commotion;
 - c. Aircraft; and
 - d. Vehicles not owned or operated by you or a resident of the Described Location.

3. If the Declarations show that the Extended Coverage perils apply to this policy, the peril of Windstorm or Hail, as described in this policy:

Applies to this coverage .

(check one)*

Does not apply to this coverage .

4. If the Declarations show that the peril of Vandalism and Malicious Mischief applies to this policy, we cover trees, shrubs, plants or lawns on the Described Location for loss caused by the peril of Vandalism and Malicious Mischief as described in this policy.

We do not cover property grown for commercial purposes.

We will pay up to the limit of liability shown in the Declarations for this coverage. No more than \$500 of this limit will be available for any one tree, shrub or plant.

*Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

**WINDSTORM OR HAIL
BROAD FORM AND SPECIAL FORM**

For an additional premium, we insure for loss by windstorm or hail to plants, shrubs and trees (except those grown for commercial purposes).

We will not be liable for more than \$500 on any one plant, shrub or tree, but not to exceed 5% of the Coverage A – Limit of Liability. Use of this coverage is included in the Coverage A Limit of Liability.

All other provisions of this policy apply.

PERMITTED INCIDENTAL OCCUPANCIES

Occupancy (Describe)* _____

For an additional premium, under Coverage C – Personal Property we cover personal property pertaining to the use of the dwelling for the occupancy described above for loss caused by a Peril Insured Against on the Described Location. We will not be liable in any one loss for more than the limit of liability shown in this policy for this coverage.

* Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

PREMIUM SHARING TWO OR MORE POLICIES

For the premium charged, you agree to maintain the limit of liability specified in this endorsement for each Described Location in this policy. We will pay only the proportion of a loss caused by a Peril Insured Against under this policy that the limit of liability that applies to the Described Location under this policy bears to the total limit of liability that you agreed to carry for the Described Location but not to exceed the limits of liability shown in the Declarations.

Condition 9. Other Insurance does not apply to the Described Location referred to in this endorsement.

The total of the limits of liability you agreed to carry for all insurance including this policy is:

	<u>Total Limit of Liability*</u>
Described Location 1	\$ _____
Described Location 2	\$ _____
Described Location 3	\$ _____
Described Location 4	\$ _____

*Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

IMPROVEMENTS, ALTERATIONS AND ADDITIONS

For an additional premium, we cover, for the limit of liability shown in this policy for this coverage, Improvements, Alterations and Additions made or acquired at your expense to your part of the Described Location whether rented to others or not.

All other provisions of this policy apply.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WINDSTORM OR HAIL EXCLUSION

For a premium credit, we do not insure for loss caused directly or indirectly from windstorm or hail. Such loss is excluded regardless of any other cause or event contributing concurrently or in any sequence to the loss.

Direct loss by fire or explosion resulting from windstorm or hail damage is covered.

All other provisions of this policy apply.

VANDALISM AND MALICIOUS MISCHIEF VACANCY

For an additional premium, the thirty day permitted period of vacancy in the vandalism and malicious mischief provisions in this policy is extended for an additional * days; however, it is a condition of the Vandalism and Malicious Mischief Coverage that we will not be liable for loss if the described building is vacant beyond

*

*Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

ADDITIONAL INSURED
Described Location

Name and Address of Person or Organization*

Interest*

Described Location*
(Number, Street, Apartment, Town or City, County, State, ZIP Code)

The person or organization named above is considered an insured in this policy with respect to Coverage A – Dwelling and Coverage B – Other Structures at the Described Location listed above.

If we decide to cancel or not to renew this policy, the party named above will be notified in writing.

*Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

POLICY NUMBER:

DWELLING
DP 04 63 06 94

LOSS ASSESSMENT PROPERTY COVERAGE

For an additional premium, we agree to pay your share of loss assessment charged during the policy period against you by a corporation or association of property owners up to the limit of liability shown below, when the assessment is made as a result of direct loss to the property, owned by all members collectively, caused by a Peril Insured Against listed in the policy other than:

- a. Earthquake; or
- b. Land shock waves or tremors, which occur before, during or after a volcanic eruption.

The following units are covered:

Location of Unit*	Limit of Liability*
-------------------	---------------------

SPECIAL LIMIT – We will not pay more than \$1,000 of your assessment per unit that results from a deductible in the insurance purchased by a corporation or association of property owners.

DEDUCTIBLE – We will pay only that part of your assessment per unit that exceeds \$250. No other deductible applies to this coverage.

*Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

SPECIAL COVERAGE

For an additional premium, the Perils Insured Against listed below apply to either of the following coverages, if provided in this policy:

- a. Improvements, Alterations and Additions;
- b. Unit-Owners Building Items.

Perils Insured Against

We insure against risks of direct loss to the property described above only if that loss is a physical loss to property; however, we do not insure loss:

1. involving collapse, other than as provided in Other Coverages – Collapse;
 2. caused by:
 - a. freezing of a plumbing, heating, air conditioning or automatic fire protective sprinkler system or of a household appliance, or by discharge, leakage or overflow from within the system or appliance caused by freezing. This exclusion applies only while the dwelling is vacant, unoccupied or being constructed, unless you have used reasonable care to:
 - (1) maintain heat in the building; or
 - (2) shut off the water supply and drain the system and appliances of water;
 - b. freezing, thawing, pressure or weight of water or ice, whether driven by wind or not, to a:
 - (1) fence, pavement, patio or swimming pool;
 - (2) foundation, retaining wall or bulkhead; or
 - (3) pier, wharf or dock;
 - c. theft of any property which is not actually part of any building or structure covered;
 - d. theft in or to a dwelling or structure under construction;
 - e. wind, hail, ice, snow or sleet to:
 - (1) outdoor radio and television antennas and aerials including their lead-in wiring, masts or towers; or
 - (2) trees, shrubs, plants or lawns;
 - f. vandalism and malicious mischief, theft or attempted theft if the dwelling has been vacant for more than 30 consecutive days immediately before the loss. A dwelling being constructed is not considered vacant;
 - g. constant or repeated seepage or leakage of water or steam over a period of weeks, months or years from within a plumbing, heating, air conditioning or automatic fire protective sprinkler system or from within a household appliance;
 - h.
 - (1) wear and tear, marring, deterioration;
 - (2) inherent vice, latent defect, mechanical breakdown;
 - (3) smog, rust or other corrosion, mold, wet or dry rot;
 - (4) smoke from agricultural smudging or industrial operations;
 - (5) discharge, dispersal, seepage, migration release or escape of pollutants.
Pollutants means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed;
 - (6) settling, shrinking, bulging or expansion, including resultant cracking, of pavements, patios, foundations, walls, floors, roofs or ceilings; or
 - (7) birds, vermin, rodents, insects or domestic animals.

If any of these cause water damage not otherwise excluded, from a plumbing, heating, air conditioning or automatic fire protective sprinkler system or household appliance, we cover loss caused by the water including the cost of tearing out and replacing any part of a building necessary to repair the system or appliance.

We do not cover loss to the system or appliance from which this water escaped.
3. excluded under General Exclusions.
- Under items 1 and 2, any ensuing loss not excluded or excepted in this policy is covered.

The following exclusions are added to the General Exclusions:

We do not insure for loss to property described as Improvements, Alterations and Additions or Unit-Owners Building Items caused by any of the following. However, any ensuing loss not excluded or excepted in this policy is covered.

1. **Weather conditions.** However, this exclusion only applies if weather conditions contribute in any way with a cause or event excluded in the General Exclusions, other than exclusions 2. and 3. below, to produce the loss;
2. **Acts or decisions,** including the failure to act or decide, of any person, group, organization or governmental body;

3. Faulty, inadequate or defective:

- a. planning, zoning, development, surveying, siting;
 - b. design, specifications, workmanship, repair, construction, renovation, remodeling, grading, compaction;
 - c. materials used in repair, construction, renovation or remodeling; or
 - d. maintenance;
- of part or all of any property whether on or off the Described Location.

All other provisions of this policy apply.

LOSS ASSESSMENT COVERAGE FOR EARTHQUAKE

For an additional premium, we agree to pay your share of loss assessment charged during the policy period against you by a corporation or association of property owners, up to the limit of liability shown below, when the assessment is made as a result of direct loss to the property, owned by all members collectively, caused by earthquake including land shock waves or tremors before, during or after a volcanic eruption.

1. One or more earthquake shocks that occur within a seventy-two hour period constitute a single earthquake.
2. The following deductible applies to your share of each assessment made for each loss caused by earthquake. No other deductible applies to this coverage.

We will pay only that part of your assessment which is more than %* of the limit of liability shown below. This deductible amount will not be less than \$250 in any one assessment.

SPECIAL EXCLUSIONS

1. We do not cover loss assessments charged against you or a corporation or association of property owners by any governmental body.
2. We do not cover any assessment made as a result of loss resulting directly or indirectly from flood of any nature or tidal wave, whether caused by, resulting from, contributed to or aggravated by earthquake.

The **Earth Movement** exclusion in this policy does not apply to loss caused by earthquake including land shock waves or tremors before, during or after a volcanic eruption.

The following units are covered:

Location of Unit*	Limit of Liability*
-------------------	---------------------

*Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

EARTHQUAKE

- 1. For an additional premium, we insure for direct physical loss to property covered under Coverages A, B or C caused by earthquake including land shock waves or tremors before, during or after a volcanic eruption.

One or more earthquake shocks that occur within a seventy-two hour period shall constitute a single earthquake.

- 2. **Special Deductible**

The following deductible provision replaces any other deductible provision in this policy with respect to loss covered under this endorsement:

We will pay only that part of the total of the loss for all Property Coverages, except Coverage D – Fair Rental Value, Coverage E – Additional Living Expenses and the Other Coverages, that exceeds the earthquake deductible stated in this endorsement.

In determining the amount, if any, that we will pay for loss or damage, we will deduct an amount equal to ____%* of the limit of liability that applies to Coverage A, B or C, whichever is greatest, in the policy to which this endorsement is attached.

The total deductible amount will not be less than \$250.

- 3. **Special Exclusions**

We do not cover loss resulting directly or indirectly from flood of any nature or tidal wave, whether caused by, resulting from, contributed to or aggravated by earthquake.

The following exclusion applies

*

does not apply

We do not cover loss to exterior masonry veneer. The value of exterior veneer will be deducted before applying the deductible clause. For the purpose of this exclusion, stucco is not considered masonry veneer.

This coverage does not increase the limits of liability stated in this policy and does not include the cost of filling land.

The **Earth Movement** exclusion in this policy does not apply to loss caused by earthquake including land shock waves or tremors before, during or after a volcanic eruption.

* Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

POLICY NUMBER:

**DWELLING
DP 04 71 06 94**

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ORDINANCE OR LAW COVERAGE

**ORDINANCE OR LAW – INCREASED AMOUNT OF COVERAGE
FORMS DP 00 02 AND DP 00 03 ONLY**

For the premium charged, if you are an owner of a Described Location, the percentage applied to the Coverage A, Coverage B, or Unit-Owner Building Items limit of liability at each Described Location, or if you are a tenant of a Described Location, the percentage applied to the Improvements, Alterations and Additions limit of liability at each Described Location, under Other Coverage 12. Ordinance or Law, is increased from 10% to the percentage shown below.

New Total Percentage %*

* Entry may be left blank if shown elsewhere in the policy for this coverage.

All other provisions of this policy apply.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ORDINANCE OR LAW COVERAGE
FORM DP 00 01 ONLY**

When you are a tenant of a Described Location covered under this policy, the words 'covered building' used below, refer to property at such a Described Location covered under Other Coverage 3. Improvements, Alterations and Additions.

1. For the premium charged, the amount of ordinance or law coverage determined in 2. or 3. below will apply with respect to the increased costs you incur due to the enforcement of any ordinance or law which requires or regulates:
 - a. The construction, demolition, remodeling, renovation or repair of that part of a covered building or other structure damaged by a Peril Insured Against;
 - b. The demolition and reconstruction of the undamaged part of a covered building or other structure, when that building or other structure must be totally demolished because of damage by a Peril Insured Against to another part of that covered building or other structure; or
 - c. The remodeling, removal or replacement of the portion of the undamaged part of a covered building or other structure necessary to complete the remodeling, repair or replacement of that part of the covered building or other structure damaged by a Peril Insured Against.
2. If you are an owner of a Described Location, and that location:
 - a. Is insured for Coverage A or Unit-Owner Building Items, you may use up to ___%* of the limit of liability that applies to Coverage A or Unit-Owner Building Items at each Described Location; or
 - b. Is not insured for Coverage A or Unit-Owner Building Items, you may use up to ___%* of the total limit of liability that applies to Coverage B at each Described Location.
3. If you are a tenant of a Described Location, you may use up to ___%* of the amount of coverage that applies to Improvements, Alterations and Additions at each Described Location.
4. You may use all or part of this ordinance or law coverage to pay for the increased costs you incur to remove debris resulting from the construction, demolition, remodeling, renovation, repair or replacement of property as stated in 1. above.
5. We do not cover:
 - a. The loss in value to any covered building or other structure due to the requirements of any ordinance or law; or
 - b. The costs to comply with any ordinance or law which requires you or others to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, pollutants on any covered building or other structure.

Pollutants means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

This coverage is additional insurance.

* Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

THIS CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ACTUAL CASH VALUE LOSS SETTLEMENT

CONDITIONS

For the premium charged, Item **5. Loss Settlement** is deleted and replaced by the following:

- 5. Loss Settlement.** Covered property losses shall be settled at actual cash value at the time of loss but shall not be settled at more than the amount required to repair or replace.

All other provisions of this policy apply.

SINKHOLE COLLAPSE

For an additional premium, we insure for direct physical loss to covered property caused by Sinkhole Collapse.

Sinkhole Collapse means actual physical damage arising out of, or caused by, sudden settlement or collapse of the earth supporting such property and only when such settlement or collapse results from subterranean voids created by the action of water on limestone or similar rock formations.

The **Earth Movement** exclusion in this policy does not apply to Sinkhole Collapse.

All other provisions of this policy apply.

DWELLING UNDER CONSTRUCTION

BUILDERS' RISK

The insurance applies only to the dwelling or structure under Coverage A while under construction.

PREMIUM

The premium is based on an average amount of insurance during construction.

AMOUNT OF INSURANCE

The limit of liability stated in the declarations for Coverage A is provisional. The actual amount of insurance on any date while the policy is in force will be a percentage of the provisional amount. The percentage will be the proportion that the actual value of the property bears to the value at the date of completion.

OCCUPANCY

You will advise us when construction is completed for our consent to occupy the dwelling and for adjustment of premium. Occupancy of the building under Coverage A as a dwelling is permitted for 30 days after completion.

POLICY PROVISIONS

All other provisions of this policy apply.

UNIT-OWNERS COVERAGE

Limit of Liability* \$

For an additional premium, the following coverage is added for the limit of liability shown above.

Unit-Owners Building Items

We cover for direct physical loss caused by the Perils Insured Against:

- a. the alterations, appliances, fixtures and improvements which are part of the building contained within your unit;
- b. items of real property which pertain exclusively to your unit;
- c. property which is your insurance responsibility under a corporation or association of property owners agreement; or
- d. structures owned solely by you, other than the Described Location, on the premises of the Described Location. However, we do not cover structures:
 - (1) used in whole or in part for commercial, manufacturing or farming purposes; or
 - (2) rented or held for rental to any person not a tenant of the Described Location, unless used solely as a private garage.

This coverage does not apply to land, including land on which the Described Location, real property or structures are located.

The following conditions apply only to the coverage provided by this endorsement:

Other Insurance

If at the time of loss there is other insurance in the name of a corporation or association of property owners covering the same property covered by this policy, this insurance will be excess over the amount recoverable under such other insurance.

Loss Settlement

Unit-Owners Building Items losses are settled as follows:

- a. If the damage is repaired or replaced within a reasonable time, at the actual cost to repair or replace;
- b. if the damage is not repaired or replaced within a reasonable time, at actual cash value but not exceeding the amount required to repair or replace.

Fair Rental Value

The following sentence is added to the Fair Rental Value Coverage in all policies covering Fair Rental Value:

We also cover the fair rental value if a loss to the building containing the property described in this policy by a Peril Insured Against under this policy makes that part of the Described Location rented to others or held for rental by you unfit for its normal use.

Additional Living Expense

The following sentence is added to the Additional Living Expense Coverage in all policies covering Additional Living Expense:

We also cover the necessary increase in living expense incurred by you so that your household can maintain its normal standard of living if a loss to the building containing the property described in this policy by a Peril Insured Against under this policy makes the Described Location unfit for its normal use.

*Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

AUTOMATIC INCREASE IN INSURANCE – NORTH CAROLINA

For an additional premium, the limits of liability for Coverages A, B and C will be increased annually by ___%*, applied pro rata during the policy period.

*Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

SPOUSE ACCESS – NORTH CAROLINA

CONDITIONS

The following Condition is added:

SPOUSE ACCESS

The named insured and we agree that the named insured and resident spouse are customers for purposes of state and federal privacy laws. The resident spouse will have access to the same information available to the named insured.

The named insured may notify us that he/she no longer agrees that the resident spouse shall be treated as a customer for purposes of state and federal privacy laws, and we will not permit the resident spouse to access policy information.

POLICY NUMBER:

DWELLING
DP 32 19 07 92

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WINDSTORM OR HAIL
MISCELLANEOUS PROPERTIES
NORTH CAROLINA

For an additional premium, we cover the following property for direct physical loss caused by windstorm or hail for the limit of liability as indicated below:

Description of Property*	Limit of Liability*
1.	\$

* Entries may be left blank if shown elsewhere in this policy for this coverage.

All other provisions of this policy apply.

DP 32 19 07 92

Copyright, North Carolina Rate Bureau, 1992

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

SPECIAL PROVISIONS – NORTH CAROLINA

DEFINITIONS

The following definition is added:

"Fungi" means any type or form of fungus, including mold or mildew and any mycotoxins, spores, scents or by-products produced or released by fungi.

OTHER COVERAGES

11. In Forms DP 00 02 and DP 00 03 Glass or Safety Glazing Material is deleted and replaced by the following:

11. Glass Or Safety Glazing Material

a. We cover:

- (1) The breakage of glass or safety glazing material which is part of a covered building, storm door or storm window;
- (2) The breakage, caused directly by Earth Movement, of glass or safety glazing material which is part of a covered building, storm door or storm window; and
- (3) The direct physical loss to covered property caused solely by the pieces, fragments or splinters of broken glass or safety glazing material which is part of a building, storm door or storm window.

b. This coverage does not include loss:

- (1) To covered property which results because the glass or safety glazing material has been broken, except as provided in a.(3) above; or
- (2) On the Described Location if the dwelling has been vacant for more than 30 consecutive days immediately before the loss, except when the breakage results directly from Earth Movement as provided for in a.(2) above. A dwelling being constructed is not considered vacant.

Loss to glass covered under this Other Coverage 11. will be settled on the basis of replacement with safety glazing materials when required by ordinance or law.

This coverage does not increase the limit of liability that applies to the damaged property.

The following Other Coverage is added to all forms except DP 00 01. When you are a tenant of a Described Location covered under this policy, the words 'covered building' used below, refer to property at such a Described Location covered under Other Coverage 3. Improvements, Alteration And Additions.

12. Ordinance Or Law

a. The Ordinance Or Law limit of liability determined in b. or c. below will apply with respect to the increased costs you incur due to the enforcement of any ordinance or law which requires or regulates:

- (1) The construction, demolition, remodeling, renovation or repair of that part of a covered building or other structure damaged by a Peril Insured Against;
- (2) The demolition and reconstruction of the undamaged part of a covered building or other structure, when that building or other structure must be totally demolished because of damage by a Peril Insured Against to another part of that covered building or other structure; or
- (3) The remodeling, removal or replacement of the portion of the undamaged part of a covered building or other structure necessary to complete the remodeling, repair or replacement of that part of the covered building or other structure damaged by a Peril Insured Against.

b. If you are an owner of a Described Location, and that location:

- (1) Is insured for Coverage A or Unit-Owner Building Items, you may use up to 10% of the limit of liability that applies to Coverage A or Unit-Owner Building Items at each Described Location; or
- (2) Is not insured for Coverage A or Unit-Owners Building Items, you may use up 10% of the total limit of liability that applies to Coverage B at each Described Location.

c. If you are a tenant of a Described Location, you may use up to 10% of the limit of liability that applies to Improvements, Alterations And Additions at each Described Location.

d. You may use all or part of this Ordinance Or Law Coverage to pay for the increased costs you incur to remove debris resulting from the construction, demolition, remodeling, renovation, repair or replacement of property as stated in a. above.

e. We do not cover:

- (1) The loss in value to any covered building or other structure due to the requirements of any ordinance or law; or
- (2) The costs to comply with any ordinance or law which requires you or others to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, pollutants on any covered building or other structure.

Pollutants means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

This coverage is additional insurance.

The following **Other Coverage** is added to all forms:

13. "Fungi", Wet Or Dry Rot, Or Bacteria

a. We will pay up to a total of \$5000 for:

- (1) Direct physical loss to property covered under Coverage A – Dwelling, Coverage B – Other Structures and Coverage C – Personal Property caused by, resulting from, or consisting of "fungi", wet or dry rot, or bacteria if the direct result of a Peril Insured Against; and
- (2) Necessary increase in costs which you incur to maintain your normal standard of living when the Described Location is uninhabitable due to a loss caused by, resulting from, or consisting of "fungi", wet or dry rot, or bacteria which is the direct result of a Peril Insured Against.

The coverage provided above is the only coverage under Coverage A – Dwelling, Coverage B – Other Structures, Coverage C – Personal Property, and if provided in this policy, Coverage D – Fair Rental Value and Coverage E – Additional Living Expenses, for damage or loss caused by, resulting from, or consisting of "fungi", wet or dry rot, or bacteria caused directly or indirectly regardless of any other cause or event contributing concurrently or in any sequence.

b. The \$5000 limit is the most we will pay for the cost:

- (1) To remove "fungi", wet or dry rot, or bacteria from covered property;
- (2) To tear out and replace any part of the building or other covered property as needed to gain access to the "fungi", wet or dry rot, or bacteria; and
- (3) Of any testing of air or property to confirm the absence, presence or level of "fungi", wet or dry rot, or bacteria whether performed prior to, during or after removal, repair, restoration or replacement. The cost of such testing will be provided only to the extent that there is a reason to believe that there is the presence of "fungi", wet or dry rot, or bacteria.

The coverage provided above applies only when such loss, costs or expenses are the result of a Peril Insured Against that occurs during the policy period and only if all reasonable means were used to save and protect the property from further damage at or after the time of the occurrence of that Peril Insured Against.

If there is covered loss or damage to covered property, not caused, in whole or in part, by "fungi", wet or dry rot, or bacteria, loss payment will not be limited by the terms of this Other Coverage, except to the extent that "fungi", wet or dry rot, or bacteria causes an increase in the loss. Any such increase in the loss will be subject to the terms of this Other Coverage.

This is additional insurance and is the most we will pay for the total of all loss, costs or expenses payable under this Other Coverage regardless of the number of locations insured or the number of claims made. No deductible applies to this coverage.

(This is Other Coverage 9. in Form DP 00 01).

PERILS INSURED AGAINST

Basic Coverage Form DP 00 01 and Broad Coverage Form DP 00 02 only.

Under **2. Windstorm Or Hail**, Paragraph b. is deleted and replaced by the following:

- b. To the following property when outside of the building, unless specifically shown on Endorsement DP 32 19 or the Declarations Page:
- (1) Signs or cloth awnings, including their supports;
 - (2) Radio or television antennas or aerials, including their lead-in wiring, masts or towers;

- (3) Swimming pools;
- (4) Screens, including their supports, around a swimming pool, patio or other areas;
- (5) Fences, property line and similar walls, including seawalls;
- (6) Bathhouses, cabanas, greenhouses, hot-houses, pergolas, slathouses, trellises;
- (7) Outdoor equipment used to service the Described Location;
- (8) Structures located over water, whether or not permanently attached to the ground, including the property in or on the structure; or

Basic Coverage Form DP 00 01 only.

Under 2. **Windstorm Or Hail**, the following paragraph is added:

- c. Caused by frost or cold weather, or ice (other than hail), snow or sleet, whether driven by wind or not.

Broad Coverage Form DP 00 02 only.

Under 2. **Windstorm Or Hail**, the following paragraphs are added:

- c. To lawns, plants, shrubs or trees; or
- d. Caused by frost or cold weather, or ice (other than hail), snow or sleet, whether driven by wind or not.

Special Coverage Form DP 00 03 only.

Under Coverage C – Personal Property, 2. **Windstorm or Hail** is deleted and replaced by the following:

2. Windstorm Or Hail

This peril does not include loss:

- a. To property contained in a building caused by rain, snow, sleet, sand or dust unless the direct force of wind or hail damages the building causing an opening in a roof or wall and the rain, snow, sleet, sand or dust enters through this opening;
- b. To plants, shrubs or trees; or
- c. Caused by frost or cold weather, or ice (other than hail), snow or sleet, whether driven by wind or not.

In Form DP 00 03, under Coverage A – Dwelling and Coverage B – Other Structure and in Endorsement DP 04 65, under Perils Insured Against, Item 2.h.(3) is deleted and replaced by the following:

- (3) Smog, rust, or other corrosion;

GENERAL EXCLUSIONS

Basic Coverage Form DP 00 01, Broad Coverage Form DP 00 02 and Special Coverage Form DP 00 03.

1. **Ordinance or Law** is deleted and replaced by the following:

1. Ordinance Or Law, meaning any ordinance or law:

- a. Requiring or regulating the construction, demolition, remodeling, renovation or repair of property, including removal of any resulting debris. This Exclusion 1.a. in Form DP 00 02, Exclusion A.1.a. in Form DP 00 01 and Exclusion 1.a.(1) in Form DP 00 03, does not apply to the amount of coverage that may be provided under Other Coverages, Glass Or Safety Glazing Material or Ordinance Or Law;
- b. The requirements of which result in a loss in value to property; or
- c. Requiring you or others to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of pollutants.

Pollutants means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

This exclusion applies whether or not the property has been physically damaged.

(This is Exclusion A.1. in Form DP 00 01 and Exclusion 1.a. in Form DP 00 03).

2. For all Forms other than DP 00 01, **Earth Movement** is deleted and replaced by the following:

2. Earth Movement, meaning earthquake, including land shock waves or tremors before, during or after a volcanic eruption; landslide; mine subsidence; mudflow; earth sinking, rising or shifting; unless direct loss by:

- a. Fire; or
- b. Explosion;

ensues and then we will pay only for the ensuing loss.

(This is Exclusion 1.b. in Form DP 00 03).

4. **Power Failure** is deleted and replaced by the following:

4. Power Failure, meaning the failure of power or other utility service if the failure takes place off the Described Location. But if the failure of power or other utility service results in a loss, from a Peril Insured Against on the Described Location, we will pay for the loss or damage caused by that Peril Insured Against.

(This is Exclusion 1.d. in Form DP 00 03).

Basic Coverage Form DP 00 01 only.

Exclusion B. is deleted and replaced by the following:

- B. We do not cover loss to lawns, plants, shrubs or trees.

Special Coverage Form DP 00 03 only.

The following subparagraph is added to Paragraph 1.:

- i. Windstorm or hail to the following property when outside of the building unless specifically shown on Endorsement DP 32 19 or the Declarations Page:
- (1) Signs or cloth awnings, including their supports;
 - (2) Swimming pools;
 - (3) Screens, including their supports, around a swimming pool, patio or other areas;
 - (4) Fences, property line and similar walls, including seawalls;
 - (5) Bathhouses, cabanas, greenhouses, hot-houses, pergolas, slathouses, trellises;
 - (6) Outdoor equipment used to service the Described Location; or
 - (7) Structures located over water, whether or not permanently attached to the ground, including the property in or on the structure.

Basic Coverage Form DP 00 01, Broad Coverage Form DP 00 02 and Special Coverage Form DP 00 03.

8. **Intentional Loss** is deleted and replaced by the following:

8. Intentional Loss

We do not provide coverage for a person insured under this policy who commits or directs an act with the intent to cause a loss.

(This is Item 1.h. in Form DP 00 03.)

The following Exclusion is added:

9. **"Fungi", Wet Or Dry Rot, Or Bacteria**, meaning the presence, growth, proliferation, spread or any activity of "fungi", wet or dry rot, or bacteria other than as provided in **Other Coverage**, "Fungi", Wet Or Dry Rot, Or Bacteria.

(This is **General Exclusion 1.(i)** in Form DP 00 03).

CONDITIONS

3. **Concealment or Fraud** is deleted and replaced by the following:

3. Concealment Or Fraud

With respect to all persons insured under this policy, we provide no coverage for loss if, whether before or after a loss, one or more persons insured under this policy have:

- a. Intentionally concealed or misrepresented any material fact or circumstance;
 - b. Engaged in fraudulent conduct; or
 - c. Made false statements;
- relating to this insurance.

Under 4. **Your Duties After Loss**, Paragraph d.(3) is deleted and replaced by the following:

- (3) Submit to examination under oath, while not in the presence of any other insured under the policy, and sign same;

Broad Coverage Form DP 00 02 and Special Coverage Form DP 00 03 only.

5. Loss Settlement

Paragraph b.(1)(c) is deleted and replaced by the following:

- (c) The necessary amount actually spent to repair or replace the damaged building, on the premises described in the policy, or some other location within the State of North Carolina.

Basic Coverage Form DP 00 01, Broad Coverage Form DP 00 02 and Special Coverage Form DP 00 03.

8. **Appraisal** is deleted and replaced by the following:

8. Appraisal

If you and we fail to agree on the value or amount of any item or loss, either may demand an appraisal of such item or loss. In this event, each party will choose a competent and disinterested appraiser within 20 days after receiving a written request from the other. The two appraisers will choose a competent and impartial umpire. If they cannot agree upon an umpire within 15 days, you or we may request that a choice be made by a judge of a court of record in the state where the dwelling on the Described Location shown in the Declarations is located. The appraisers will separately set the amount of loss. If the appraisers submit a written report of an agreement to us, the amount agreed upon will be the amount of loss. If they fail to agree, they will submit their differences to the umpire. A decision agreed to by any two will set the amount of loss. Each party will:

a. Pay its own appraiser: and

- b. Bear the other expenses of the appraisal and umpire equally.

In no event will an appraisal be used for the purpose of interpreting any policy provision, determining causation or determining whether any item or loss is covered under this policy. If there is an appraisal, we still retain the right to deny the claim.

11. Suit Against Us is deleted and replaced by the following:

11. Suit Against Us

No action can be brought unless the policy provisions have been complied with and the action is started within three years after the date of loss.

13. Loss Payment is deleted and replaced by the following:

13. Loss Payment

We will adjust all losses with you. We will pay you unless some other person is named in the policy or is legally entitled to receive payment. We will pay within 60 days after the amount is finally determined.

This amount may be determined by:

- a. Reaching an agreement with you;
- b. Entry of a final judgment; or
- c. The filing of an appraisal award with us.

The following Condition is added and applies to all risks located in Protection Class 9, 9E, 9S or 10 in the State of North Carolina:

26. Vacancy And/Or Unoccupancy (Unprotected Dwellings)

- a. Coverage is extended for the described dwelling while it is vacant for not more than 60 consecutive days immediately before the loss; or unoccupied for not more than 90 consecutive days immediately before the loss.
- b. If the vacancy or unoccupancy exceeds the respective period stated above, coverage must be extended for an additional period of vacancy and/or unoccupancy by use of Endorsement **DP 32 52**, otherwise all coverage on such dwelling shall be suspended during the period of vacancy or unoccupancy.

- c. "Unoccupied" means the dwelling is entirely furnished but with personal habitants temporarily absent, provided the dwelling is secured against intrusion during this period; except as otherwise provided in this policy for certain specified perils.

- d. A building being constructed shall not be considered vacant.

The following Condition is added to Basic Coverage Form **DP 00 01**, Broad Coverage Form **DP 00 02** and Special Coverage Form **DP 00 03**:

27. Choice Of Law

This policy is issued in accordance with the laws of North Carolina and covers property or risks principally located in North Carolina. Any and all claims or disputes in any way related to this policy shall be governed by the laws of North Carolina.

SPECIAL CONDITIONS

When this policy insures real property of a condominium association, the following Provisions (1. through 3.) apply:

- 1. Under **Conditions**, Item **9. Other Insurance** is deleted and replaced by the following:

9. Other Insurance

If at the time of loss there is other insurance, in the name of a unit-owner, covering the same property covered by this policy, this policy shall provide primary insurance.

- 2. Under **Conditions**, Item **10. Subrogation**, the following sentence is added:

However, we waive any rights of recovery against a unit-owner or member of the unit-owner's household.

- 3. An act or omission by a unit-owner, unless acting within the scope of his authority on behalf of the condominium association, will **not** preclude recovery by you under this policy.

All other provisions of this policy apply.

INSERT – NORTH CAROLINA

This policy is a legal contract between you and us. The Property Policy is:

- Designed for your easy reference;
- Simplified, to make it more understandable; and
- Arranged to better display the available coverages.

READ YOUR POLICY CAREFULLY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

SEASONAL DWELLING – NORTH CAROLINA

For an additional premium, the plumbing, heating and telephone facilities at the described location may be suspended during the usual periods of seasonal unoccupancy.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

Premises Alarm or Fire Protection System – North Carolina

For a premium credit, we acknowledge the installation of qualified protection devices or system approved by us on the described location. You agree to maintain the devices or systems in working order and to notify us promptly of any changes made to the device or system or if it is removed.

All other provisions of this policy apply.

POLICY NUMBER:

DWELLING
DP 32 52 07 92

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

VACANCY AND/OR UNOCCUPANCY PERMIT
Unprotected Dwellings
NORTH CAROLINA

Coverage is extended for the described dwelling while it is:

(Check which)

Vacant for ____ days from _____ to _____
This period includes the sixty day period of vacancy granted in the policy.

THERE IS AN ADDITIONAL PREMIUM CHARGE FOR THIS COVERAGE EXTENSION.

Unoccupied for ____ days from _____ to _____
This period includes the ninety day period of unoccupancy granted in the policy.

THERE IS NO ADDITIONAL PREMIUM CHARGE FOR THIS COVERAGE EXTENSION.

If the vacancy and/or unoccupancy exceeds the period(s) stated above, coverage must be extended for an additional period of vacancy and/or unoccupancy by endorsement or the entire policy shall be suspended.

It is agreed that the dwelling shall be properly secured to prevent trespassing or entry of unauthorized persons during the period(s) of vacancy and/or unoccupancy.

All other provisions of this policy apply.

DP 32 52 07 92

Copyright, North Carolina Rate Bureau, 1992

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**WINDSTORM EXTERIOR PAINT AND WATERPROOFING EXCLUSION
NORTH CAROLINA**

Coverage to any building or structure under this policy excludes loss caused by windstorm or hail to paint or waterproofing material applies to the exterior of the building or structure.

All other provisions of this policy apply.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

REPLACEMENT COST
Form DP 00 01 Only
NORTH CAROLINA

For the premium charged for this policy,
Condition 5. Loss Settlement is amended to read
as follows:

5. **Loss Settlement.** Covered property losses
are settled as follows:

- a. Personal property and structures that
are not buildings at actual cash value
at the time of loss but not exceeding
the amount necessary to repair or
replace;
- b. Carpeting, domestic appliances, awnings,
outdoor antennas and outdoor equipment,
whether or not attached to buildings, at
actual cash value at the time of loss
but not exceeding the amount necessary
to repair or replace;
- c. Buildings under Coverage A or B at
replacement cost without deduction for
depreciation, subject to the following:

(1) If at the time of loss the amount of
insurance in this policy on the
damaged building is 80% or more of
the full replacement cost of the
building immediately prior to the
loss, we will pay the cost of repair
or replacement, without deduction
for depreciation, but not exceeding
the smallest of the following
amounts:

- (a) The limit of liability under
this policy applying to the
building;
- (b) The replacement cost of that
part of the building damaged for
equivalent construction and use
on the same premises; or

(c) The amount actually and
necessarily spent to repair or
replace the damaged building, on
the premises described in the
policy, or some other location
within the State of
North Carolina.

(2) If at the time of loss the amount of
insurance in this policy on the
damaged building is less than 80% of
the full replacement cost of the
building immediately prior to the
loss, we will pay the larger of the
following amounts, but not exceeding
the limit of liability under this
policy applying to the building:

- (a) The actual cash value of that
part of the building damaged; or
- (b) That proportion of the cost to
repair or replace, without
deduction for depreciation, of
that part of the building
damaged, which the total amount
of insurance in this policy on
the damaged building bears to
80% of the replacement cost of
the building.

(3) In determining the amount of
insurance required to equal 80% of
the full replacement cost of the
building immediately prior to the
loss, you shall disregard the value
of excavations, foundations, piers
and other supports which are below
the undersurface of the lowest
basement floor or, where there is no
basement, which are below the
surface of the ground inside the
foundation walls, and underground
flues, pipes, wiring and drains.

(4) When the cost to repair or replace the damage is more than \$2500 or more than 5% of the amount of insurance in this policy on the building, whichever is less, we will pay no more than the actual cash value of the damage until actual repair or replacement is completed.

(5) You may disregard the replacement cost loss settlement provisions and make claim under this policy for loss or damage to buildings on an actual cash value basis and then make claim within 180 days after loss for any additional liability on a replacement cost basis.

All other provisions of this policy apply.

THIS CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

FUNCTIONAL REPLACEMENT COST LOSS SETTLEMENT

FORM DP 00 02 AND DP 00 03 ONLY

CONDITIONS

The following definition is added when this endorsement is attached to the policy:

"Functional replacement cost" means the amount which it would cost to repair or replace the damaged building with less costly common construction materials and methods which are functionally equivalent to obsolete, antique or custom construction materials and methods used in the original construction of the building.

For the premium charged, Item **5.b. Loss Settlement** is deleted and replaced by the following:

b. Buildings under Coverage A or B:

(1) If, at the time of loss:

- (a)** The amount of insurance in this policy on the damaged building is 80% or more of the "functional replacement cost" of the building immediately before the loss; and
- (b)** You contract for repair or replacement of the damaged building for the same use, within 180 days of the damage unless we and you otherwise agree;

we will pay, after application of deductible, the lesser of the following amounts:

- (a)** The limit of liability under this policy that applies to the building; or
- (b)** The necessary amount actually spent to repair or replace the damaged building on a "functional replacement cost" basis, on the premises described in the policy, or some other location within the State of North Carolina.

(2) If, at the time of loss the amount of insurance in this policy on the damaged building is 80% or more of the "functional replacement cost" of the building immediately before the loss; and you do not make claim under Paragraph **(1)** above, we will pay, after application of deductible, the least of the following amounts:

- (a)** The limit of liability under this policy that applies to the building;
- (b)** The actual cash value of the damaged part of the building; or
- (c)** The amount which it would cost to repair or replace the damaged building on a "functional replacement cost" basis, on the premises described in the policy, or some other location within the State of North Carolina.

(3) If, at the time of loss, the amount of insurance in this policy on the damaged building is less than 80% of the "functional replacement cost" of the building immediately before the loss, we will pay that proportion of the cost to repair or replace that part of the building damaged:

- (a)** After application of deductible; and
- (b)** Without deduction for depreciation;

which the total amount of insurance in this policy on the damaged building bears to 80% of the "functional replacement cost" of the building, but not more than the limit of liability under this policy that applies to the building.

- (4) To determine the amount of insurance required to equal 80% of the "functional replacement cost" of the building immediately before the loss, do not include the value of:
- (a) Excavations, foundations, piers or any supports which are below the undersurface of the lowest basement floor;
 - (b) Those supports in (a) above which are below the surface of the ground inside the foundation walls, if there is no basement; and
 - (c) Underground flues, pipes, wiring and drains.
- (5) If the actual cash value of the damage is less than the "functional replacement cost" then:
- (a) We will pay no more than the actual cash value of the damage until replacement is complete. Once replacement is complete, we will settle the loss according to the provisions of **b.(1)** and **b.(3)** above.

However, if the cost to functionally repair the damage is both:

- (i) Less than 5% of the amount of insurance in this policy on the building; and
 - (ii) Less than \$2,500;
- we will settle the loss according to the provisions of **b.(1)** and **b.(3)** above whether or not replacement is complete.
- (b) You may disregard the "functional replacement cost" loss settlement provisions and make claim under this policy for loss or damage to buildings on an actual cash value basis.

You may then make claim for any additional liability according to the provisions of this Condition 5. Loss Settlement, provided we are notified of your intent to do so within 180 days of the date of loss.

All other provisions of this policy apply.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

INFLATION GUARD ENDORSEMENT – NORTH CAROLINA

(FORMS DP 00 02 AND DP 00 03 ONLY)

The limits of liability for Coverage A is shown in the Declarations. These limits will be adjusted at the same rate as the change in the Index shown on the Declarations or billing notice (or named below)*.

To find the limits on any date:

- a. Divide the latest Index level by the Index level as of the effective date of this endorsement;
- b. Multiply the result obtained in a. by each limit of liability.

The premium for this policy at the next anniversary date will be based on the Coverage A Limit Of Liability determined on that date by the provisions of this endorsement.

If the Coverage A Limit Of Liability shown in the Declarations is revised during the policy term, the effective date of this endorsement, for the purpose of calculating the change in the index level, will be deemed to be the same as the effective date of the Coverage A revision.

The limits of liability will not be reduced during the current policy term below that for which premium was paid.

(In-
dex _____)*

(Published
by _____)*

*May be deleted at company discretion.

All other provisions of this policy apply.

POLICY NUMBER:

DWELLING PROPERTY
DP 32 80 02 01

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY INSURANCE FOR COVERAGE A –
NORTH CAROLINA FORM DP-1**

SCHEDULE*

Coverage A – Dwelling Primary Limit Of Liability			
Location 1	Location 2	Location 3	Location 4

*Entries may be left blank if shown elsewhere in this policy.

OTHER COVERAGES

With respect to the property covered under Coverage A – Dwelling in the policy form or described in the Schedule above, the last paragraph of Other Coverages 8. **Fire Department Service Charge** is deleted and replaced by the following:

Payment under this coverage reduces the Coverage A limit of liability shown in the Schedule above by the amount paid for the same loss.

CONDITIONS

9. **Other Insurance** is deleted and replaced by the following:

The insurance for the property covered under Coverage A – Dwelling, shall be primary over any other valid and collectible insurance available to you.

All other provisions of this policy apply.

POLICY NUMBER:

DWELLING PROPERTY
DP 32 81 02 01

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY INSURANCE FOR COVERAGE B –
NORTH CAROLINA FORM DP-1**

SCHEDULE*

Coverage B – Other Structures Primary Limit Of Liability	Location Number	Description Of Structure

*Entries may be left blank if shown elsewhere in this policy.

OTHER COVERAGES

With respect to the structures covered under Coverage B – Other Structures in the policy form or described in the Schedule above, the last paragraph of Other Coverages 8. **Fire Department Service Charge** is deleted and replaced by the following:

Payment under this coverage reduces the limit of liability for Coverage A – Dwelling and any structure described above by the amount paid for the same loss.

CONDITIONS

9. **Other Insurance** is deleted and replaced by the following:

The insurance for structures covered under Coverage B in the policy form or described in the Schedule shall be primary over any other valid and collectible insurance available to you.

All other provisions of this policy apply.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY INSURANCE FOR COVERAGE C –
NORTH CAROLINA FORM DP-1**

SCHEDULE*

Coverage C – Personal Property Primary Limit Of Liability			
Location 1	Location 2	Location 3	Location 4

*Entries may be left blank if shown elsewhere in this policy.

OTHER COVERAGES

With respect to the property covered under Coverage C – Personal Property in the policy form or described in the Schedule above, the last paragraph of Other Coverages **8. Fire Department Service Charge** is deleted and replaced by the following:

Payment under this coverage reduces the Coverage C limit of liability shown in the Schedule above by the amount paid for the same loss.

CONDITIONS

9. Other Insurance is deleted and replaced by the following:

The insurance for the property covered under Coverage C – Personal Property shall be primary over any other valid and collectible insurance available to you or members of your family residing with you.

All other provisions of this policy apply.

POLICY NUMBER:

DWELLING PROPERTY
DP 32 83 02 01

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY INSURANCE FOR COVERAGE A – DWELLING
NORTH CAROLINA FORM DP-2 OR DP-3**

SCHEDULE*

Coverage A – Dwelling Primary Limit Of Liability			
Location 1	Location 2	Location 3	Location 4

*Entries may be left blank if shown elsewhere in this policy.

OTHER COVERAGES

With respect to the property covered under Coverage A – Dwelling in the policy form or described in the Schedule above, the last paragraph of Other Coverages **1. Other Structures, 5. Rental Value and Additional Living Expense, 8. Trees, Shrubs and Other Plants, 9. Fire Department Service Charge, and 12. Ordinance or Law** is deleted and replaced by the following:

Payment under this coverage reduces the Coverage A limit of liability shown in the Schedule above by the amount paid for the same loss.

CONDITIONS

9. Other Insurance is deleted and replaced by the following:

The insurance for the property covered under Coverage A – Dwelling, shall be primary over any other valid and collectible insurance available to you.

All other provisions of this policy apply.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY INSURANCE FOR COVERAGE B –
NORTH CAROLINA FORM DP-2 OR DP-3**

SCHEDULE*

Coverage B – Other Structures Primary Limit Of Liability	Location Number	Description Of Structure

*Entries may be left blank if shown elsewhere in this policy.

OTHER COVERAGES

With respect to the structures covered under Coverage B – Other Structures in the policy form or described in the Schedule above, the last paragraph of Other Coverages **9. Fire Department Service Charge** and **12. Ordinance or Law**, is deleted and replaced by the following:

Payment under this coverage reduces the limit of liability for Coverage A – Dwelling and any structure described above by the amount paid for the same loss.

CONDITIONS

9. Other Insurance is deleted and replaced by the following:

The insurance for structures covered under Coverage B in the policy form or described in the Schedule shall be primary over any other valid and collectible insurance available to you.

All other provisions of this policy apply.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY INSURANCE FOR COVERAGE C –
NORTH CAROLINA FORM DP-2 OR DP-3**

SCHEDULE*

Coverage C – Personal Property Primary Limit Of Liability			
Location 1	Location 2	Location 3	Location 4

*Entries may be left blank if shown elsewhere in this policy.

OTHER COVERAGES

With respect to the property covered under Coverage C – Personal Property in the policy form or described in the Schedule above, the last paragraph of Other Coverages **3. Improvements, Alterations and Additions** and **9. Fire Department Service Charge**, is deleted and replaced by the following:

Payment under this coverage reduces the Coverage C limit of liability shown in the Schedule above by the amount paid for the same loss.

CONDITIONS

9. Other Insurance is deleted and replaced by the following:

The insurance for the property covered under Coverage C – Personal Property shall be primary over any other valid and collectible insurance available to you or members of your family residing with you.

All other provisions of this policy apply.

**PREFILED TESTIMONY
OF
ROBERT J. CURRY**

**2005 DWELLING FIRE AND EXTENDED COVERAGE INSURANCE
RATE FILING BY THE
NORTH CAROLINA RATE BUREAU**

- Q. Please state your name and business address.
- A. My name is Robert J. Curry. My business address is Insurance Services Office, 545 Washington Boulevard, Jersey City, New Jersey.
- Q. By who are you employed?
- A. I am employed by Insurance Services Office ("ISO") and have been employed by ISO since October 8, 1984.
- Q. What are your responsibilities at ISO?
- A. I am generally responsible for managing and overseeing the operations of the Personal Property Actuarial Division at ISO. The Personal Property Actuarial Division is responsible for ISO's total ratemaking operation as it pertains to personal property insurance, including homeowners, dwelling and inland marine coverages. We are generally responsible for doing analyses that pertain to ratemaking for the personal property coverages including reviewing experience, making filings, analysis of classification plans, etc. ISO is involved in ratemaking for the personal property coverages in general in all of the 50 states plus the District of Columbia and Puerto Rico.
- Q. What is your employment background?
- A. I have been employed by ISO for over twenty years in various actuarial positions. I was hired as an Actuarial Assistant in 1984 in the Data Management and Control area. In 1990, I joined Actuarial Development as an Actuarial Consultant coordinating work on the quarterly Industry Operating Results and several Insurance Issues Series studies. In 1994, I joined Actuarial Government Services as a Regional Actuary. In 1998, I joined the Personal Lines Actuarial Division (PLAD) as a Manager and Associate Actuary. In PLAD, I was responsible for personal auto filings in 25 states and the use of catastrophe models in personal property ratemaking. In 2003 I was appointed Assistant Vice

President and Actuary of the Personal Property Actuarial Division.

Q. What is your background in actuarial science and your educational background?

A. I have a Bachelor of Science degree in mathematics from Cook College at Rutgers University. I am a Fellow of the Casualty Actuarial Society ("CAS") and a member of the American Academy of Actuaries. I am a Chartered Property Casualty Underwriter (CPCU). I have also earned the Associate in Insurance Accounting and Finance (AIAF) and Associate in Regulatory Compliance (ARC) designations. I am currently a member of the CAS Committee on Special Interest Seminars. I have served on the CAS Examination Committee, CAS Continuing Education Committee and CAS Syllabus Committee. I have also served as a member of the American Academy of Actuaries Committee on Automobile Insurance Issues

Q. Are you familiar with dwelling fire and extended coverage ratemaking in other states?

A. Yes. As part of my duties at ISO, I am familiar with the data collection and ratemaking procedures in use in states in addition to North Carolina. I am responsible at the present time for either preparing or supervising the preparation of filings for all of the states and the District of Columbia and Puerto Rico.

Q. What work have you performed with respect to the Rate Bureau's 2006 dwelling fire and extended coverage rate filing in North Carolina?

A. Through ISO I have been involved in the preparation of the 2006 dwelling rate filing for the Rate Bureau in two respects. First, ISO collects data from a significant number of insurers that write dwelling fire and extended coverage in North Carolina. The Property Casualty Insurers Association of America ("PCI"), the American Association of Insurance Services (AAIS) and the National Independent Statistical Service ("NISS") are the other statistical organizations that collect such data. The four statistical organizations subject the data that are reported to them to a series of verification edits and then consolidate the data. The data which PCI, AAIS and NISS collect are sent to ISO and consolidated with the ISO-collected data in the proper format

so that they can be reviewed to determine whether rates are adequate or inadequate. ISO then produces the hard-copy exhibits of the combined data in a format and detail necessary for ratemaking.

Second, ISO provides consulting actuarial services directly to the Rate Bureau. I have been directly involved in this aspect of the Rate Bureau's dwelling insurance rate filings for a number of years. As in the past, my staff and I compiled the ratemaking data to be reviewed by the Property Rating Subcommittee and the Property Committee in preparation of the filing.

Under my direction, my staff put together the vast majority of the data and information contained in Exhibit RB-1.

With this review, a loss cost methodology more similar to that used by the Auto Committee and in the previous homeowners filing was selected as the method to be utilized. This was done after ISO and the committees reviewed the old and new methodologies and determined them to be equivalent regarding the statewide indication produced.

Finally, I have reviewed the filed rates to determine if they are calculated in accordance with the Casualty Actuarial Society's (CAS) Statement of Principles Regarding Property and Casualty Insurance Ratemaking. In accordance with Actuarial Standard of Practice No. 17 Expert Testimony by Actuaries, I conducted my review in terms of reasonableness rather than solely in terms of whether there is precise agreement on each issue. In addition, I applied the rate standards set forth in North Carolina General Statute 58-36-10(2), i.e., that rates must be adequate, not excessive and not unfairly discriminatory.

- Q. What data are utilized in Exhibit RB-1?
- A. With respect to Exhibit RB-1 the supporting data for the rate level changes for dwelling fire and extended coverage are contained in Section C. Five years of premium and loss experience are displayed in Section C. The five years are the years ended December 31, 1999 through December 31, 2003.

The loss experience used in the filing is what we call "accident year" experience. I can explain that best by giving you an example. The losses for the accident year ended December 31, 2003 consist of all losses caused by

claims that occurred during the one year period ended December 31, 2003. If a claim occurred December 29, 2003 and resulted in either a loss being paid or a reserve being established after January 1, 2004, that loss would be a part of the accident year losses for the period ended December 31, 2003. The test for breaking losses down into accident years is the date the claim occurred.

Q: What is the reason for using five years of premium and loss data to determine the indicated rate level change?

A: Five years of data are used to balance the stability of the rates with responsiveness to current conditions. The North Carolina statutes allow the Rate Bureau to review five years of experience in its property rate level filings. Furthermore, traditional fire insurance ratemaking has relied on five years of experience with the weights of .10, .15, .20, .25 and .30 being given to each year respectively as the way to achieve this balance. The accident year weights used by the Bureau are identical to those used by Insurance Services Office in developing their advisory loss costs for dwelling fire insurance. These weights are generally accepted in all jurisdictions in which these loss costs are submitted. For dwelling extended coverage insurance, because it is by nature more likely to be unstable, equal weights are given to each year for stability. This treatment is a common and accepted ratemaking practice used by ISO countrywide.

Q: Mr. Curry, please turn to page C-1 of Exhibit RB-1. Would you explain what that page is.

A: Page C-1 is what we call a statewide rate level calculation for dwelling fire. Page C-1 is a determination of what the actual indicated rate level change is for dwelling fire. The data shown are for all business written in the voluntary market and the data written by the North Carolina Beach and FAIR Plans.

Q. Referring to column 1 on page C-1, what are "Adjusted Incurred Losses"?

A. The incurred losses in column 1 are the losses from all causes from claims that occurred during each of the respective accident years. The figure includes both losses that have already been paid, losses that are not yet paid and are represented by outstanding claim reserves, and losses

that have been incurred but for which no individual reserve exists because they have not yet been reported.

Q. Have the losses as shown in column 1 been adjusted in any way?

A: Yes, there are two adjustments. First, these losses have been adjusted to a \$250 deductible level. The second adjustment results from the use of a loss development factor.

Q. What is the purpose of adjusting the reported losses by applying a loss development factor?

A. As I mentioned a moment ago, the losses in column 2 of page C-1 include losses that are not yet reported. By definition since they are not yet reported we cannot simply take a reported number and add it to the losses. They are included by what is known as an adjustment for IBNR (incurred but not reported) losses. This is accomplished through the use of loss development factors. The losses as they are reported to us cover all claims that occur during the respective accident years ended December 31. When they are reported to the statistical agent they are evaluated as of March 31 of the next year. As of March 31 some of the losses have already been paid and some have not. Those that have not are represented by loss reserves. The loss reserves, of course, are estimates of what will ultimately be paid on these outstanding claims. Since we want the estimates to be as accurate as possible, we look at history to see how losses have changed, or "developed," in the past from the time they were initially reported to the time they were ultimately paid. For example, if we look back and see that historically there has been a 1% increase in the amount of losses from the time they were initially reported as reserves until the time they were ultimately paid, we would logically assume that the same development pattern will hold true for losses incurred during the year ended December 31, 2003. Accordingly we would make an adjustment by increasing the losses as they are initially reported to us by 1%.

Q. What causes losses to change or develop as you have described?

A. The losses that are paid as of the date of the initial reporting, of course, do not change. As to the reserve portion of the losses, however, changes would typically result from the fact that the ultimate loss payments are more

or less than estimated at the time of the initial report. Another factor would be the late reporting of claims. For example, if an claim occurred on December 25 of any given year and for some reason was not timely reported to the company, it might very well be that the losses as initially reported would not include any provision for that particular claim. By the time of the next year's evaluation, however, the claim would have worked its way into the system and the total loss would include either the paid amount or the reserved amount for that particular claim. This would cause an upward development in the losses as initially reported.

Q. Will you please refer to page D-12 of RB-1 and explain how the loss development factors used in the filing were calculated?

A. Yes. In the top section of that page, the North Carolina incurred losses evaluated as of 15, 27, 39, 51, 63, 75 and 87 months for the accident years for which data are available are shown. In calculating loss development factors, we have used the data of companies reporting to ISO. The first entry for the accident year ended December 31, 1996 is \$6,271,356. This is in the column that is labeled "15 Months." This is the first evaluation of the losses caused by claims that occurred during the year that ended December 31, 1996. The evaluation was made as of March 31, 1997 -- 15 months after the beginning of the accident year. Twelve months later (March 31, 1998) the losses caused by claims that occurred during the year ended December 31, 1996 had increased to \$6,316,390. This is the evaluation as of 27 months after the beginning of the accident year. This increase represents an increase in losses, or a positive development, of 0.7% (1.007) as shown in the column on that page labeled "27:15." As shown on page D-12, we have looked at the development from 15 months to 27 months for eleven different years. The average development for those years was .993, or -0.7%.

Q. Does page D-12 also show development figures for periods later than 27 months?

A. Yes. Studies have shown that for dwelling fire virtually all losses have been paid by the time of the evaluation at 87 months after the beginning of an accident year. We calculate loss development factors for the periods from 27 months to 39 months, 39 months to 51 months, 51 months to 63 months, 63 months to 75 months and 75 months to 87 months. For example, by the time of the 39 month evaluation the losses for the

accident year ended December 31, 1996 had become 6,383,042. This represents an increase of 1.011, or +1.1%, over the losses for the same accident year evaluated as of 27 months. The average development over the period 27 months to 39 months for the ten most recent years for which the data are available was 1.002, or 0.2%.

Q. Will you explain how the loss development factor used to determine the ultimate payment value of the accident year ended December 31, 2003 losses was determined?

A. Yes. The development factors for each of the applicable periods, as shown on page D-12, are:

<u>Development Period</u>	<u>Factor</u>
15 to 27	0.993
27 to 39	1.002
39 to 51	1.000
51 to 63	0.999
63 to 75	0.999
75 to 87	1.001

If you multiply all of these factors you will get a factor of .994 to apply to the year ended December 31, 2003 losses.

Q: What other adjustments must be made to the losses?

A: The losses need to be adjusted by trend to reflect the cost levels anticipated to prevail during the period that the proposed rates are expected to be in effect.

Q: Could you please describe how the loss trend is developed and applied?

A: The loss trend is developed in a two step process. The first step is the development of a current cost factor that brings the losses up to the cost level of the external current cost index that is used as the basis of the loss trend. The second step is the development of a loss projection factor based upon an exponential fit of the last twelve quarters of the Current Cost Index. The loss projection factor projects the losses from May 15, 2005 (the midpoint of the latest quarter of the external index) to June 1, 2007, the average date of loss for policies which are assumed to be written at

the proposed rates (i.e. one year beyond the assumed effective date of June 1, 2006).

Q: You mentioned that the loss trend is based on a Current Cost Index. What are the components of the Current Cost Index used for dwelling fire?

A: The Current Cost Index is a weighted average of the Modified Consumer Price Index (MCPI) and the Boeckh Residential Index (BRI), with the MCPI receiving 20% weight and the BRI receiving 80% weight. The intent of the weights is to approximate the split between contents type losses and buildings type losses.

Q. How are the weights of 80% to the Boeckh Residential Index and 20% to the Modified Consumer Price Index determined?

A. The weights were based on an examination of fire losses, apportioning the losses between buildings and contents.

Q. What is the Boeckh Residential Index?

A. The Boeckh Residential Index is an index of construction costs compiled by Marshall & Swift/Boeckh. The particular index used in this filing is based on information compiled specifically for construction costs in North Carolina.

Q: What is the Modified Consumer Price Index composed of?

A: The Modified Consumer Price Index is based on selected components of the Consumer Price Index that correspond to the items that dwelling fire insurance covers. The components used and the weights given to them are House Furnishings (70%), Apparel Commodities (20%) and Entertainment Commodities (10%).

Q: Please illustrate what factors would be applied to trend the losses for the year ended December 31, 2003.

A: The losses from the accident year ended December 31, 2003 are first adjusted by the Current Cost Factor for 2003 found on page D-14. The Current Cost Factor is the ratio of the Current Cost Index from the quarter ending June 30, 2005 to the Current Cost Index value for the full year 2003. The Current Cost Factor brings the losses from the cost levels corresponding to an average date of loss of June 30, 2003 to the cost levels corresponding to the midpoint of the latest

quarter (May 15, 2005) of the Current Cost Index. Since the average date of loss for policies that will be written at the proposed rates is June 1, 2007 (one year past the assumed effective date) it is necessary to project the losses from the May 15, 2005 cost level to that date. This is accomplished by projecting the losses at the annual rate of change of 6.9% (as determined by an exponential fit of the Current Cost Index) for 24.5 months. This factor is calculated on page D-15.

Q: Where on page C-1 is this factor applied?

A: The Current Cost Factor for each year is applied as part of the current cost/current amount factor in column 3. For example, for the year ended December 31, 2003 the current cost/current amount factor of 1.038 is the ratio of the current cost factor of 1.134 (shown on page D-18) and the current amount factor of 1.093 (shown on page D-18). The loss projection factor is combined with the premium projection factor and the trend from first dollar to produce the composite projection factor. This composite projection factor is applied in column 5 in the development of the Trended Loss Cost.

Q: You mentioned the trend from first dollar. Could you describe what that is and how it is developed and applied?

A: The index is a first dollar index. The losses compiled by ISO, NISS and PCI have been adjusted to a \$250 deductible level. As such, increases in cost as measured by the current cost index would affect losses below the deductible and cause an additional increase as losses below the deductible increase above it. For example, a loss of \$1,000 subject to a \$250 deductible results in a payment of \$750 to the insured. If there is 10% inflation the \$1,000 loss grows to \$1,100. This results in a payment to the insured of \$850, which is a resulting effective inflation of 13.3%, an incremental trend of 3%. The procedure used in the filing accounts for this effect. The procedure in essence converts all the losses to a first dollar basis before the trend factor is applied. To obtain the resulting trended losses, the deductible portion of the trended losses are subtracted out. The trend from first dollar factor as shown on page D-19 is the incremental difference in the trend factor resulting from the application of our procedure. Using our example from before, and the formula for trend from first dollar on page D-19 results in a trend from first dollar

factor of $1 + (((.1) (250))/((1.1)(750))) = 1.03$, which matches what was calculated earlier.

Losses for the Beach Plan/FAIR Plan (1999-2000), ISO Minimum Plan/ Statistical Agent Plan/Limited Coded and AAIS have been compiled on the deductible at which they were written, and therefore the trend from first dollar was not applied since the underlying deductible was not known.

Q: Please refer to column 2 of page C-1. With reference to the column headed "Adjusted Incurred Losses Including LAE," please tell us what the figure \$35,352,047 represents.

A: These are the losses and loss adjustment expenses associated with claims that occurred in the accident year ended December 31, 2003. The losses are the sum of the adjusted incurred losses in Column 2, adjusted by a trended loss adjustment expense factor of 1.075.

Q: How is the trended loss adjustment expense factor of 1.075 developed?

A: Each year the Rate Bureau sends a special call to its member companies for expense-related data. The special calls showed that loss adjustment expenses for the five calendar years ended December 31, 2003, when averaged after taking the three middle valued years, produced a value of 8.7%.

This factor of 8.7% must be adjusted for the change in cost levels of the items that go into loss adjustment expenses. These expenses include items like adjuster's salaries, rents and overhead items related to claims settlement. In essence, these items will not change as losses change but rather will vary as general economic trends vary. We adjust the loss adjustment expense factor by taking a ratio of the expense trend to the loss trend.

Q: Could you please explain how the expense trend used to adjust the loss adjustment expense factor is developed?

A: The expense trend used to adjust the loss adjustment expense factor is based on an analysis of the Current Expense Index, which is an index based on a 50/50 weighting of the all items CPI and the Compensation Cost Index. The data for this index are shown on pages D-23 and D-24. Based on an analysis of this data, an annual rate of change of 3.3% was selected.

Q: Please explain the development and application of the expense projection factor in adjusting the loss adjustment expense factor?

A: The three year average loss adjustment expense factor of 8.7% is the average of the three middle value years from the 5 year period between 1999 and 2003. As such the factor is representative of the time period corresponding to 2001.

The expense projection factor uses the 3.3% annual rate of change based on an exponential curve of the Current Expense Index. Since the loss adjustment expense ratio is at the cost level corresponding to July 1, 2001, it is necessary to project this cost to the average date of claim for the period which our rates are proposed to be effective, June 1, 2007 (one year beyond our assumed effective date). This calculation is displayed on line (2) on page D-29.

Q: What other adjustments must be made to the loss adjustment expense factor in order to use it?

A: The loss adjustment expense factor is determined as the ratio of expenses to losses. Having adjusted the expense portion of the factor, we need to adjust the denominator of the factor, the portion corresponding to losses, by the loss trend, reflecting both the current cost factor and the loss projection factor.

Q. Could you please describe what is being done in Column 3 of page C-1?

A. In Column 3 the previously described current cost factors and current amount of insurance factors are combined into the current cost/current amount factors. This is done by taking the ratio of the current cost factor to the current amount factor. For example, the current cost/current amount factor of 1.038 for 2003 is the ratio of the 2003 current cost factor of 1.134 to the 2003 current amount factor of 1.093. Through these steps the losses and premiums have been brought to the cost level of May 15, 2005.

Q: Please describe the development of the current amount factor.

A: The current amount factor is calculated, separately for buildings and contents, by taking the ratio of the average

policy size relativity for each year to the projected average policy size relativity as of May 15, 2005. The average policy size relativity is calculated by taking a weighted average of the policy size relativity curve for each amount of insurance using the exposures for each amount of insurance as weights. By taking the ratio of these relativities for each year to the May 15, 2005 value, we are in effect measuring the percentage growth in the premiums at present rates from year to year caused by changes in amount of insurance. Since the average relativity differs for buildings and contents and is forecasted separately, the resulting current amount factors for buildings and contents are weighed on a premium distribution to produce a combined current amount factor.

Q: How are these two factors used in the calculation of the indicated rate level change?

A: The current amount factor for each year is the denominator in the current cost/current amount factor for that year shown in column 3 of page C-1. The premium projection factor is the denominator in the composite projection factor (CPF) used in column 5 of page C-1. The combined effect of these two factors is to bring the average rating factor to the level for the amount of insurance expected to prevail during the period for which these rates are expected to be in use.

Q. Could you please describe what is being done in Column 5 of page C-1?

A. Column 5 combines all of the elements in Columns 1 to 4. In Column 5, the losses and loss adjustment expenses are trended to the cost level expected to prevail during the period in which it is assumed that the policies written at proposed rates will be providing coverage (average date of claim of June 1, 2007). The house years are also projected to reflect the anticipated amounts of insurance for business written between June 1, 2006 and May 30, 2007. Column 5 is the equivalent of multiplying the losses by the current cost factor and loss projection factor and the house years by the current amount factor and premium projection factor. Using 2003 as an example:

(1) Losses and loss adjustment expenses	\$35,352,047
(2) Current cost factor (D-18, Col. 3)	1.134

(3) Loss projection factor (D-19, Line 6)	1.145
(4) Trend from first dollar (D-19, Line 7)	1.006
(5) Trended losses and loss adjustment expenses (1) x (2) x (3) x (4)	\$46,177,571
(6) Earned house years	549,049
(7) Current amount factor (D-18, Col. 2)	1.093
(8) Premium projection factor (D-19, line 5)	1.059
(9) Trended adjusted house years (6) x (7) x (8)	635,517
(10) Trended Loss Cost (5) ÷ (9)	72.66

Note that because of rounding the trended loss cost calculated in this example differs slightly from the trended loss cost in column 5 that is used in the statewide rate calculation.

Q: Please describe the development of the premium projection factor.

A: As I mentioned earlier, for each year we have an average policy size relativity that is calculated as a weighted average of each amount of insurance relativity. The premium projection factor is calculated by fitting an exponential curve to the average policy size relativities. This curve is used to develop an annual rate of change for the policy size relativities. In the case of dwelling fire buildings the average annual rate of change is 3.8% as shown on page D-17. Since the current amount factor has been calculated as the value on May 15, 2005, the premium projection factor will be calculated as the expected growth from May 15, 2005 to December 1, 2006 (which is six months after the assumed effective date of June 1, 2006). This date of December 1, 2006 represents the midpoint of the year in which it is assumed that policies will be written using the proposed rates. This results in a premium projection factor of 1.059 that is shown on Page D-17. A similar calculation is done for fire contents and this produces a Premium Projection Factor of 1.060. The two factors are weighed together to

produce the Premium Projection Factor of 1.059. This is shown on Page D-19.

Q. Could you please explain column 6 on page C-1?

A. Column 6 is the average rating factor for the policies purchased in each year. The average rating factor is the ratio of the average rate at manual level to the average current base rate. For example, let's assume that the current territory base rate for frame construction with \$75,000 coverage A is \$100, that the rating factor for masonry is 0.9 and that the rating factor to purchase an additional \$25,000 of coverage A is 1.2. Then the average rating factor for a \$100,000 masonry policy is calculated as:

$$(100 * 1.2 * 0.9) / 100 = 1.08$$

This factor is needed to adjust the average trended loss costs in column (5) to a base class level. Since most policyholders do not purchase exactly the base amount of coverage the average trended loss cost is divided by the average rating factor to convert this average trended loss cost into a trended base class loss cost which is shown in column 7.

Q. Could you please explain line 9 on page C-1?

A. Line 9 is the resulting weighted trended base loss cost obtained by applying the accident year weights shown in Column 8 to the trended loss cost for each year shown in Column 7. This weighted trended loss cost is our forecasted loss cost for policies written during the one-year period after the assumed effective date of June 1, 2006.

Q. Could you please explain line 10 on page C-1?

A. Line 10 is the reflection of the credibility of the experience based on the number of house years during the 5 year period. The full credibility standard is based on a procedure considering the frequency of claims and the variability of the size of those claims. The procedure is explained in a CAS Proceedings Paper "Credibility of the Pure Premium" by Mayerson, Jones and Bowers. The full credibility standard is based on a normal distribution with a 90% probability of the pure premium being within 10% of the

expected value. The full credibility standard for Fire is 500,000 house years and 330,000 house years for Extended Coverage.

Q. Could you please explain what line 11 entitled "Fixed Expense per Policy" on page C-1 refers to and what it represents?

A. Line 11, "Fixed expense per Policy" refers to the dollars of prospective premiums that the general expenses will be on policies written between June 1, 2006 and May 30, 2007. General expenses along with other acquisition expenses constitute fixed expenses. They are fixed in that they do not vary as a direct function of the premium dollar. For example, employee salaries (other than claims employees) would be among the items classified as either general expenses or other acquisition expenses. Those salaries are fixed in the sense that they do not vary directly as a function of premium. Such things as commissions and premium taxes, on the other hand, are examples of expenses that do rise or fall directly with premium. The number shown on line 11 - \$4.79 - represents the dollars of general expenses trended to the levels anticipated to prevail during the period from June 1, 2006 to May 30, 2007 (the average date of which is December 1, 2006) and the projected premiums for business written during the same period. This is appropriate because general expenses are generally incurred at the time a policy is written.

Q. Could you explain how the figure \$4.79 was derived?

A. This derivation is shown on page D-29 in line (4), "Factor to trend expense based on Current Expense Index." It starts out with an untrended general expense ratio of .073 that is based on the average of the 2001, 2002 and 2003 general expense ratios. These are shown on page D-25. The average of these represents the average expense ratio corresponding to 2001. In order to trend these to the cost levels anticipated to prevail between June 1, 2006 and May 30, 2007, we project these by using the Current Expense Index described earlier. This is done by projecting the average annual change of +3.3% over the time period from June 30, 2002 (the average date of the experience on which the general expense ratio is based) to December 1, 2006 (the average date of writing under the proposed rates). Since this ratio is relative to premium, we must project the amount of insurance from 2002 levels to the level anticipated on business written between June 1, 2006 and May 30, 2007. This is done by using the current amount

factor for 2002 of 1.083 and the premium projection factor of 1.059. The result is

$$\frac{0.073 \times 1.154}{1.093 \times 1.059} = .071.$$

A similar calculation is show on line 5 for other acquisition expenses.

Q. What does Line 12 on page C-1 entitled "Loss & Fixed Expenses" show?

A. Line 12 is a combination of the trended base class loss cost and the trended general expenses and other acquisition expenses. The figure \$26.42 is the dollar amount that is required to cover the portion of the insurance base rate that covers losses, loss adjustment expenses, general expenses and other acquisition expenses.

Q. What does line 13 on page C-1 entitled "Expected Loss & Fixed Expense Ratio" show?

A. This line takes into account the other expense items to which I just referred. If you look at page D-25 of the filing, you can see that the commission and brokerage is 15.9% of the premium dollar, and taxes, licenses and fees are 3.1% of the premium dollar. The provision utilized in this filing for underwriting profit for dwelling fire is 8.0%. This filing also contains a 1% margin for contingencies. All those items add up to 28.0%. These items are what are known as variable expenses. They vary in direct proportion with the premium dollar. You know that out of every dollar of premium you write, 28.0 cents will have to go to pay for these expenses and you are left with only 72.0 cents to pay for losses, loss adjustment expenses and general expenses and other acquisition expenses. The expected loss and fixed expense ratio shows the percentage of the premium dollar you will have available to pay for trended losses, trended loss adjustment expenses and trended general expenses and other acquisition expenses.

Q. What is the source of the percentages on page D-25 with respect to commissions and brokerage and taxes, licenses, and fees?

A. They were calculated from the North Carolina special expense calls for 2001, 2002 and 2003 data undertaken by the North Carolina Rate Bureau.

- Q. What is the source of the percentage on page D-25 for contingencies?
- A. The 1% contingency factor is a standard factor used across the country and in past Bureau filings. It was selected by the Bureau committees upon recognition of the systematic bias that causes actual underwriting experience to be worse than the provision assumed in the rates. Reasons for this bias are many and include the potential for conflagration and other catastrophic type losses that are not adequately recognized in normal ratemaking, law changes and court interpretations expanding coverage under the policies, regulatory delay in obtaining necessary rate level increases and other such factors. The 1% contingency factor was also selected after giving consideration to the manner in which the North Carolina Beach and Fair Plans operate. If the Beach Plan suffers a large loss, such as from a major hurricane, it assesses the member companies for that loss. Since the risks insured by the Beach Plan are concentrated in areas highly vulnerable to catastrophes, the contingency load, in a small way, reflects the companies' vulnerability to loss due to Beach Plan assessments. The committees' selection of a 1% factor applies both to fire and extended coverage.
- Q. Would you explain line 14 on page C-1 entitled "Net Base Rate per Policy"?
- A. The Net Base Rate per policy is calculated by dividing the Loss and Fixed expenses in line 12 by the expected loss and fixed expense ratio in line 13. This is the net base rate before incorporating the anticipated deviation.
- Q. What is the source of the percentage on line 15 for anticipated deviations?
- A. The 3.8% provision for deviations is based on an analysis of the last several years of deviation experience for dwelling business.
- Q. Would you explain line 16 on page C-1 entitled "Deviation Amount per Policy"?
- A. Line 16 is the dollar amount of deviation that needs to be in the final rate to ensure that the selected 3.8% deviation percentage is accounted for.

- Q. Would you explain line 17 on page C-1 entitled "Required Base Rate per Policy"?
- A. Line 17 is the required base rate that is needed to ensure that sufficient revenue is collected to cover the losses and expenses that are expected to result from the policies written during the year following the effective date of this filing.
- Q. Would you explain line 18 on page C-1 entitled "Current Base Rate"?
- A. Line 18 is the current base rate for all of the policies written in the most recent year included in the review. This rate assumes that each policyholder is buying only the base coverage.
- Q. Would you explain line 19 on page C-1 entitled "Indicated Rate Level Change"?
- A. Line 19 is the percentage change in the current rates which will be necessary to make the rates adequate for the cost levels that are expected to prevail in the one year period following the effective date of the filing. It is determined by taking the required base rate per policy on line 17 and dividing it by the current base rate from line 18. This results in an indicated rate level change for dwelling fire of 8.3%.
- Q. How are these changes distributed by class?
- A. On page C-5 the calculations of the indicated change for fire buildings and contents classes are shown. Column 1 displays the adjusted incurred losses for each of the two classes - buildings and contents. The losses shown are for the latest five years. Column 2 gives the five year house year total, which is the sum of the exposures by class for the five year period. Column 3 provides the trended average rating factor. Each year's costs have been trended by using each class' own current cost factors and a loss projection factor. Column 4 gives the base class loss cost for each class and total. This loss cost is obtained by dividing the five year total trended adjusted incurred losses by the five year total house years times the trended average rating factor. Column 5 is the credibility assigned to each class' experience, based on the full credibility standard of 500,000 house years for

fire. Column 6 is the credibility weighted loss cost for each class. This loss cost results from the formula:

$$\text{Class Loss Cost} \times \text{Class Credibility} + \text{Statewide Loss Cost} \times \text{1-Class Credibility}$$

In the case of fire buildings, this is

$$(24.56)(1.00) + (20.01)(1-1.0) = 24.56$$

The statewide credibility weighted loss cost is obtained by weighting the class credibility weighted loss cost by the individual class house years. Column 7 provides the indicated base loss cost by class. This is the statewide base loss cost adjusted by the class relativity indicated by the credibility weighted loss cost. Column 8 shows the current base rate by class. Column 9 displays the expected loss and fixed expense ratio. The indicated net base rate is shown in column 10. The indicated net base rate is the sum of the loss cost and fixed expenses divided by the expected loss and fixed expense ratio. Column 12 is a derivation of dollars of deviation that need to be loaded into the required base rate. Column 13 is the sum of the indicated net base rate in column 10 and the deviation amount in column 12. Column 14 shows the indicated base rate change by change. This rate change includes the impact of statewide change of 8.3%.

- Q. Does the filing contain a revision of the present territory relativities?
- A. Yes. In connection with the overall rate level change we have been discussing, new territory rates are displayed; these are shown on page A-2. In these rates, the new territorial relativities are determined in such a way that no overall statewide rate level change results. In other words, based on each territory's own indications, the relativities are revised, with some territories receiving increases while others receive decreases. The overall statewide change as a result of these territorial changes is 0. When the territorial relativity changes are then compounded with the filed statewide rate level change, the overall change is essentially equal to the filed change, subject to minor rounding differences. The calculation of the territory rate level changes for dwelling fire is displayed on page C-7.

Q. How has the Rate Bureau treated general and other acquisition expense by territory?

A. The Rate Bureau has treated 100% of general expense and other acquisition expense as not varying by territory.

Q. Is the average rating factor for extended coverage on page C-3 determined in the same way as they are for fire insurance?

A. Yes.

Q. Are the incurred losses and loss adjustment expenses in Columns 1 through 5 on page C-2 determined in the same manner as you testified with respect to fire insurance?

A. Yes, but for one exception.

Q. What is that exception?

A. The actual hurricane losses for extended coverage have been excluded and replaced by "Modeled Hurricane Losses", which are displayed in Column 4 of page C-3, and the actual excess losses in column 2 have been replaced by an excess factor loading shown in column 3 of page C-3.

Q: You indicated that losses due to hurricanes have been excluded on Page C-3. Have you excluded them anywhere else in the filing?

A: Yes, they have been excluded in the development of the indications by class and by territory, and in the calculation of the non-hurricane excess factor.

Q: How have these losses been identified in order to be excluded?

A: The method to remove the hurricane losses depends on the detail of the data. For 1950-1965 only statewide data is available; consequently for a year in which a hurricane requires the removal of losses, that year is removed from the calculation of the statewide excess factor. This is shown by the omission of the year in question on page D-30.

Since territory data is available (in varying detail) for 1966-2003, the calculation of the non-hurricane losses is

done at the territory level for this period. After it has been determined that a particular hurricane is accounted for by the AIR hurricane model, the territories affected (territories exposed to windspeeds of 50 MPH or higher) are determined by use of recorded wind speeds and central pressures at 6 hour intervals, storm tracks, and wind to non-wind ratios.

The non-hurricane losses for a territory are calculated by replacing the hurricane year wind to non-wind ratio by the average wind to non-wind ratio of the non-hurricane years. Given the revised wind to non-wind ratio for the hurricane year, the reported non-hurricane total losses and the reported non-hurricane wind losses are then "backed into." For the years in which the territory codes 01-04 were in effect (1966-1982), the average wind to non-wind ratios are based on the non-hurricane years from 1966-1982. For the years in which the territory codes 04 and 30-41 were in effect (1983-2003), the average wind to non-wind ratios are based on the non-hurricane years from 1983 to 1996.

For 1986-1995, territory losses by month are available for ISO data only. The territory non-hurricane losses for this period are calculated as follows: first the average losses for the month in which the hurricane occurred are calculated based on the non-hurricane years. The average monthly losses are then added to the eleven remaining months of the hurricane year and divided by the hurricane year annual losses resulting in a non-hurricane adjustment factor. This factor is then applied appropriately to either reported losses or adjusted losses by territory for all statistical agents to obtain non-hurricane losses. For severe hurricanes, wind type losses are frequently reported as water losses or all other property damage losses. To accurately estimate the non-hurricane losses, the above non-hurricane factors are calculated for water and all other property damage and then applied to the water losses and the all other property damage losses.

For 1996-2003, based on information from NOAA and other sources, the specific dates on which a given hurricane was active in North Carolina are determined. The loss experience for ISO is then examined by date and cause-of-loss. Wind losses and losses for other weather-related perils, which occurred on these dates, are assumed to be hurricane losses. For ISO data, the percentage of hurricane losses to total losses is calculated. To estimate the hurricane losses for

statistical agents other than ISO, the percentage of hurricane losses in the ISO data (relative to the ISO yearly total) is applied to the total loss amounts for the other statistical agents

Q: Do you have an opinion as to whether the incurred losses excluding hurricanes shown in column 1 on page C-3 of RB-1 accurately represent the anticipated value of dwelling extended coverage incurred losses excluding actual hurricane losses which resulted from claims which took place during each of the years ended December 31 in North Carolina?

A: Yes, I do.

Q: What is that opinion?

A: I believe that the losses excluding actual hurricane losses shown in column 1 do accurately represent the expected ultimate value of those losses.

Q: Could you please describe the figures contained in column 4 labeled "Modeled Hurricane Losses" on page C-3?

A: These are the hurricane losses resulting from the model used by AIR Worldwide Inc. (AIR) to simulate the hurricane loss that could be anticipated as a result of reflecting the long term potential for hurricanes that would affect dwelling extended coverage insurance in North Carolina. ISO furnished to AIR North Carolina extended coverage insurance data on the 2003 total number of earned house years and earned insurance years by territory. These data are ISO, FAIR Plan/Beach Plan, NISS and PCI data, were compiled by ISO and are correct to the best of my knowledge, information and belief.

Q: How are these losses for each year derived?

A: The AIR model simulates 100,000 years of hurricane losses and develops a mean hurricane loss cost per \$100 of coverage by territory. To produce the modeled hurricane losses, the Rate Bureau has multiplied the hurricane loss cost per \$100 of coverage by the amount of insurance in effect. An example of how the 2003 modeled hurricane losses are developed is shown on page D-32.

Q. How is the amount of insurance in effect determined?

A. For the purpose of developing the hurricane loss cost, the amount of insurance in effect is determined as the sum of the various internal limits found in a dwelling extended coverage policy -- the Coverage A amount (building coverage), the Coverage B amount (other structures), the Coverage C amount (contents) and the Coverage D amount (loss of use). Loss costs per \$100 of insured value were determined for Coverage A, Coverage C and Coverage D. The weighted average amount of Coverage B as a percentage of Coverage A for experience other than the Beach and FAIR Plans is 8.1%, so the Coverage A modeled losses for non-Beach and FAIR Plans business were increased by 8.1%. There was no adjustment necessary for the FAIR Beach Plan data since their policies do not provide Coverage B.

Q: Why was a simulation used to develop the hurricane losses?

A: A simulation was used to develop the hurricane losses because it is a more accurate way of including the exposure than using traditional insurance statistics. Hurricanes are highly variable in frequency, intensity and place of occurrence. The simulation allows for the smoothing out of the hurricane losses as well as better reflecting the potential for losses in a given location. For example, if we were using just the losses from the five years of data 1999-2003, a very large loading for a storm such as Hurricane Floyd would be reflected in some areas of the state, with little or no loading for other areas of the state. The simulation model produces a more accurate estimate of the loss potential both in terms of territory and dollar value than is possible using any analysis of the insurance data.

Q. In addition to excluding all hurricane losses and replacing them with the modeled hurricane losses, what other adjustments to the losses have been made because of catastrophes?

A. An adjustment was made to the non-hurricane losses in the years in which there were very severe storms. The adjustment caps average losses by territory in years where abnormally high losses coincide with severe non-hurricane storm activity. The adjustment relies on a factor developed by using a statewide average consisting of years without losses influenced by severe non-hurricane storms. A long-term excess factor of 1.037 was loaded in to the losses. This calculation is shown on pages D-30 and D-31.

- Q. Are general expenses and other acquisition expenses for extended coverage determined in the same manner as for fire insurance?
- A. Yes.
- Q. Is the loss trend procedure the same for extended coverage as it was for fire insurance?
- A. Yes, it is.
- Q. What is the source of the 19.1% item for net cost of reinsurance?
- A. The source of the 19.1% item for net cost of reinsurance is an analysis performed for the Rate Bureau by Dr. David Appel. In that analysis he determines the net cost of reinsurance incurred by Dwelling Extended Coverage insurers in North Carolina because of the need to buy catastrophe reinsurance. The net cost of reinsurance is the expense and profit component of the reinsurance premium paid by these insurers (the loss component is in the direct losses used in the overall rate determination). More details of the analysis are included in Dr. Appel's direct testimony.
- Q. How does this filing reflect the changes in territory definition that were recently approved by the Department?
- A. The filing determines the indicated rate level for the new territories by using the all perils other than hurricane experience from the predecessor territories combined with the modeled hurricane losses for the new territories based on the AIR hurricane model.
- Q. Are the remaining portions of the rate level calculation for extended coverage similar to that for fire insurance?
- A. Yes, they are.
- Q. What other changes does the filing make for dwelling fire and extended coverage insurance?
- A. The filing revises the credit for the Windstorm or Hail Exclusion that is available in Territories 05, 06, 42 and 43.
- Q. How is this revised credit calculated?

The indicated credit for the exclusion is developed using the following formulas:

The credit as a percentage of premium is:

$$C = 1 - \frac{(Ld + F)}{(1 - V) * R}, \quad \text{where}$$

C = indicated percentage credit
F = provision in proposed rates for fixed expenses
V = provision in proposed rates for variable expenses
L = provision in proposed rates for losses and loss adjustment expenses
R = territory risk load factor
d = percentage of losses remaining after wind losses are excluded

The formula for determining the value of d is:

$$d = \frac{N}{N+W}, \quad \text{where}$$

N = 4 year (2000-2003) non-wind losses
W = X+Y, where
X= 4 year (2000-2003) modeled hurricane losses; and
Y= 4 year (2000-2003) non-hurricane wind losses

The dollar credit is determined by the following formula:

$$\text{Dollar Credit} = \frac{\text{Fixed Base} \times \text{Percentage}}{\text{Rate Credit C.}}$$

- Q. Please turn to page A-1 of Exhibit RB-1 and explain what is shown on that page?
- A. Page A-1 of Exhibit RB-1 shows the filed statewide rate level change.
- Q. What is shown on Page A-2 of Exhibit RB-1?
- A. Page A-2 shows the average rate level change filed for each territory.
- Q. Do you have an opinion as to whether the data utilized and the method of calculating the filed rate level changes

contained in the filing are sound and actuarially reliable and if so, what is that opinion?

A. Yes, I have an opinion. In my opinion, the data utilized and the ratemaking methodologies used by the Rate Bureau are consistent with generally accepted actuarial procedures and they are actuarially sound and reliable.

Q. Do you have an opinion as to whether the filed rate level changes contained in Exhibit RB-1 are fully justified and, if so, what is that opinion?

A. In my opinion, they are fully justified and are not excessive.

Q. Are there any qualifications you wish to attach to your opinion?

A. Yes. In reaching my opinion, I have relied on the accuracy of the data supplied by the Rate Bureau and the PCI, AAIS, NISS and the Beach Plan/FAIR Plan and I have relied on Professor Vander Weide and Dr. Appel for the determination of the appropriate profit component of the rates.

Curry PFT/070044-009/634995

**PREFILED TESTIMONY OF DAVID BORDER
2006 FILING
DWELLING FIRE & EXTENDED COVERAGE INSURANCE
NORTH CAROLINA RATE BUREAU**

Q. Please state your name and business address.

A. My name is David Border. My business address is 2775 Sanders Road, Northbrook, IL 60062.

Q. By whom are you employed?

A. I am employed by Allstate Insurance Company and have been so employed since 1994.

Q. What is your educational background?

A. I received a Bachelor of Science degree in Business Administration and a Bachelor of Arts degree in Mathematics from Washington University in St. Louis in 1994.

Q. What is your employment background?

A. I was employed by Allstate as an analyst in auto insurance pricing upon graduation from Washington University in St. Louis. I began working in property insurance

pricing in 1995. From May 2002 – April 2003, I was the actuary responsible for pricing countrywide for Allstate's Specialty Product Lines, which includes Dwelling Fire and Extended Coverage insurance. Since that time, I have been the Pricing Director responsible for all of Allstate's personal lines Home and Auto rate filings for the East half of the country, including North Carolina.

Q. Are you a member of any professional organizations?

A. Yes. I have been a Fellow of the Casualty Actuarial Society since 2000. I have been on the Examination Committee of the Casualty Actuarial Society since 2001. I have been a member of the American Academy of Actuaries since 2000.

Q. Are you familiar with dwelling fire and extended coverage insurance ratemaking in North Carolina?

A. Yes. As part of my duties at Allstate, property pricing has been one of my responsibilities since 1995. I specifically had responsibility for the ratemaking for the dwelling fire and extended coverage product for all states, including North Carolina, from May 2002 – April 2003. I am currently a Pricing Director for Allstate with primary lines responsibility for multiple states. In addition, Allstate chairs the Property Rating Subcommittee (the "Committee"). Since July 2002, I have served as Allstate's representative and chaired the Committee.

Q. Are you familiar with dwelling fire and extended coverage insurance ratemaking in other states?

A. Yes. With minor exceptions, Allstate makes its own filings in virtually all of the United States, and, I have had responsibility for filings in most states during my career at Allstate.

Q. What is the function of the Property Rating Subcommittee?

A. Generally, the Committee is concerned with ratemaking matters pertaining to the property insurance coverages subject to the Rate Bureau's jurisdiction, including the development of classifications, rules, rates and rating plans.

Q. Who are the members of the Committee?

A. The current members of the Committee are Allstate Insurance Company, Nationwide Mutual Insurance Company, North Carolina Farm Bureau Mutual Insurance Company, State Farm Mutual Insurance Company, Travelers Property Casualty Company and USAA. Representatives of these member companies attend the meetings of the Committee and conduct the work of the Committee. Allstate Insurance Company chairs the Committee. All representatives on the Committee are actuaries or have extensive experience in actuarial matters.

Q. Can you identify Exhibit RB-1?

A. Yes. This is a large portion of the filing submitted by the Bureau to the Honorable James E. Long, Commissioner of Insurance, with respect to revised dwelling fire and extended coverage insurance rates in North Carolina.

Q. Can you identify the document marked exhibit RB-2 and entitled "Dwelling Policy Program Manual"?

A. Yes. This exhibit is also part of the filing. It includes the manual of rules, rates and classifications used to write dwelling fire and extended coverage insurance in North Carolina. This manual and any approved amendments are on file with the Department. A copy of this manual is maintained at the offices of the Bureau.

Q. Would you describe generally how the Committee was involved in the preparation of this filing?

A. Over the years the Committee has developed the methodologies it has felt were appropriate for ratemaking in North Carolina and has recommended those methodologies to the Bureau's Property Committee and Governing Committee. Generally speaking, the process is as follows. Insurance Services Office ("ISO") consolidates premium, loss and expense data in the format historically reviewed by the Committee and sends that out to the members. The North Carolina Rate

Bureau assembles expense data and furnishes it to the Committee. In addition, Applied Insurance Research runs its hurricane simulation model to produce estimated hurricane loss costs that are furnished to ISO. Then, the Committee meets by telephone conference and/or in person to consider the data and to formulate its final recommendations to the Property Committee and Governing Committee of the North Carolina Rate Bureau.

With this review the same procedure was followed. The Committee selected a loss cost methodology to determine the rate indication. This was done after ISO and the Committee reviewed the old and new methodologies and determined them to be equivalent regarding the statewide indication produced. This is consistent with the latest Homeowners review completed and is also similar to the method utilized by the Auto Committee.

Q. Would you describe the basic ratemaking methodology that underlies the filing?

A. The indicated rate change was determined by first projecting the losses and loss adjustment expenses for the policy period that the filed rates are expected to be in effect. The projected loss and loss adjustment expenses are then divided by historical earned house years to produce loss costs. These loss costs are then adjusted to the base class level. The trended base class loss costs are then credibility weighted with the expected base class loss cost. The measure of

credibility is based on the number of house years in the experience period used to develop the loss ratios, and in this instance, all of the forms are fully credible.

Then, other anticipated costs associated with policies expected to be in effect, along with provisions for underwriting profit and contingencies, were added to derive the required base rate per policy. The required base rate was compared to the current base rate to determine the indicated rate level change. This comparison of base rates is an actuarially sound method of developing indicated rate changes. In determining each component of the ratemaking formula, the Committee analyzed the data presented to it and considered the recommendations of ISO's actuary, Robert Curry, and economic consultants, Dr. David Appel and Dr. James Vander Weide.

Q. Did the Committee consider the accuracy of data in its review?

A. Yes. Companies and statistical agents employ extensive procedures to assure the quality of ratemaking data. In addition, the Committee requested the statistical agents to produce exhibits displaying exposure distributions for key factors such as territory, amount of insurance and protection class for the years in the filing for the top 10 companies. Each company was asked to review and evaluate the accuracy of its data as reported to its statistical agent. Companies have confirmed that they have performed these reviews and that to the best of their knowledge their data are correct in all material respects

Based on these and other procedures, the Committee believes that the data underlying the 2006 rate filing are reliable for ratemaking purposes.

Q. How were the premiums used in the rate level calculations in the filing determined?

A. The calculations are based on premiums expected to be produced by current manual rates. The premiums are determined by applying current manual rates to the exposures in effect during the experience period. This is known as the extended exposure method. Earned premiums at present rates are used to determine average rating factors. The average rating factor is the ratio of the average rate (earned premium at manual level divided by corresponding house-years) and the current manual base rate by territory. The average rating factor is used to convert the pure-premiums incurred during the experience period to the base class level.

Q. How were anticipated losses determined?

A. The starting point for losses is accident years 1999-2003 incurred losses evaluated at 63, 51, 39, 27 and 15 months of development respectively. Loss development factors were applied to estimate ultimate settlement amounts. Historical loss

development patterns were observed and the selected factors are the average of the prior years for each 12 month link, consistent with past years' practice.

In order to insure stability in rate levels for extended coverage while maintaining adequacy in the event of wide swings in hurricane and other wind losses, an excess wind procedure and a hurricane loss model have been utilized. Hence, violent shifts in rate level (both upward and downward), which might result from reflecting large hurricane and other wind losses only in the year in which they occur will be avoided. The incurred non-modeled excess losses are those losses that result from unusually severe wind activity (other than hurricane). They are removed from the experience used in developing rates. In order to reflect the impact of excess wind losses (that are not related to hurricanes and not accounted for in the hurricane model) on a long-term basis, non-modeled losses are multiplied by an excess wind factor. A particular year's excess wind losses and the long-term excess wind factors are determined using ISO's standard excess wind procedure. Generally, this procedure involves consideration of all available loss data in calculating the average extended coverage loss ratio. Each year's extended coverage loss ratio is capped at .500 to produce that year's "normal" loss ratio. The excess loss ratio for each year is the actual loss ratio minus the "normal" loss ratio for that year. Excess losses for any year are the product of the excess loss ratio and that year's earned premium. These excess losses are removed from the actual non-modeled losses in the experience period. The long-term excess factor is

1.0 plus the ratio of the long-term average of the excess ratios to the long-term average of the normal ratio.

Expected hurricane losses are derived from the damage ratios provided by Applied Insurance Research. These damage ratios are provided by territory and represent the expected hurricane loss per thousand dollars of coverage in effect for one year. The damage ratios are multiplied by each year's insurance years to determine the expected hurricane losses by territory for that year. The statewide expected annual hurricane losses are the sum of the territory expected annual losses

Losses were trended from the midpoint of each experience period to the midpoint of the trend period. As in past years, the Committee reviewed external trend information and pure premium information. The Boeckh Residential Index and the Modified Consumer Price Index are averaged on an appropriately weighted basis and comprise the Current Cost Index.

The loss trending procedure is accomplished in two steps. In the first step Current Cost Factors are applied to each year's losses. The Current Cost Factors are derived from the external indices and, when applied to a given year's losses, translate these losses to a cost level of May 15, 2005. In order to trend losses from 5/15/05 to the trend date, a Loss Projection Factor is applied. This projection factor is based on the annual change inherent in the latest twelve quarterly points of the Current Cost Index.

Since the external indices necessarily ignore the effect of policy deductibles, a first dollar procedure to trend from the first dollar of loss is incorporated into the calculation of the Loss Projection Factor.

Q. How were the anticipated expense provisions used in the filing determined?

A. Commissions and brokerage and taxes, licenses, and fees are a function of premium, and the ratios for these expenses from the North Carolina special calls for expense experience were used. For general and other acquisition expenses, dollar amounts were determined based on the data collected in the Bureau's special calls for expense experience.

The allocated and unallocated loss adjustment expenses are included with losses by use of a factor derived from the Rate Bureau's calls for expense experience. For each coverage, experience from calendar years 1999-2003 was used. After removing the highest and lowest value, the average of the remaining three years was used. This was done in order to reduce the fluctuation in the ratio due to the variation in incurred losses from year to year.

The Committee reviewed Consumer Price Index trends and trends in the total Compensation Cost Index. Based on the review, the Committee selected a 3.3%

trend. This factor was then used to trend expense dollars from the midpoint of the base period to the midpoint of the trend period.

For Dwelling Extended Coverage, the Bureau also included a provision for reinsurance costs in the rates. This provision reflects the Bureau's projection of reinsurers' expenses and profit (denominated as a percent of extended coverage premium) that would be incorporated in the cost of reinsurance purchased to support North Carolina Dwelling Extended Coverage insurance. The Committee recognized that historical ratemaking procedures, which did not include a specific provision for reinsurer costs, do not properly provide for the true cost of insurance. As a consequence, not all costs associated with the transfer of risk were being reflected in the rates. The Committee reviewed the analysis performed by Dr. Appel to determine the provision for reinsurance costs to include in developing the indicated rates and considers this provision to be appropriate.

Q. Are you familiar with the procedures used to collect the expense experience?

A. Yes. The Bureau sends a data call to the Companies annually. Companies complete the expense call, which includes reporting expense dollars as well as premiums at collected level and adjusted to manual level. The Bureau checks and compiles this information and sends it to ISO for their use in the rate filing. The Bureau also obtains from duplicates of diskettes filed with the Department the information appearing in the annual statement and the insurance expense exhibits.

Data from this information is provided to ISO. This information is part of the official records maintained at the Department.

Q. Have dividends to policyholders been considered in the Filing?

A. Yes. The ratemaking statutes require consideration of policyholder dividends. Dividends to policyholders are a return of a portion of the premiums paid by the policyholders. Dividends are an additional cost associated with policies written because they are payments anticipated to be made to policyholders as part of the insurance transaction. The ratemaking formula must recognize all costs that are expected to be associated with the risk transfer, consistent with ratemaking principles. The Committee recognizes the discretionary nature of dividends on an individual company basis. The data shows that the industry, as a whole, pays dividends to policyholders. To ignore a significant level of dividends would result in rates that would not allow the aggregate industry to realize a fair rate of return. However, since dividends have been small in recent years, a factor of zero was employed in this filing.

Q. Have deviations been considered in the filing?

A. Yes. Deviations have also been recognized as one of the statutory elements required to be considered in North Carolina. Deviations are an up front reduction from the manual rates. Once a deviation is approved by the Department for an

individual insurer, that lower rate must be charged until the deviation is changed in accordance with the statutory provisions. Therefore, deviations are an additional cost associated with the policies written because they represent the portion of manual premiums that will not be collected by the aggregate industry. The ratemaking formula must recognize all costs associated with the risk transfer, consistent with ratemaking principles. Deviations in the marketplace are driven by competition. To exclude deviations in the ratemaking process would have both short-run and long-run ramifications. In the short-run, the industry would be denied a fair return because companies would be reluctant to remove deviations due to the effect on their ability to compete for policyholders they have identified as the better risks in the state. In the long-run, companies would be forced to remove deviations in order to compensate for the inadequacy of rates and some companies may leave the market or may have to change their manner of doing business simply because the rates would be inadequate to allow them to continue providing the same level of service. The end result would be a less competitive market with a narrower range of services, and the impact of the increased rates would be borne primarily by the best risks in the state. Ignoring deviations would not only be counter to sound actuarial principles, but would also have serious negative implications for the competitive market in North Carolina. The projected level of deviations is based on an analysis of the historical levels of deviations on a combined coverage basis in North Carolina.

Q. Did the Committee make a determination of the underwriting profit provision to be used in calculating rates in the filing?

A. Yes. The Committee adopted an extremely conservative position with respect to the selection of an underwriting profit provision. Under the law in North Carolina, the Rate Bureau is entitled to utilize in its rates an underwriting profit provision such that the anticipated return on insurance operations (the sum of underwriting profit and investment income from insurance operations) is commensurate with the total return expected from industries of comparable risk. In this filing, the selected underwriting profit, when combined with investment income from the insurance operations, produces a return on net worth that does not exceed the cost of capital estimates provided by our consultants. However, because of the conservative selections made by the Committee, it is also the case that the underwriting profit, when combined with both investment income from insurance operations and investment income from surplus, produces a return that does not exceed the cost of capital. The 8.0% provision for Dwelling Fire and 8.0% provision for Extended Coverage were tested in the profit analysis by Dr. Appel. The range of cost of capital estimates provided by Dr. Vander Weide was found to be reasonable and accepted by the Committee.

An issue related to underwriting profit is the need for the ratemaking methodology to adequately recognize a systematic bias that causes actual underwriting experience to be different from the provision allowed in the rate. Sources of this

systematic bias include, but are not limited to, economic variations, changes in the judicial environment, legislative changes, regulatory delay or reduction of rate filings, and catastrophic events not sufficiently recognized in the normal ratemaking process including residual market assessments. Note that these events are unpredictable in terms of both when they will occur and what the magnitude will be on the relevant premium and losses. Note however that what is not unpredictable is the direction of the bias; the bias these events introduce is virtually always upward in terms of expected loss costs or downward in terms of expected premium. For example, rate filings are virtually never implemented before the assumed effective date or for more than the original requested amount; judicial decisions with regard to contract language almost never restrict coverage beyond what was intended by the Bureau when it filed policy forms, but such decisions often expand it beyond what was contemplated in the rate level.

Thus, estimated premium that does not reflect a provision for these contingencies will always fall short of needed premium. When these premiums are inadequate and underwriting losses are observed, an insurer must borrow from surplus to properly indemnify its policyholders or claimants. The contingency provision is intended to provide for these variations in a stable method over time. The Committee continues to believe that a contingency provision is appropriate and necessary, and has conservatively selected a 1% factor in this filing.

Q. Did the Committee review rate level adequacy by territory?

- A. Yes, the Committee reviewed indicated relative changes by territory.

With this filing, the Committee based the analysis upon the approved territorial definitions that made the dwelling territories the same as the existing Homeowners territories. The Committee received all of the data and completed the analysis based upon these updated territorial definitions.

The indicated relative changes suggest the extent to which the existing territorial rate relativities need to change in order to more equitably spread the overall rate level. The indicated rate level change for a particular territory is determined by comparing the territory's indicated base rate to the current average base rate. In order to develop the trended loss and fixed expense amount for each territory, premium and loss adjustments similar to those performed at the statewide level are performed at the territory level. A credibility value, based on the number of house years underlying the loss ratio, is assigned to each coverage for each territory. For extended coverage, actual hurricane losses have been removed and replaced by estimated losses based on the damage ratios provided by Applied Insurance Research. Also, an excess procedure is performed similar to the excess procedure applied at the statewide level.

At the direction of the Committee, Dr. David Appel prepared a risk load analysis that was used to allocate the net cost of reinsurance and the underwriting profit in

the rates, based on territorial differences in risk. In this analysis, measures of risk were developed for three “Zones” of North Carolina. These zones, based on the new territory definitions, are: Zone 1: NCRB Territories 5, 6, 42, and 43; Zone 2: NCRB Territories 32, 34, 41, 44, 45, 46, 47, and 53; Zone 3: NCRB Territories 36, 38, 39, 57, and 60. The measures of risk that were developed by Dr. Appel provide indicated relative levels of return, or profit, necessary for each zone. Conceptually, this methodology reflects the principle that required return is related to risk, and that a varying level of required return should be reflected in the premiums. The statewide impact of the methodology is revenue neutral; the effect is to increase the needed premium on the coast (Zone 1) and decrease the needed premium in the western part of the state (Zone 3) by way of an underwriting profit and reinsurance provision that varies by zone.

The Committee examined various issues relating to hurricane modeling and made refinements with respect to the AIR methodology. First, based on the experience following a number of hurricanes, particularly those in 2004 and 2005, the Committee chose to employ the demand surge component of the AIR model. This component reflects the fact that following significant hurricanes, the cost of virtually everything paid by insurance rises. This includes lumber, bricks, plywood, labor, shingles, hotel rooms and other such items. In addition to actual experience, economic theory dealing with supply and demand supports the use of the demand surge component.

The Committee also considered recent advances in the science of hurricane climatology and forecasting, both on a short term basis and on an intermediate term basis. Virtually everyone in the scientific community agrees that the Southeastern United States, including North Carolina, is now in a period of intense hurricane activity and that this intense activity is expected to continue for the next several years for which rates are being made, at a minimum. There are various schools of thought as to why the activity in recent years has been and continues to be more intense than average. Some scientists argue that there is a long term climactic shift resulting from global warming. Under this theory, warming of ocean temperatures will continue to occur and will result in more frequent and more severe hurricanes. Other scientists claim that we are simply at the beginning of the intense portion of a multi-decade long cycle of increased hurricane activity. Under this theory, the increased intensity of hurricane activity will ultimately subside, as the cycle turns several decades in the future.

The Committee does not currently take a position as to the cause of the current intense period of hurricane activity, but the Committee feels that it is demonstrably true that we are in a period of intense activity and that it is expected to continue at least in the short term. This being the case, the Committee felt that merely employing an average of the last 105 years of hurricane activity (using meteorological data back to 1900) will under-predict the risk of hurricanes over the period when this filing will be effective.

Following discussions with AIR, the Committee instructed AIR to run its model using a separate single year data set prepared by AEF. This data set was prepared in 2005 and represents a catalog of hurricane events for a single prospective year during this intense period. In addition, the Bureau instructed AIR to prepare an analysis based on its traditional data set back to 1900. This data set has been used for many years and is updated annually. Losses from the single year data set were employed in the reinsurance factor analysis by Dr. Appel, but the traditional AIR data set was employed in the general losses as in past years. The Committee feels that either using a five or ten year forecast period or an adjustment to the long-term average loss results is appropriate given the current forecasts. However, no such storm catalog or adjustment was available at the time of this filing, so the conservative estimate of the long-term historical AIR model was utilized for the underlying ratemaking indication.

This single prospective year was employed by Dr. Appel in his reinsurance analysis. The use in this factor reflects the fact that reinsurers now employ short term forecasting of hurricanes to negotiate reinsurance treaties with primary insurers. Recently, the cost of reinsurance has risen sharply based on short term expectation of intense hurricane activity. Such higher reinsurance costs charged by reinsurers who engage in short term forecasting of risk using data sets such as that of AEF. The current period of high reinsurance costs are expected to continue over the period for which rates are being made in this filing.

Q. Do you have an opinion as to whether the rate level changes contained in the filing are fully justified and actuarially sound and reliable?

A. Yes.

Q. What is that opinion?

A. First let me note that I have relied on the accuracy of the data supplied by the statistical agents and the Rate Bureau as reviewed and checked and on the profit analyses performed by Dr. Appel and Professor Vander Weide. With these qualifications, it is my opinion that the rate level changes are fully justified and actuarially sound and reliable.

Q. Does this conclude your prefiled testimony?

A. Yes.

WMT/cmr/070044-009/622444/ 3/30/06

PREFILED TESTIMONY of DAVID A. LALONDE

2005 DWELLING INSURANCE RATE FILING BY THE NORTH CAROLINA RATE BUREAU

1. Q. What is your name and address?

A. My name is David Lalonde. I live at 1073 Augustus Drive, Burlington, Ontario.

2. Q. What is your occupation?

A. I am Senior Vice President of AIR Worldwide Corporation a corporation in Boston, Massachusetts.

3. Q. What is AIR Worldwide Corporation?

A. AIR Worldwide Corporation is a company that analyzes and models the characteristics and impacts of natural and man-made extreme events such as hurricanes, severe thunderstorms (hail, tornadoes, and straight-line winds), earthquakes, and terrorism to estimate the potential property losses from these hazards.

4. Q. What is your educational background?

A. I have a Bachelors of Mathematics (Honours) in Actuarial Science with Statistics from University of Waterloo and I am a Fellow of the Casualty Actuarial Society.

5. Q. What is your work experience?

A. I was employed at Economical Group from 1985-89 becoming Manager, Actuarial Services; I was employed at Insurance Corporation British Columbia 1989-1993 becoming Chief Actuary; I was employed at Coopers & Lybrand 1993-95 as Director, Casualty Actuarial Risk Management Consulting; and from 1995 to the present I have been employed by AIR Worldwide Corporation and its predecessor company Applied Insurance Research, Inc.

6. Q. Please describe your technical publications and speaking engagements relating to computer models and insurance.

A.

-- In March of 2006, I spoke at CAS Ratemaking Seminar in Salt Lake City, UT.

-- In March of 2006, I spoke at the NAIC meeting in Orlando, FL.

-- In June of 2005, I spoke at Summer meeting of the Southwest Actuarial Forum in Austin, TX.

-- In May of 2005, I spoke at Enterprise Risk Management Symposium in Chicago, IL.

-- In April of 2005, I spoke at Watson Wyatt Client Conference in Orlando, FL.

-- In March of 2005, I spoke at CAS Ratemaking Seminar in New Orleans, LA.
-- In November 2004, I spoke at the Fall Meeting of the CAS in Montreal, PQ.
-- In September 2004, I spoke at the Casualty Actuaries in Reinsurance Meeting in New York, NY.
-- In May of 2004, I spoke at American Academy of Actuaries Annual Meeting in Washington, DC.
-- In April of 2004, I spoke at International Accounting and Statistical Association Annual Meeting in Las Vegas, NV.
-- In March of 2004, I spoke at the CAS Ratemaking Seminar in Philadelphia, PA.
-- In June 2003, I spoke at the Annual Meeting of the Canadian Institute of Actuaries (CIA) in Victoria, BC.
-- In June 2003, I spoke at the Spring Meeting of the Casualty Actuaries of Greater New York in New York, NY.
-- In June 2003, I spoke at the Casualty Actuaries in Reinsurance (CARE) Meeting in Philadelphia, PA.
-- In May 2003, I spoke at the Spring Meeting of the CAS in Marcos Island, FL.
-- In March 2003, I spoke at the CAS Seminar on Ratemaking in San Antonio, TX.
-- In February 2003, I spoke at the Windstorm Insurance Network Conference in Orlando, FL.
-- In October of 2002, I spoke at the CAS Special Interest Seminar on Catastrophe Risk Management in Atlanta, GA.
-- In April of 2002, I spoke at the CAS Special Interest Seminar in Dallas, TX.
-- I have co-authored (i) "Aggregation and Correlation of Reinsurance Exposures," CAS Forum, Spring 2003; (ii) "Aggregation and Correlation of Insurance Exposures," CAS Forum, Summer 2003; and (iii) "The Basis Risk of Catastrophic-loss Index Securities," Journal of Financial Economics, 2004, Elsevier, vol. 71(1), Pages 77-111. I was also a contributing author of: "Catastrophe Modeling: A New Approach to Managing Risk," Springer, 2005.

7. Q. Please describe your experience with respect to the issue of computer modeling of windstorms, including tornadoes, hurricanes, hailstorms and other storms.

A. I began modeling insurance risk in 1985; while at ICBC I implemented a Stochastic Planning Model to manage overall corporate risk. I began work on the modeling of natural hazard risk including tornadoes, hurricanes, hailstorms and other, storms in 1995. My work involves review of model components and responsibility for the review of the Atlantic Tropical Cyclone model by the Florida Commission on Hurricane Loss Projection Methodology.

8. Q. Please describe the companies or organizations for whom you have consulted in connection with the computer modeling of windstorm losses.

A. AIR provides catastrophe risk assessment and management products and services to primary insurance companies, reinsurers, intermediaries, involuntary markets, state funds, and other insurance industry organizations. We also provide services to investment banks and investors in catastrophe bonds.

AIR has performed hurricane loss analyses for the following coastal FAIR and Beach Plans:

Alabama Insurance Underwriting Association
Florida Windstorm Underwriting Association
Hawaiian Hurricane Relief Fund
Insurance Placement Facility of Delaware
Insurance Placement Facility of Pennsylvania
Louisiana Insurance Underwriting Association
Louisiana Joint Reinsurance Association
Massachusetts Property Insurance Underwriting Association
New York Property Insurance Underwriting Association
North Carolina Insurance Underwriting Association
Rhode Island Joint Reinsurance Association
South Carolina Windstorm and Hail Underwriting Association
Texas Windstorm Insurance Association
Virginia Property Insurance Association.

AIR has been directly involved in ratemaking proceedings in the states of Florida and North Carolina.

9. Q. Have these companies and organizations relied upon your hurricane loss computer simulation methodology?

A. Yes.

10. Q. Please explain how these companies and organizations have relied upon your computer simulated hurricane loss estimates?

A. Reinsurers use AIR Software Systems (CATRADER®, CATMAP®/2, CLASIC/2™, CATSTATION™) to estimate long run expected and potential large losses on the reinsurance treaties of primary ceding companies. Based on these expected loss estimates as well as other underwriting information, reinsurers can develop rates for catastrophe treaties and can decide how much, if any, to participate in catastrophe, aggregate excess or pro rata treaties. AIR Software CATRADER® and CATMAP®/2 also helps reinsurers to estimate the potential losses on their total portfolios of property treaties.

Primary companies use our services and software systems to estimate their long run windstorm and/or earthquake loss potential. They are also interested in estimating large loss potential, commonly referred to as "probable maximum losses." This information helps them to decide how much catastrophe reinsurance to buy. Particularly after Hurricane Andrew, companies want to make sure that they are not overly exposed to a single catastrophic event. Primary companies are becoming increasingly interested in estimating catastrophe pure premiums and loss costs in various geographical areas.

The coastal FAIR and Beach Plans provide their member companies with the results of our analyses so that they can estimate their potential assessments due to catastrophic events.

Intermediaries use our services to provide catastrophe loss analyses to their primary company clients.

AIR also provides hurricane loss estimation services to the investment community in conjunction with various catastrophe bond offerings that have been issued. Investment bond rating companies use the probabilistic estimates derived from the AIR catastrophe models as the primary basis for assigning catastrophe bond ratings.

11. Q. Have you been asked by the North Carolina Rate Bureau to prepare an analysis based on your models of windstorm loss potential for the state of North Carolina?

A. Yes.

12. Q. What specifically have you prepared for the North Carolina Rate Bureau relating to North Carolina dwelling insurance?

A. We have prepared a report for the North Carolina Rate Bureau based on an analysis using a simulated sample of 100,000 "years" of potential hurricane experience based on a long-term view of the hurricane risk ("standard" catalog simulation). A copy of our report is attached hereto as Exhibit RB-6A.

We have also prepared a report based on an analysis using a simulated sample of 10,000 "years" of potential hurricane experience based on the hurricane risk given the climatological conditions expected for the 2005 hurricane season ("seasonal" catalog simulation). A copy of our report is attached hereto as Exhibit RB-6B.

A simulated "year" in this context represents a hypothetical year of hurricane experience that could happen in the current year. For the North Carolina Rate Bureau we used exposures for 2003, which was then the most recent year available. These large samples of simulated loss experience enabled us to estimate pure hurricane premiums and loss costs as well as the probabilities of losses of various magnitudes.

13. Q. What is meant by the term "pure premiums"?

A. Pure premiums are calculated by dividing the long run average annual aggregate losses by the number of risks, i.e., the house years.

14. Q. What is meant by the term "loss costs"?

A. Loss costs are calculated by dividing the long run average annual aggregate losses by the insurance in force, i.e., the insurance years plus the liabilities for contents and other coverages.

15. Q. When were you asked by the North Carolina Rate Bureau to do your study?

A. Mid-2005.

16. Q. Please describe the approach that you used to develop your reports.

A. Our approach is that of a computer simulation model. AIR Worldwide, Inc. (AIR) was the first company to develop probabilistic catastrophe modeling as an alternative to the standard actuarial or "rule of thumb" approaches on which insurance companies had to rely for the estimation of potential catastrophe losses. In 1987, AIR introduced to the insurance industry a modeling methodology based on simulation techniques and mathematical approaches long-accepted in a wide variety of scientific disciplines. Since the inception of this new approach, the AIR hurricane model has undergone a comprehensive process of refinement, enhancement, validation, and review.

Standard actuarial techniques rely on data on past losses to project future losses. But the scarcity of historical loss data resulting from the infrequency of these events makes standard actuarial techniques of loss estimation inappropriate for catastrophe losses. Furthermore, the usefulness of the loss data that does exist is limited because of the constantly changing landscape of insured properties. Property values change, along with the costs of repair and replacement. Building materials and designs change, and new structures may be more or less vulnerable to catastrophe events than were the old ones. New properties continue to be built in areas of high hazard. Therefore, the limited loss information that is available is not suitable for directly estimating future losses

By way of example in North Carolina, if historical insurance loss data were used, the only recent significant hurricane events would be Hugo in 1989, Fran in 1996, Bonnie in 1998, and Floyd in 1999. Hugo entered North Carolina in the Charlotte area and continued through the central and western parts of the state. While Hurricane Fran made direct landfall on the North Carolina coast and did significant damage to coastal exposures, it caused even more damage inland in the Raleigh area. Raleigh incurred more loss than one would normally expect for an inland area because of the significant amount of rain that had fallen in Raleigh just prior to Hurricane Fran. The two weeks of rain prior to Hurricane Fran's arrival left the ground saturated resulting in significantly more damage from uprooted trees than would normally be expected for a storm of its size.

If the data from these storms were the only data used in ratemaking, it could well be the case that rates for the Raleigh and Charlotte areas would be higher than for coastal areas. Such a result would not fairly reflect the relative wind loss vulnerability of the territories in the state.

17. Q. Do you know how many years of dwelling insurance data exist for North Carolina?

A. I am advised that data for dwelling insurance exists only back to approximately 1950.

18. Q. What is your opinion as to whether dwelling insurance data for the period from 1950 to 2004 adequately represents the state's likely exposure to hurricanes.

A. In my opinion, 55 years of insurance data is not sufficient to estimate the true hurricane loss potential in North Carolina. Hurricanes, particularly intense hurricanes, are low frequency events. The absence or presence of even one Category 4 or 5 hurricane (under the Saffir-Simpson scale) can dramatically influence the loss potential calculated over such a short time horizon.

Furthermore, the usefulness of the loss data that does exist is limited because of the constantly changing landscape of insured properties. Property values change, along with the costs of repair and replacement. Building materials and designs change, and new structures may be more or less vulnerable to catastrophe events than were the old ones. New properties continue to be built in areas of high hazard. Therefore, the limited loss information that is available is not suitable for directly estimating future losses.

For these reasons, a better measure of North Carolina's exposure to hurricanes can be gained by using a computer simulation model such as ours, which is based on historical data and meteorological information.

19. Q. What is a computer simulation model?

A. Basically, a computer simulation model is a series of computer programs which describe or model the particular system under study. All of the system's significant variables and interrelationships are included. A high-speed computer then "simulates" the activity of the system and outputs the measures of interest. Our simulation models incorporate random variables. In such simulation models, numbers are generated from the probability distributions of random variables to assign values to the variables for each model simulation. These probability distributions are usually standard statistical distributions selected on the basis of good fits with empirical data. Many simulations or iterations are performed to derive estimates from simulation models. Many simulations are necessary so that the output distribution converges to the true distribution and that model-derived estimates are "stable".

20. Q. Is computer modeling commonly used and relied on in meteorology?

A. Yes. In current operational hurricane forecasting practice, experts in the National Hurricane Center rely heavily on various kinds of computer models. These models range in complexity from simple statistical models to three-dimensional primitive equation models. The statistical and two-dimensional models are maintained by the Tropical Prediction Center (TPC). The three-dimensional models are maintained by the National Centers for Environmental Prediction's (NCEP) Environmental Modeling Center (EMC).

More detailed information regarding the forecast NWP models used by NHC can be found at <http://www.nhc.noaa.gov/aboutmodels.html>.

21. Q. How long have computer simulation models been used in insurance?

A. AIR pioneered the probabilistic catastrophe modeling technology that is used today by the world's leading insurers, reinsurers and financial institutions. The AIR hurricane simulation model has been in use by our clients since 1987.

22. Q. How many simulations are typically performed?

A. There is no standard number of simulations that are performed. The required number is a function of the number of random variables and the probability distributions of those variables. The required number also depends on the geographical resolution of the data and the convergence level desired. The number of iterations can, however, be estimated using a formula which is based on the Central Limit Theorem. The Central Limit Theorem states that for a large number of samples, the normal distribution is a good approximation of the mean of the samples. Additionally, model output is tested for convergence by re-calculating the various moments or percentiles of the output distributions after adding more simulations to ensure that the additional simulations do not change significantly the output distributions.

23. Q. How many simulations did you perform for your study as to North Carolina dwelling insurance?

A. We performed two analyses, each with a different number of simulation "years".

One analysis was performed with 100,000 "years" of simulations, based on a long-term view of the hurricane risk. This analysis formed the basis of the work performed for the NCRB.

Additionally, we performed an analysis with 10,000 "years" of simulations, based on the hurricane risk given the climatological conditions expected for the 2005 hurricane season.

24. Q. What is the implication of using 100,000 simulated "years" vs. 10,000 simulated "years", and is each an appropriate number of simulations?

A. A 100,000 "year" simulation yields results that are stable and appropriate for base rate-making purposes, where results are drilled down to the relatively high geographical resolution of territory(s).

The 10,000 "year" view is a common view used by reinsurers. A 10,000 "year" simulation yields results that are stable and appropriate for use at a lower geographical resolution, such as state(s) or zones.

Our approach was based on the Monte Carlo simulation method which is a generally accepted mathematical technique that has been used extensively in the fields of insurance, operations research, and nuclear physics, among others.

25. Q. In general, what are the uses of Monte Carlo simulation models?

A. One of the first real uses of Monte Carlo simulation as a research tool was for work on the atomic bomb during World War II. With the advent of powerful computers, the uses for this technique expanded. Computer simulation models are particularly useful tools for the analysis of problems that involve solutions that are difficult to obtain analytically.

As one noted authority, Law and Kelton, has stated: "Most complex, real-world systems cannot be accurately described by a mathematical model which can be evaluated analytically. Thus, a simulation is often the only type of investigation possible." The natural hazard loss-producing system is one such system.

26. Q. What is the natural hazard simulation model?

A. The natural hazard simulation model is a model of the natural disaster "system." The primary variables are meteorological in nature. The AIR research team collects the available scientific data pertaining to the meteorological variables critical to the characterization of hurricanes and therefore to the simulation process. These primary model variables include landfall location, central pressure, radius of maximum winds, forward speed, and track direction. Data sources used in the development of the AIR hurricane model include the most complete databases available from various agencies of the National Weather Service, including the National Hurricane Center.

After the rigorous data analysis, AIR researchers develop probability distributions for each of the variables, testing them for goodness-of-fit and robustness. The selection and subsequent refinement of these distributions are based not only on the expert application of statistical techniques, but also on well-established scientific principles and an understanding of how hurricanes behave.

These probability distributions are then used to produce a large catalog of simulated events. By sampling from the various probability distributions, the model generates simulated "years" of event activity. A simulated year in this context represents a hypothetical year of hurricane experience that could happen in the current year. The AIR models allow for the possibility of multiple events occurring within a single year. That is, each simulated year may have no, one, or multiple hurricanes, just as might be observed in an actual year. Many thousands of these scenario years are generated to produce the complete and stable range of potential annual experience of tropical cyclone activity. The pattern and distribution of the simulated years approximates the pattern of historical and

future years because their derivation is based on a scientific extrapolation of actual historical data.

Once values for each of the important meteorological characteristics have been stochastically assigned, each simulated storm is propagated along its track. Peak wind speeds and wind duration are estimated for each geographical location affected by the storm. Based on peak winds and duration, damages are estimated at each location for different types of structures. Finally, policy conditions are applied to estimate the insured losses resulting from each event.

As opposed to purely deterministic simulation models, probabilistic simulation models enable the estimation of the complete probability distribution of losses from hurricanes. Once this probability distribution is estimated, hurricane loss can be derived.

27. Q. What are the meteorological data sources that underlie your model?

A. The following are key data sources that underlie the model.

<u>Source</u>	<u>Years of Data</u>
Monthly Weather Review	1900-present
NWS-23	1900-1976
NMW-38	1900-1984
Neumann, Charles J., "Tropical Cyclones of the North Atlantic Ocean, 1871-1998." NCDC, NOAA*	1871-1998
National Hurricane Center Preliminary Reports for Specific Hurricanes*	1977-2004
Tropical Cyclone Data Tape for the North Atlantic Basin, HURDAT	1886-2004
http://weather.unisys.com/hurricane/index.html	1886-present

* Supplemental data added to report by NHC upon request by AIR.

28. Q. Are all of these sources governmental reports?

A. All are except for the Monthly Weather Review, which is a peer-reviewed journal published by AMS and the Unisys web site which is maintained by Unisys Corporation.

29. Q. Are these sources generally relied upon in the meteorological and insurance communities?

A. Yes.

30. Q. What steps were taken to assure that the meteorological data underlying the model were correctly inputted into the model?

A. When the meteorological and other data are input into the model, we consistently follow the policy of carefully cross-checking and verifying the numbers for accuracy. We continually review our models and their underlying meteorological data to make sure that the data have been input correctly. We also compare our model-generated data with the actual historical data to make sure that there is a close match. For example, we overlay maps of our simulated wind speeds on maps of the actual wind speeds for actual historical events.

31. Q. What is a hurricane?

A. Hurricanes form when warm ocean water evaporates, is further warmed by the sun, and rises to create a high, thick layer of humid air. This rising of warm, dense air creates an area of low pressure, technically known as a depression, near the ocean's surface. Surface winds converge and, due to the earth's Coriolis force, display a clear cyclonic pattern.

The inward rush of peripheral surface winds toward the central area of low pressure, the rise of warm humid air in the center, and the subsequent outflow away from the system at high altitude, combine to create a self-sustaining heat engine. The warmer the water temperature, the faster the air in the center of the system rises. The faster this air rises, the greater will be the difference between the surface air pressures inside and outside the vortex.

Air flows from areas of relative high pressure to relative low pressure. The greater the difference between peripheral and central pressures, the faster the inflow. When wind speeds reach 40 miles per hour, the depression reaches tropical storm status. When wind speeds reach 74 miles per hour, the storm is designated a hurricane or typhoon. The term "super-typhoon" is used for tropical cyclones that reach maximum sustained 1-minute surface winds of at least 130 knots, which is the equivalent of a strong Category 4 or Category 5 hurricane in the Atlantic basin. Note that the terms "hurricane" and "typhoon" are regionally specific names for the same phenomenon. Severe tropical cyclones that occur in the Atlantic and eastern Pacific are referred to as hurricanes, and in the western Pacific as typhoons.

32. Q. What is meant by sustained wind speed?

A. The term sustained wind speed refers to the wind averaged over a given period of time, such as one or ten minutes, or an hour. Generally for the purpose of this testimony as to hurricanes, a one minute sustained wind is used. The speed of shorter period gusts or lulls may be considerably higher or lower than the sustained wind. Surface wind speed is defined as the wind at 33 feet (10 meters) above ground for this purpose.

33. Q. What are the categories of hurricanes?

A. Under the Saffir-Simpson Hurricane Scale, there are five categories of hurricanes. They are categorized according to sustained wind speeds and central pressure as follows:

Saffir-Simpson Hurricane Scale

Category	Wind Speed (mph)	Central Pressure
1	74-95	≥ 980
2	96-110	965-979
3	111-130	945-964
4	131-155	920-944
5	>155	<920

34. Q. How many hurricanes made landfall in the historical experience period?

A. There were one hundred and sixty-three hurricanes making landfall in the U.S. during the sample period (1900-2004). A single hurricane may comprise several landfalls, for example hurricane Donna in 1960 had three landfall points. By landfall point, I mean the latitude and longitude coordinates of the place where the center of the wind circulation of the hurricane crossed from the ocean to land. In addition to landfalling hurricanes, AIR scientists have analyzed historical data on the storm tracks of bypassing events. A bypass is defined as causing hurricane force winds over land.

35. Q. What was the most intense hurricane to directly strike North Carolina during the period 1900-2004?

A. Hazel, a Category 4 hurricane, in 1954 was the most intense hurricane to hit North Carolina during this period from a meteorological standpoint.

36. Q. What are "by-passing" storms and how are they handled?

A. By-passing storms are hurricanes which do not actually make landfall, that is, where the center of the hurricane never actually comes on shore but where winds of hurricane strength, i.e. 74 mph or higher, are recorded on-shore. By-passing storms are modeled like all other hurricanes starting with estimates of the frequency and location of such storms. As is the case with landfalling hurricanes, the frequency and location distributions of by-passing hurricanes have been derived from the historical record and other scientific information.

37. Q. Are there any climatological factors influencing hurricane frequency and intensity in general and with respect to North Carolina in particular?

A. There are a number of climatological factors that impact hurricane activity in the Atlantic Basin, including the Atlantic Multidecadal Oscillation (AMO), the El Niño Southern Oscillation (ENSO), the Quasi-Biennial Oscillation (QBO), and the North Atlantic Oscillation (NAO). The AMO is the oscillation of sea surface temperatures in the North Atlantic, which fluctuates over a period of several decades. The ENSO is the oscillation of sea surface temperatures in the Eastern Pacific Ocean, which fluctuates over a period of approximately 2.5 to 7 years. The QBO is the oscillation in wind directions over the tropics in the upper atmosphere, which fluctuates about every 2 years. The NAO is the large scale oscillation in atmospheric pressure in the Atlantic Ocean between the subtropic high and the polar low pressure system, which fluctuates over a period of days, weeks, or months. These factors have different impacts on hurricane activity in the Atlantic basin.

38. Q. How are these factors incorporated into the model?

A. These factors are not explicitly accounted for in AIR's standard 100,000 "year" hurricane catalog. The catalog is a long term catalog that is based on the past 105 years of historical hurricane activity.

However, AIR has developed a "seasonal" hurricane catalog in conjunction with Accurate Environmental Forecasting (AEF), based on the climatological conditions expected for a given year. This catalog takes into account factors such as AMO, ENSO, and QBO in order to refine hurricane frequency and intensity probabilities for a given year.

Additionally, AIR is developing a "near-term" hurricane catalog to account for the impact of Sea Surface Temperature Anomalies (SSTs) on hurricane activity. SSTs are being considered in the generation of this "near term" catalog because they vary over the longest time period, and thus have the least amount of uncertainty associated with them.

A correlation has been drawn between SST cycles and hurricane activity in the Atlantic basin. There is an increased probability of hurricane activity during warm cycles, and a decreased probability of hurricane activity during cool cycles.

39. Q. Based on this information, what conclusions can be drawn about the probability of hurricane activity in the Atlantic basin in the coming years?

A. We are currently in an SST warm cycle. This condition results in an increased probability of hurricane activity. While other cycles might oscillate to result in an increased or decreased probability of hurricane activity from one season to the next, the SST varies over a longer period of time and thus results in an overall increased probability of hurricane activity in the coming years.

40. Q. Is the AIR modeling methodology a sound and appropriate method of projecting the long-term average wind losses used in the filing for dwelling insurance in North Carolina?

A. Yes. AIR's simulation methodology is based on mathematical/statistical models that represent real-world systems. As with all models, these representations are not exact, however simulation methodology is a superior technique for estimating potential hurricane losses. The best approach is to consider the longest period of consistently maintained and reported meteorological data available, which is what AIR's models do.

AIR's "standard" catalog incorporates the best and longest period of data available, and analyses performed using this catalog yield the long-term average wind loss for the modeled exposure set. The AIR/AEF "seasonal" catalog also incorporates the best and longest period of data available, with modifiers applied for the climatological conditions expected in the upcoming hurricane season (in this case 2005). Analyses performed using this catalog yield the average wind losses for the given climatological conditions.

41. Q. How does the hurricane model simulate hurricanes affecting the U.S. and North Carolina?

A. For each simulated year, the model first determines the number of landfalls that occur during that year. If a landfall occurs, the landfall location is generated using a probability distribution for landfall location. Having simulated the location, values for landfall angle, central pressure, radius of maximum wind, and forward speed are generated using probability distributions derived from historical data and meteorological knowledge. As the hurricane moves from its landfall location, the track of the hurricane is simulated using probability distribution derived from historical data and meteorological knowledge. As the hurricane moves from its landfall location, the track of the hurricane is simulated using a Markov procedure with transition probabilities estimated using historical data.

42. Q. How is hurricane frequency modeled?

A. The AIR hurricane model uses a negative binomial distribution to generate the number of landfalling storms per year. Actual historical data from 1900-2004 is compared to the modeled distribution for the entire Gulf and East Coasts. The modeled distribution fits the historical data very closely. The average number of hurricanes per year making landfall in the U.S. is 1.6. The average number of landfalling and bypassing storms is 1.7. We make no other assumptions as to future hurricane activity.

43. Q. How is landfall location modeled?

A. In the AIR hurricane model there are 3,100 possible landfall points at each one nautical mile of smoothed coastline from Texas to Maine. Historical hurricane occurrences since 1900 are used to estimate a smoothed locational frequency distribution. The actual smoothing technique employed was selected because it has been utilized in other climatological studies and because it produces a smoothed distribution that

maintains areas of high versus low frequency while smoothing out variations due to limitations on completeness in the historical record.

44. Q. How is hurricane severity modeled?

A. The hurricane model generates values for the severity variables. There are five primary variables which account for hurricane severity. These variables are the minimum central pressure, the radius of maximum winds, the forward speed, the angle at which the storm enters the coast, and the track of the storm once on shore.

45. Q. What is the central pressure variable?

A. Central pressure is defined as the minimum atmospheric pressure measured in a hurricane. The central pressure distribution is based on the historical database and is determined for each 100 nautical mile coastline segment.

46. Q. What is meant by the radius of maximum winds?

A. The radius of maximum winds is the distance from the center of circulation to the location of maximum wind speeds. The radius distribution is based on the historical database and is determined for each 100 nautical mile segment.

47. Q. What is forward speed?

A. Forward speed is the speed at which a hurricane moves from point to point. The forward speed distribution is based on the historical database and is determined for each 100 nautical mile segment.

48. Q. Does the combination of forward speed and wind speed affect the damage caused by a given hurricane?

A. Yes, this is what is referred to as the asymmetrical effect of hurricane winds. Hurricane winds move in a counter clockwise direction around the eye of the hurricane, which means that winds on the right side of the hurricane are moving with the forward direction of the storm thereby creating a higher effective wind speed at any location on the right side of the hurricane. Conversely, the effective wind speed at any given location on the left side of the storm is reduced by the combined effect of the hurricanes rotational winds moving in the opposite direction from the translational winds.

49. Q. What is the track angle at landfall?

A. Track angle at landfall is the angle between track direction and due north at landfall location.

50. Q. What is the storm track?

A. Storm track is the path the hurricane takes. The procedure that AIR has developed to simulate storm tracks, which is described in more detail under question 56 below, allows the tracks to curve and recurve in the same way and to the same extent that actual historical storms do.

51. Q. Does the location of the hurricane make a difference?

A. Yes. Hurricane intensity as well as frequency vary by location. In general, as latitude increases, average hurricane intensity decreases and we model this effect accordingly. When a hurricane moves over cooler waters, its primary source of energy (latent heat from warm water vapor) is reduced so that the intensity of circulation decreases in the absence of outside forces. For this reason, the parameters of the severity variable probability distributions were estimated separately for each of the 31 100-mile coastal segments using state-of-the-art statistical techniques combined with published scientific information.

52. Q. How does the simulation model generate values for the distribution of hurricane central pressures?

A. The AIR hurricane model utilizes central pressure as the primary hurricane intensity variable. Using the historical data, Weibull distributions are fitted to the data for each of the 31 100-nautical-mile coastal segments as well as for larger regional segments, with the final distribution for each segment being a weighted combination of the two. The Weibull form was selected based on "goodness-of-fit" tests with actual historical data. The use of the Weibull distribution for storm central pressure is documented in the scientific literature.

53. Q. How does the model generate values for the radius of maximum winds?

A. The radius of maximum wind is simulated using a regression model that relates the mean radius to central pressure and latitude. The error term in this model is assumed to follow a Normal distribution. The parameters are estimated using the least squares method and standard diagnostic tests are used to evaluate the adequacy of the fit. The resulting values are bounded based on central pressure to produce a final distribution for the radius.

54. Q. How does the model generate values for forward speed?

A. Probability distributions are estimated for forward speed for each 100 nautical mile segment of coastline with bounds based on the historical record. Separate distributions are estimated for each of the segments because the likely range and probabilities of values within the range for these variables depend upon geographical location, particularly latitude.

55. Q. How does the model generate values for track angle at landfall?

A. Separate distributions for track angle at landfall are estimated for variable length segments of coastline with bounds based on the historical record. The length of each segment is governed by the general orientation of that segment. Standard 100 mile segments cannot be used because the orientation of the coastline might change dramatically within these segments. The corresponding probability distributions are combined normal distributions with bounds based on the historical record and meteorological expertise.

56. Q. How does the model generate values for storm track?

A. AIR has developed a unique and scientific procedure to simulate storm tracks. Our scientists and engineers have collected and analyzed historical data on the tracks of more than 900 Atlantic tropical cyclones, both landfalling and non-landfalling. Using this data, they have created conditional probability matrices from which the tracks of simulated events are generated. There are 16 primary directional probabilities. Within each of these 16 primary directions there is a continuous probability distribution, resulting in an infinite number of potential track directions. For each of 16 directional probabilities of storm arrival, these matrices specify the probability of a directional change to each of the other 16 directional probabilities. The advantage of this probabilistic approach is that the storm tracks generated for simulated tropical cyclones will closely resemble the curving and recurving tracks that are actually observed. Furthermore, the simulated storm tracks are fully probabilistic, which means that any possible storm track can be generated, not just historical tracks. Other approaches that use either straight-line tracks or historical tracks are not as realistic because future hurricanes will not travel in perfectly straight lines, nor will they follow the exact path of previous hurricanes.

In order to model hurricanes with multiple landfalls, or combination of landfall and bypass, selected storm tracks are joined statistically. The criteria used to select tracks to be joined are consistency in the following storm parameters: central pressure, forward speed and radius of maximum wind. The number of bypasses and landfalls selected to be joined is determined based on the historical record for the region. The tracks are joined using a cubic spline and the storm parameters are interpolated along the joining path to ensure appropriate hurricane behavior. This procedure ensures that multiple landfalling storms, such as triple-landfalling Donna in 1960, which affect more than one area of the U.S. coastline, are accurately reflected in the catalog.

57. Q. How does the model calculate maximum wind speeds?

A. Once values are obtained for all of the severity variables, the maximum sustained wind speed is calculated using generally accepted meteorological formulas. For each simulated event, the AIR hurricane model simulates the storm's movement along its

track. A complete time profile of wind speeds is developed for each location affected by the storm, thus capturing the effect of duration of wind on structures as well as peak wind speed. Calculations of local intensity take into account the effects of the asymmetric nature of the hurricane windfield, storm filling over land, surface friction, and relative wind speeds as the distance from the radius of maximum winds increases.

58. Q. You have explained how the model generates values determining the frequency and severity of hurricanes. Now please explain how are insured damages computed?

A. AIR scientists and engineers have developed mathematical functions called damageability relationships, which describe the interaction between buildings, both their structural and nonstructural components as well as their contents, and the local intensity to which they are exposed. Damageability functions have also been developed for estimating time element losses. These functions relate the mean damage level as well as the variability of damage to the measure of storm intensity at each location. Because different structural types will experience different degrees of damage, the damageability relationships vary according to construction materials and occupancy. The AIR model estimates a complete distribution around the mean level of damage for each local intensity and each structural type, and from there constructs an entire family of probability distributions. Losses are calculated by applying the appropriate damage function to the replacement value of the insured property.

The AIR damageability relationships incorporate the results of well-documented engineering studies, tests, and structural calculations. AIR engineers continually survey the engineering literature and consult with other experienced engineers to verify our damage functions, and if necessary, they refine these relationships. AIR also performs post-disaster field surveys and analysis for all U.S. landfalling hurricanes. We have analyzed over \$10 billion of actual claims data from recent hurricanes. Much of the loss data is by zip code, coverage, and construction.

59. Q. Has the model been independently peer reviewed?

A. Yes.

60. Q. By whom?

A. All hurricane characteristics were reviewed by Dr. Walter Lyons in 1986. Dr. Lyons, a Certified Consulting Meteorologist, was contracted by the E.W. Blanch Company to review the AIR hurricane simulation model. There are no unresolved issues.

During 1996 and 1997, Duff & Phelps, Fitch, Moody's and Standard & Poors all reviewed AIR's hurricane model in conjunction with their rating of the USAA catastrophe bond.

The vulnerability functions were reviewed by Dr. Joseph Minor, P.E. in 2001 and 2002. There are no unresolved issues.

61. Q. What type of reviews has been performed?

A. In 1986 Dr. Lyons was asked to independently review and make suggestions as to the hurricane and tornado simulation models and our sources of meteorological information. Dr. Lyons reviewed the meteorological variables and relationships used in the models. In 1986, Dr. Lyons recommended and provided copies of a few additional meteorological papers for our review and made several suggestions for change. For example, he made a suggested correction to our approximation of the air density term in the gradient wind equation. Our original formula could have resulted in up to a 5 percent error in the estimation of peak wind speeds near the center of the storm. This correction was made immediately following Dr. Lyons' recommendation. In 1993 Dr. Lyons again reviewed these models, including how the climatology had been updated to reflect storms since 1986 and validation results based on actual events.

The testing conducted by Duff & Phelps, Fitch, Moody's and Standard & Poors was particularly extensive because the USAA catastrophe bond was the first such bond to be assigned a corporate bond rating by all four agencies, and the probabilistic estimates derived from the AIR hurricane model were the primary bases for the assigned ratings. Over a period of 18 months, AIR staff met with employees and consultants hired by the rating agencies representing many fields, including insurance, statistics, and finance, to explain in detail the AIR hurricane model. In addition, a number of sensitivity analyses and stress tests were performed at the requests of the rating agencies during this year and half period of time. These tests, performed by outside experts whose primary interest is the protection of their investors, confirm the robustness of the AIR model. Moody's wrote, "Moody's did not simply accept AIR's modeling results at face value. Rather, we followed an examination and calibration procedure, aiming to provide Moody's with a high degree of confidence in the reliability and stability of the simulation results." Similarly, "Fitch evaluated the underlying technical integrity of the AIR model on the basis of model specification and model structure." Because of the first-time nature of such a large catastrophe bond issuance, the rating agencies very carefully scrutinized model assumptions, data, and methodology. These rating agencies have continued their scrutiny of the model in the course of several subsequent securitization transactions.

62. Q. What information did you provide the reviewers about your methodology?

A. In 2003 AIR provided Dr. Minor with the 2002 submission of the AIR Hurricane Model to the Florida Commission and documents describing the Commission's process for determining the acceptability of a computer simulation. Dr. Minor had access to the full AIR hurricane modeling team in two days of briefings and discussion. His training and experience as a structural/wind engineer provided for a principal focus on the vulnerability functions in the AIR model.

In the review of the AIR model in 1996 and 1997 by the bond rating companies, access was given to the probability distributions assumed by AIR and the estimation methods employed to fit the parameters of those distributions. Also reviewed were the

mathematical functions used in the model to approximate the interactions between simulated storm parameters. For the validation testing and sensitivity analysis, the rating companies reviewed model output under various distributional assumptions.

In 1986 we provided to Dr. Lyons technical documents describing our methodology. For example, the hurricane simulation model technical document describes the model-variables, the estimated probability distributions that we fit to the model variables, the variable interrelationships, such as the formula relating minimum central pressure to maximum wind speed, our filling equations, how we account for the effects of surface terrain on wind speed, and how we estimate storm surge heights at various coastal locations. In 1993 we additionally provided him with copies of our original documentation along with information regarding validation of the hurricane model. Validation information included, for several hurricanes such as Alicia (1983), Elena (1985), Gloria (1985), Kate (1985), Hugo (1989), Bob (1991) and Andrew (1992), a comparison of simulated losses with actual losses.

63. Q. Has your model been reviewed by the Florida Commission on Hurricane Loss Projection Methodology?

A. Yes. The Florida Commission on Hurricane Loss Projection Methodology was established in 1995 with the mission to “assess the effectiveness of various methodologies that have the potential for improving the accuracy of projecting insured Florida losses resulting from hurricanes and to adopt findings regarding the accuracy or reliability of these methodologies for use in residential rate filings.” The Commission has established 53 standards that need to be met before a catastrophe model is acceptable for ratemaking purposes in the state of Florida. The AIR hurricane model was the only model approved under the 1996 standards, and it has consistently been approved under the standards of subsequent years. In addition, AIR has been working with insurance departments in other states for the past several years in meeting their informational requirements. Rates based on the AIR models have been filed and approved in an increasing number of states.

64. Q. What sorts of specialists comprise the Florida Commission’s professional team?

A. The Florida Commission professional team includes two persons from each of the following professions: actuary, computer scientist, statistician, structural engineer, and meteorologist.

65. Q. Does AIR have a staff meteorologist?

A. Yes, AIR now has 6 staff meteorologists. Dr. Shangyao Nong, who joined the company in 1999, has a specialty in tropical cyclones. Dr. Nong is a member of the American Meteorological Society. He is responsible for the meteorological components of the AIR hurricane model.

66. Q. Have the meteorological components of your model been reviewed?

A. Yes, Dr. Nong has thoroughly reviewed all meteorological components of AIR's hurricane model.

67. Q. Have you validated the models?

A. Yes. AIR scientists and engineers validate the models at every stage of development by comparing model results with actual data from historical events. The simulated event characteristics parallel patterns observed in the historical record and resulting loss estimates correspond closely to actual claims data provided by clients. Internal peer review is a standard operating procedure and is conducted by the AIR professional staff of scientists and engineers, over 20 of whom hold Ph.D. credentials in their area of expertise. AIR models have also undergone extensive external review, beginning with Dr. Walter Lyons' systematic review of the AIR hurricane model in 1986.

68. Q. What are the advantages of computer simulation?

A. There are several advantages of the computer simulation approach. First, it is able to capture the effects on the catastrophe loss distribution of changes over time in population patterns, building codes, amounts insured and construction costs. Second, this estimation procedure provides a complete picture of the probability distribution of losses rather than just estimates of probable maximum losses. As opposed to using actual loss data, this procedure also leads to more stability in the estimated expected annual losses. Simulation models can be tested much more easily than other approaches to catastrophe loss estimation. Additionally, they provide a means to determine the impact of new scientific information and/or developments. And finally, the simulation approach provides a framework for performing sensitivity analyses and "what-if" studies. Disadvantages of the simulation approach include long model development time and potential high development costs. Overall the benefits provided by the model and the value of the model output outweigh the costs. The simulation approach provides much more reliable and consistent loss estimates than traditional approaches to catastrophe risk assessment and management.

69. Q. Have your models been updated and refined since they were originally constructed?

A. Yes. The AIR hurricane model was first developed in 1985. Since that time the model has been updated at least once each year. At a minimum, the zip code database is updated each year. For each new zip code centroid, the following data needs to be re-estimated: distance from coastline, elevation, surface terrain, and any other special topographical features. This is a technical update.

Additionally, all of the probability distributions for all of the meteorological variables have been re-estimated to include additional years of actual hurricane experience every two to three years. These updates are not substantive and do not result in major changes to loss estimates.

Damageability relationships are continually reviewed and validated as actual events occur and new loss data is received from our client companies. Usually, changes to loss estimates are not significant.

The updates listed above are ongoing and reflect the efforts of AIR professionals to incorporate the most current data available, particularly those relating to recent hurricane activity. There are other revisions to the model, however, that represent one-time refinements to various model components. These are undertaken when new data becomes available or when the results of new research, which may be conducted either by AIR scientists and engineers or by outside experts, warrant such revision.

70. What were the main model updates in the past 3 years?

A. The main updates to the model from 2003 to 2005 are detailed below:

2003:

- Updated historical storm set to include all landfalling and bypassing hurricanes through 2001
- Incorporation of a new regression model for estimating radius of maximum winds
- Incorporation of higher resolution land use/land cover data for more accurate estimation of local wind speeds (Florida only)
- Increased temporal resolution (time step increased from 1 hour to 30 minutes) for fast moving storms

2004:

- Updated historical storm set to include all landfalling and bypassing hurricanes through 2002
- Incorporation of higher resolution land use/land cover data for all of U.S. Gulf and East Coasts for more accurate estimation of local wind speeds (Florida updated in 2003)
- Implementation of a new component-based methodology for the derivation of commercial damage functions that explicitly account for building height

2005:

- Updated historical storm set to include all landfalling and bypassing hurricanes through 2004
- Implementation of an aggregate demand surge function

71. Q. What has been your role as to model development?

A. In the past, I performed model development. Currently, I serve as a consultant to and oversee staff who supervise and direct the development computer models.

72. Q. Did you receive any data from Insurance Services Office on which you relied in preparing your analyses?

A. Yes, we received North Carolina data as to the 2003 number of earned house years and the 2003 earned insurance years by territory and construction class, for the dwelling line of business.

73. Q. What use did you make of such data?

A. For each territory the total number of house years and insurance years were calculated for dwelling policies by multiplying the percentage of house years and the percentage of insurance years by the total house years and total insurance years, respectively. House years and insurance years were then distributed to the five digit zip codes within each territory using a territory to zip code mapping developed by AIR in conjunction with the NCRB and AIR's proprietary industry exposure database by five digit zip code.

74. Q. What are the areas of highest hurricane frequency in North Carolina?

A. The figures very convincingly show that the higher risk areas are the coastal zones. The hurricane is at maximum force in coastal areas just as it crosses over land. As it travels inland, the storm dissipates because of the elimination of its primary energy source (heat and moisture from the sea) and because of surface frictional effects.

75. Q. As between the northern and southern coasts of North Carolina, which one experiences greater hurricane frequency?

A. The highest frequency of hurricanes occurs in a 100-mile segment which includes Cape Lookout, Cape Hatteras, and Pamlico Sound. The coastline in this area juts out into the Atlantic Ocean where it is exposed as storms move up the coastline. The far northern coast towards Virginia suffers relatively few hurricane landfalls because of the westerly orientation of the coastline in this region.

76. Q. Have you examined North Carolina's building code?

A. Yes. In our windstorm simulation models, we assume that the residential buildings built to North Carolina's code will perform better than average with respect to hurricane force winds. One of the major reasons for this assumption is the fact that the code is prescriptive in nature which means that it clearly instructs the builder on what to do to make the structure wind resistive, particularly in the coastal areas. For example, the more common type of building code might simply say to build the structure to withstand 120 mph winds. The North Carolina building code specifically tells the builder in high hazard areas how to space studs, how many hurricane clips to use and where to attach them, etc. We have given maximum credit to the coastal areas of the state, assuming that these buildings are built to code and that the code will be effective. The vulnerability functions are modified to incorporate the effects of building codes in different regions.

The AIR modifications have been validated by comparing actual losses with simulated losses for different areas of North Carolina.

77. Q. Are there any changes that you have made to your model for North Carolina?

A. No. The model version and settings used for North Carolina were the same as that accepted by the Florida Commission on Hurricane Loss Projection Methodologies. Although the model can take into consideration the effects of storm surge, and construction modification (individual building characteristics), these components of the model were not employed at the direction of the North Carolina Rate Bureau. The results were provided without demand surge and with occurrence demand surge.

78. Q. What is demand surge and how is it calculated in the model?

A. Demand Surge according to the Actuarial Standards Board is defined as a sudden and usually temporary increase in the cost of materials, services and labor due to the increased demand for them following a catastrophe. Historical evidence from major catastrophic events in past 15 years suggests that after a major event, increased demand for materials and services to repair and rebuild damaged property can put pressure on prices, resulting in temporary inflation. This phenomenon is often referred to as demand surge and it results in increased losses to the insurers.

After Hurricane Andrew in 1992, AIR developed a rudimentary demand surge function to allow companies the capability to assess the potential impact on losses due to demand surge. In order to develop a default demand surge function AIR reviewed several studies on the impact on prices of material and labor after Hurricane Andrew and Northridge Earthquake. It was commonly accepted that the demand surge from a Hurricane Andrew sized event (\$15.5 billion) was 8-12 %.

AIR continues to review the impact that catastrophic events have had on material and labor prices. We have found that Hurricane Hugo, for example, had a significant temporary impact on personal incomes in the construction industry in South Carolina. Analyses performed after the 2004 hurricane season in Florida revealed that demand surge had a significant impact on insured losses. Specifically, empirical data reveals that roof rebuilding costs increased substantially in the period following the hurricane season, and losses resulting from Additional Living Expense (Time Element) coverage were significantly impacted due to the amount of time it took to repair damages from the multiple events.

79. Q. Was demand surge used for the analyses you performed for the NCRB?

A. Yes, demand surge was used for both analyses.

80. Q. What does the demand surge factor depend on and how is it applied?

A. AIR's demand surge function relates the level of demand surge to the amount of industry loss. Each event is assigned a demand surge factor based on the amount of industry loss. The factor is then applied to losses from the specific exposure set to calculate the loss with demand surge.

81. Q. Now let me ask you several questions concerning Exhibit RB-6A to your prefiled testimony. What is the significance of the figure from the column called "Estimated Hurricane Loss Cost per 100" from Exhibit LossCosts.NCRB_Terr of Exhibit RB-6A?

A. The figures show the estimated loss costs per \$100 of exposure, including contents and all other coverages.

82. Q. On the page near the beginning of Exhibit RB-6A entitled "Exposure Information and Assumptions," there is reference to the estimation of zip code distribution using certain information. One such type of information is "the 2003 total earned insurance years by line of business, construction class, and territory." Please explain to what that phrase refers.

A. This phrase refers to the insured values under dwelling policies. The source of this data is ISO.

83. Q. On the same page there is also reference to AIR's "proprietary database of insured residential properties by line of business, construction class, and five-digit zip code." Please explain what is referred to by that phrase.

A. We have developed a database of estimated total insured property values by five digit zip code including estimates for single family homes, tenants, and condominiums. Our estimates of the number of insured single family homes are based primarily on census data. Our estimates of replacement values are based primarily on census, property tax and residential construction cost data. We continually verify our estimated numbers with actual insurance company exposure data.

84. Q. On the same page there is reference to a "five-digit zip code to territory mapping." Please explain what was referred to by that phrase.

A. Since we had to relate our zip code-level data to ISO-supplied territory data, we needed a zip code to territory mapping. The mapping simply shows which zip codes are included in each territory. Note that some zip codes can cross territories. However, in our mapping procedure each zip code is assigned to only one territory. The assignment is based on the territory in which-the population centroid of the zip code lies.

85. Q. Beginning on page 5 of your Exhibit RB-6A shows exposure by territory. What is the source of your data on this exhibit?

A. The exposure by territory was provided by ISO.

86. Q. Page 8 of your Exhibit RB-6A show the average annual aggregate losses by territory. What is source of the data on these exhibits?

A. The average annual aggregate loss is the sum of all losses caused by all simulated events, divided by the number of simulation years. It represents the long run average annual hurricane loss potential by territory. As can be seen, the territory with the highest average annual aggregate loss is territory #5. This fact is a function of that territory's population and its exposure to hurricanes.

87. Q. What is the source of the data on page 9 of Exhibit RB-6A?

A. Exhibits Expo.NCRB and AAL.NCRB.

88. Q. What does Exhibit Dist.NCRB of Exhibit RB-6A show?

A. It shows the distribution of exposures and average annual losses by territory. Obviously, coastal territories account for a much higher percentage of losses than exposures because of their vulnerability to hurricanes. For instance, Exhibit Dist.NCRB demonstrates that territory 60 has 17.3% of the statewide insurance in force, but accounts for only 1.1% of total annual hurricane losses. Territory 5, on the other hand, accounts for only 14.4% of insurance in force, but its average annual hurricane loss is 31% of the statewide total.

89. Q. What is the source of the data on pages 10-12 of Exhibit RB-6A?

A. Exhibits Expo.NCRB and AAL.NCRB

90. Q. What does Exhibit LossCosts.NCRB of Exhibit RB-6A show?

A. It shows the estimated hurricane pure premiums and loss costs, per \$100 of exposure, by territory for all coverages and broken down by buildings and contents on pages 10-12. As can be seen from these exhibits, loss costs are highest in territories 5, 6, 42 and 43.

91. Q. On page 10 of Exhibit RB-6A, please explain the significance of the number "321.43 for territory 05 in the column entitled " Pure Premium."

A. \$321.43 is the amount, exclusive of expenses and provisions for profit and contingencies, that on average needs to be collected each year to cover the long run hurricane loss potential on dwelling policies in territory 05. This number is based on 2003 values. By comparison, only \$11.43 needs to be collected to cover that same potential in territory 38.

92. Q. Are the numbers used in your model true and accurate to the best of your knowledge, information and belief?

A. Yes. The AIR research team collects the available scientific data pertaining to the meteorological variables critical to the characterization of hurricanes and therefore to the simulation process. Data sources used in the development of the AIR hurricane model include the most complete databases available from various agencies of the National Weather Service, including the National Hurricane Center. All data is cross-verified. If data from different sources conflict, a detailed analysis and the use of expert judgment is applied to prepare the data for modeling purposes. Furthermore, to the extent possible, we cross-check and verify the numbers that go into our models as well as the numbers that come out of the models. To the best of my knowledge, information and belief, the data that we use are the most reliable and accurate data that is publicly available.

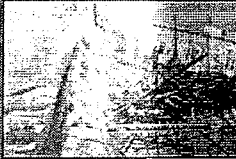
93. Q. Is the Exhibit to your prefiled testimony true and accurate to the best of your knowledge, information and belief?

A. Yes.

94. Q. Do you have an opinion as to whether your model is a reasonable method of projecting the long term average wind losses used in the filing for dwelling insurance in North Carolina, and if so what is that opinion?

A. Yes. It is not only a reasonable method of doing so but also it is the most consistent and reliable method available for doing so. The projected hurricane losses in the filing are reasonable projections of insured hurricane losses on the policy forms reviewed.

Catastrophe Loss Analysis Service Atlantic Tropical Cyclone



Prepared for:
North Carolina Rate Bureau

October 25, 2005

BETTER TECHNOLOGY
BETTER DATA
BETTER DECISIONS



INTRODUCTION

This report contains the results of the Catastrophe Loss Analysis Service (CLAS™) for Dwelling policies in the state of North Carolina as requested by the North Carolina Rate Bureau (NCRB). Loss estimates are provided using AIR Worldwide's (AIR) Atlantic Tropical Cyclone model.

The NCRB provided AIR with information that represents the exposures analyzed. AIR reviewed and reformatted the exposure data as necessary and used them as input to the AIR hurricane model, which generated the loss estimates that form the core of this analysis. The AIR model is a system of computer programs that incorporate the fundamental physical characteristics, expressed mathematically, of hurricanes. These characteristics are then overlaid on the geographical distribution of the NCRB's exposures. Building, contents, and time element damage are estimated by applying AIR's proprietary damageability relationships. Finally, insured losses are calculated by applying policy conditions to the total damage estimates.

The AIR model simulated 100,000 years of potential hurricane experience. The results of the model are expressed in terms of probability distributions of event losses. These distributions represent a range of possible losses and the relative likelihood of occurrence of various levels of loss.

All aspects of the AIR hurricane model undergo extensive validation tests. The stochastic model variables have been compared to the actual characteristics of historical hurricanes occurring in North Carolina in this century. The simulated event characteristics parallel patterns seen in the historical record, and resulting loss estimates correspond closely to actual claims data provided by clients.

The model has also undergone extensive internal and external peer review. Internal peer review is a standard part of AIR's operating process and is conducted by AIR's technical staff of over 100 professionals, over 20 of whom hold Ph.D. credentials in their fields of expertise. The AIR hurricane model has also undergone extensive external review, beginning with Dr. Walter Lyons' systematic review in 1986. Dr. Lyons, a Certified Consulting Meteorologist, was contracted by the E.W. Blanch Company. A further independent review was conducted by engineer Dr. Joseph E. Minor. Independent Actuaries Mike Miller, FCAS, and Richard Biondi, FCAS, have knowledge of the model. During 1996 and 1997, Duff & Phelps, Fitch, Moody's and Standard & Poors reviewed all aspects of AIR's hurricane model in conjunction with their rating of the USAA catastrophe bond.

Probably the most extensive peer review of the AIR hurricane model has been conducted by the Florida Commission on Hurricane Loss Projection Methodology (FCHLPM). The FCHLPM was established in 1995 with the mission to "assess the effectiveness of various methodologies that have the potential for improving the accuracy of projecting insured Florida losses resulting from hurricanes and to adopt findings regarding the accuracy or reliability of these methodologies for use in residential rate filings." The



Commission has established 45 standards that need to be met before a catastrophe model is acceptable for ratemaking purposes in the state of Florida. The AIR hurricane model has been reviewed and has met the standards of the Commission annually since 1996.

Catastrophe modeling has become widely used and accepted. AIR was the first organization to have its model approved under the rigorous standards of the Florida Hurricane Commission. AIR's simulation methodology is a robust technique for estimating potential hurricane losses. It is based on mathematical/statistical models that represent real-world systems. As with all models, these representations are not intended to represent specific prior or future events.

The hurricane model used in this report is Atlantic Tropical Cyclone Model v.7.00.505, CLASIC/2 V7.0.

EXECUTIVE SUMMARY

To estimate the hurricane loss potential for NCRB, AIR simulated 100,000 years of potential hurricanes. The simulation was performed to include occurrence demand surge. Occurrence demand surge is demand surge resulting from the given hurricane occurrence.

The long-term average annual aggregate hurricane loss for the NCRB Dwelling policies is \$51.4 million.

In the 100,000-year sample, 46,702 hurricanes resulted in losses to North Carolina's insured properties net of deductibles. Given that a hurricane has occurred, the estimated average hurricane loss is \$110 million.

The largest simulated hurricane loss is \$6.9 billion. This loss resulted from a category 5 hurricane with landfall in Pender County, North Carolina. Note that higher occurrence losses, that is, losses in excess of \$6.9 billion, are possible. They have, however, a very low probability of occurrence. Nevertheless, it should be understood that the largest simulated hurricane losses do not represent the worst possible scenarios.

Hurricane events of specified probabilities of exceedance and estimated return times appear below.

Annual Maximum Occurrence Loss

Hurricane Occurrence (\$millions)	Estimated Probability of Exceedance	Estimated Average Return Time (years)
100.6	0.100	10
257.1	0.050	20
606.6	0.020	50
954.5	0.010	100
1,496.9	0.004	250
1,937.7	0.002	500
2,449.2	0.001	1000

Actual hurricane losses are influenced by a number of characteristics, the most important of which is intensity as measured by wind speed, commonly expressed in terms of Saffir-Simpson (SS) category. Given the same landfall point, storms with higher wind speeds typically result in larger losses than do storms with lower wind speeds. Other characteristics that influence loss amounts include radius of maximum winds, forward speed, and storm track.

Actual losses also depend on the geographical distribution of exposures in relation to the area affected by the storm. That is, a severe hurricane could result in a smaller overall loss than a less severe hurricane if the less severe hurricane strikes an area of higher property value.

EXPOSURE INFORMATION AND ASSUMPTIONS

The NCRB provided exposure information used to generate the loss estimates. The exposure file contained information on number of risks, coverage amounts of insurance, and construction class by line of business and by NCRB territory. NCRB requested that AIR allocate territory exposure to ZIP Code. This was completed using AIR's database of industry exposure by ZIP Code using the following information:

- The 2003 total earned insurance years by line of business, construction class, and territory
- AIR's proprietary database of insured residential properties by line of business, construction class, and five-digit ZIP Code
- A five-digit ZIP Code to territory mapping algorithm

The information on house-years and insurance-years by line of business, construction class, and territory was provided by the Insurance Services Office (ISO) and represents the Full Statistical Plan experience of companies reporting to either ISO or the National Association of Independent Insurers. House years and insurance years were then distributed to the five digit ZIP Codes within each territory using a territory to zip mapping developed by AIR in conjunction with the NCRB and AIR's proprietary database of insured residential properties by five digit ZIP Code. This database was developed using U.S. Census data and other information.

Consistent in the level of building values provided by NCRB, the amount of insurance years provided by NCRB was increased by 10% to reflect non-primary coverage (loss of use).

Exhibit Expo.NCRB shows total insured values, number of risks, and average values by territory.

Exhibit Expo.NCRB

Insured Value by Territory - All Coverages North Carolina

Territory	Total*
5	
Value	5,790,084,600
Num. Risks	49,577
Avg. Value	116,790
Avg. Ded \$	250
6	
Value	3,550,916,500
Num. Risks	31,398
Avg. Value	113,094
Avg. Ded \$	250



Territory	Total*
32	
Value	1,353,335,500
Num. Risks	17,046
Avg. Value	79,393
Avg. Ded \$	250
34	
Value	1,465,302,100
Num. Risks	22,825
Avg. Value	64,197
Avg. Ded \$	250
36	
Value	1,115,026,700
Num. Risks	16,109
Avg. Value	69,218
Avg. Ded \$	250
38	
Value	1,440,478,400
Num. Risks	17,463
Avg. Value	82,487
Avg. Ded \$	250
39	
Value	1,377,129,700
Num. Risks	20,180
Avg. Value	68,242
Avg. Ded \$	250
41	
Value	1,093,996,200
Num. Risks	27,133
Avg. Value	40,320
Avg. Ded \$	250
42	
Value	5,048,218,500
Num. Risks	65,866
Avg. Value	76,644
Avg. Ded \$	250
43	
Value	2,632,187,500
Num. Risks	41,882
Avg. Value	62,848
Avg. Ded \$	250
44	
Value	273,072,486
Num. Risks	5,832
Avg. Value	46,823
Avg. Ded \$	250

Territory	Total*
45	
Value	1,512,503,359
Num. Risks	32,423
Avg. Value	46,649
Avg. Ded \$	250
46	
Value	542,960,663
Num. Risks	11,363
Avg. Value	47,783
Avg. Ded \$	250
47	
Value	2,426,908,071
Num. Risks	50,523
Avg. Value	48,036
Avg. Ded \$	250
53	
Value	1,411,263,516
Num. Risks	19,530
Avg. Value	72,261
Avg. Ded \$	250
57	
Value	2,178,854,086
Num. Risks	37,285
Avg. Value	58,438
Avg. Ded \$	250
60	
Value	6,925,917,919
Num. Risks	129,822
Avg. Value	53,349
Avg. Ded \$	250
Total	
Value	40,138,155,800
Num. Risks	596,257
Avg. Value	67,317
Avg. Ded \$	250

*US Dollars

LONG-TERM AVERAGE LOSSES

Exhibit AAL.NCRB shows the long run average annual hurricane loss potential by territory.

Exhibit Dist.NCRB shows North Carolina's distribution of Dwelling average annual hurricane losses and total insurance in force by territory. The coastal territories account for much higher shares of loss than exposure due to their vulnerability to the hurricane peril.

Exhibit AAL.NCRB

Average Annual Loss by Territory – All Coverages

North Carolina

Territory	Total*
5	15,935,724
6	11,594,671
32	381,880
34	708,509
36	127,071
38	199,654
39	194,853
41	881,901
42	12,291,795
43	5,560,565
44	76,461
45	1,067,797
46	112,996
47	974,141
53	415,025
57	296,820
60	574,565
Total	51,394,428

*US Dollars

Exhibit Dist.NCRB

Distribution of Exposure and Loss by Territory – All Coverages

North Carolina

Territory	Insured Value*	Percent of Total	Est. Avg. Annual Loss*	Percent of Total
5	5,790,084,600	14.4	15,935,724	31
6	3,550,916,500	8.8	11,594,671	22.6
32	1,353,335,500	3.4	381,880	0.7
34	1,465,302,100	3.7	708,509	1.4
36	1,115,026,700	2.8	127,071	0.2
38	1,440,478,400	3.6	199,654	0.4
39	1,377,129,700	3.4	194,853	0.4
41	1,093,996,200	2.7	881,901	1.7
42	5,048,218,500	12.6	12,291,795	23.9
43	2,632,187,500	6.6	5,560,565	10.8
44	273,072,486	0.7	76,461	0.1
45	1,512,503,359	3.8	1,067,797	2.1
46	542,960,663	1.4	112,996	0.2
47	2,426,908,071	6	974,141	1.9
53	1,411,263,516	3.5	415,025	0.8
57	2,178,854,086	5.4	296,820	0.6
60	6,925,917,919	17.3	574,565	1.1
Total	40,138,155,800	100	51,394,428	100

*US Dollars



ESTIMATED PURE PREMIUMS AND LOSS COSTS

ExhibitLossCosts.NCRB shows the estimated hurricane loss costs and pure premiums by territory. ExhibitLossCostsBuild.NCRB and ExhibitLossCostsCont.NCRB show results for the building and contents exposure separately. Clearly, the coastal territories are most vulnerable to hurricane losses. The estimated loss costs are highest in coastal territories 5 and 6. These territories form part of the eastern tip of North Carolina, an area of relatively high hurricane frequency.

For all exhibits, the estimated loss costs are per \$100 of exposure. The estimated hurricane pure premiums are calculated by dividing the estimated average annual losses by the number of risks. The estimated hurricane pure premiums show the amounts, exclusive of expenses and provisions for profit and contingencies, that need to be collected each year to cover only the long run hurricane loss potential.

Exhibit LossCosts.NCRB

Loss Costs by Territory – All Coverages

North Carolina

Territory	Insured Value	Risk Count	Average Annual Loss	Pure Premium	Loss Cost (Per \$100)
5	5,790,084,600	49,577	15,935,724	321.43	0.2752
6	3,550,916,500	31,398	11,594,671	369.28	0.3265
32	1,353,335,500	17,046	381,880	22.40	0.0282
34	1,465,302,100	22,825	708,509	31.04	0.0484
36	1,115,026,700	16,109	127,071	7.89	0.0114
38	1,440,478,400	17,463	199,654	11.43	0.0139
39	1,377,129,700	20,180	194,853	9.66	0.0141
41	1,093,996,200	27,133	881,901	32.50	0.0806
42	5,048,218,500	65,866	12,291,795	186.62	0.2435
43	2,632,187,500	41,882	5,560,565	132.77	0.2113
44	273,072,487	5,832	76,461	13.11	0.0280
45	1,512,503,359	32,423	1,067,797	32.93	0.0706
46	542,960,663	11,363	112,996	9.94	0.0208
47	2,426,908,071	50,523	974,141	19.28	0.0401
53	1,411,263,516	19,530	415,025	21.25	0.0294
57	2,178,854,086	37,285	296,820	7.96	0.0136
60	6,925,917,918	129,822	574,565	4.43	0.0083
Total	40,138,155,800	596,257	51,394,428	86.20	0.1280

Exhibit LossCostsBuild.NCRB

Loss Costs by Territory – Building

North Carolina

Territory	Insured Value	Risk Count	Average Annual Loss	Pure Premium	Loss Cost (Per \$100)
5	5,079,080,600	25,988	15,131,884	582.26	0.2979
6	3,040,746,500	16,492	10,783,422	653.86	0.3546
32	1,301,305,500	12,847	378,675	29.48	0.0291
34	1,403,271,100	16,642	701,377	42.14	0.0500
36	1,074,201,700	12,908	126,082	9.77	0.0117
38	1,390,492,400	13,787	198,176	14.37	0.0143
39	1,331,843,700	16,818	193,309	11.49	0.0145
41	935,255,200	16,567	841,442	50.79	0.0900
42	4,022,067,500	38,807	11,074,402	285.37	0.2753
43	2,163,529,500	26,222	5,123,635	195.39	0.2368
44	256,668,776	4,317	75,240	17.43	0.0293
45	1,408,828,688	23,140	1,048,252	45.30	0.0744
46	505,301,095	8,161	111,009	13.60	0.0220
47	2,263,049,246	36,158	957,184	26.47	0.0423
53	1,359,129,081	14,626	411,338	28.12	0.0303
57	2,084,467,956	29,396	293,438	9.98	0.0141
60	6,544,381,259	97,180	566,575	5.83	0.0087
Total	36,163,619,801	410,056	48,015,441	117.09	0.1328

Exhibit LossCostsCont.NCRB

Loss Costs by Territory – Contents

North Carolina

Territory	Insured Value	Risk Count	Average Annual Loss	Pure Premium	Loss Cost (Per \$100)
5	711,004,000	23,589	803,840	34.08	0.1131
6	510,170,000	14,906	811,249	54.42	0.1590
32	52,030,000	4,199	3,205	0.76	0.0062
34	62,031,000	6,183	7,132	1.15	0.0115
36	40,825,000	3,201	989	0.31	0.0024
38	49,986,000	3,676	1,478	0.40	0.0030
39	45,286,000	3,362	1,544	0.46	0.0034
41	158,741,000	10,566	40,459	3.83	0.0255
42	1,026,151,000	27,059	1,217,393	44.99	0.1186
43	468,658,000	15,660	436,930	27.90	0.0932
44	16,403,711	1,515	1,221	0.81	0.0074
45	103,674,671	9,283	19,545	2.11	0.0189
46	37,659,568	3,202	1,987	0.62	0.0053
47	163,858,825	14,365	16,957	1.18	0.0103
53	52,134,435	4,904	3,687	0.75	0.0071
57	94,386,130	7,889	3,382	0.43	0.0036
60	381,536,659	32,642	7,990	0.24	0.0021
Total	3,974,535,999	186,201	3,378,987	18.15	0.0850

DISTRIBUTIONS OF POTENTIAL LOSSES

The following exhibits show the estimated probability distributions of annual occurrence losses and annual aggregate losses for the exposure data provided.

An annual occurrence loss is the largest loss caused by a single simulated event in a single year. The probability distribution of annual occurrence losses displays the probability of experiencing losses of specified amounts resulting from a single hurricane in a single year. The annual aggregate loss is the sum of all losses caused by all simulated events in a single year. The probability distribution of annual aggregate losses displays the probability of experiencing aggregate losses of specified amounts resulting from all hurricanes in a single year.

In the tables, probabilities of exceedance are expressed as return periods, which may be interpreted as follows.

10-year loss: Probability of exceedance, 0.100. The loss likely to be equaled or exceeded 10 percent of the time, or in one year out of every 10. It represents the 90th percentile of the annual loss distribution. In a 100,000-year simulation, it is the 10,000th worst simulated loss.

20-year loss: Probability of exceedance, 0.050. The loss likely to be equaled or exceeded 5 percent of the time, or in one year out of every 20. It represents the 95th percentile of the annual loss distribution. In a 100,000-year simulation, it is the 5,000th worst simulated loss.

50-year loss: Probability of exceedance, 0.020. The loss likely to be equaled or exceeded 2 percent of the time, or in one year out of every 50. It represents the 98th percentile of the annual loss distribution. In a 100,000-year simulation, it is the 2,000th worst simulated loss.

100-year loss: Probability of exceedance, 0.010. The loss likely to be equaled or exceeded 1 percent of the time, or in one year out of every 100. It represents the 99th percentile of the annual loss distribution. In a 100,000-year simulation, it is the 1,000th worst simulated loss.

250-year loss: Probability of exceedance, 0.004. The loss likely to be equaled or exceeded 0.4 percent of the time, or in one year out of every 250. It represents the 99.6th percentile of the annual loss distribution. In a 100,000-year simulation, it is the 400th worst simulated loss.

500-year loss: Probability of exceedance, 0.002. The loss likely to be equaled or exceeded 0.2 percent of the time, or in one year out of every 500. It represents the 99.8th percentile of the annual loss distribution. In a 100,000-year simulation, it is the 200th worst simulated loss.



1,000-year loss: Probability of exceedance, 0.001. The loss likely to be equaled or exceeded 0.1 percent of the time, or in one year out of every 1,000. It represents the 99.9th percentile of the annual loss distribution. In a 100,000-year simulation, it is the 100th worst simulated loss.

Average loss: The long-term average loss, either occurrence or aggregate. It is calculated by summing either the maximum occurrence or aggregate losses for all the simulated years and dividing by 100,000.



Exhibit Prob_Dist.NCRB

Probability Distribution of Losses

Annual Occurrence Losses

Return Period	Total*
10	100,631,535
20	257,084,536
50	606,585,861
100	954,541,242
250	1,496,860,415
500	1,937,661,450
1000	2,449,200,278
Estimated Average	49,418,308

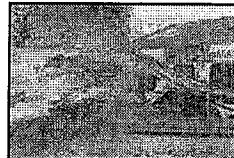
*US Dollars

Annual Aggregate Losses

Return Period	Total*
10	106,060,566
20	268,892,570
50	627,304,782
100	994,753,862
250	1,554,823,900
500	1,980,821,060
1000	2,488,774,900
Estimated Average	51,394,428

*US Dollars

Catastrophe Loss Analysis Service Atlantic Tropical Cyclone



Prepared for:
North Carolina Rate Bureau

November 3, 2005

BETTER TECHNOLOGY
BETTER DATA
BETTER DECISIONS



INTRODUCTION

This report contains the results of the Catastrophe Loss Analysis Service (CLAS™) for Dwelling policies in the state of North Carolina as requested by the North Carolina Rate Bureau (NCRB). Loss estimates are provided using AIR Worldwide's (AIR) Atlantic Tropical Cyclone model and the AIR/AEF Climate-Conditioned Hurricane Catalog.

The NCRB provided AIR with information that represents the exposures analyzed. AIR reviewed and reformatted the exposure data as necessary and used them as input to the AIR hurricane model, which generated the loss estimates that form the core of this analysis. The AIR model is a system of computer programs that incorporate the fundamental physical characteristics, expressed mathematically, of hurricanes. These characteristics are then overlaid on the geographical distribution of the NCRB's exposures. Building, contents, and time element damage are estimated by applying AIR's proprietary damageability relationships. Finally, insured losses are calculated by applying policy conditions to the total damage estimates.

The AIR model simulated 10,000 years of potential hurricane experience. The results of the model are expressed in terms of probability distributions of event losses. These distributions represent a range of possible losses and the relative likelihood of occurrence of various levels of loss.

All aspects of the AIR hurricane model undergo extensive validation tests. The stochastic model variables have been compared to the actual characteristics of historical hurricanes occurring in North Carolina in this century. The simulated event characteristics parallel patterns seen in the historical record, and resulting loss estimates correspond closely to actual claims data provided by clients.

The model has also undergone extensive internal and external peer review. Internal peer review is a standard part of AIR's operating process and is conducted by AIR's technical staff of over 100 professionals, over 20 of whom hold Ph.D. credentials in their fields of expertise. The AIR hurricane model has also undergone extensive external review, beginning with Dr. Walter Lyons' systematic review in 1986. Dr. Lyons, a Certified Consulting Meteorologist, was contracted by the E.W. Blanch Company. A further independent review was conducted by engineer Dr. Joseph E. Minor. Independent Actuaries Mike Miller, FCAS, and Richard Biondi, FCAS, have knowledge of the model. During 1996 and 1997, Duff & Phelps, Fitch, Moody's and Standard & Poors reviewed all aspects of AIR's hurricane model in conjunction with their rating of the USAA catastrophe bond.

Probably the most extensive peer review of the AIR hurricane model has been conducted by the Florida Commission on Hurricane Loss Projection Methodology (FCHLPM). The FCHLPM was established in 1995 with the mission to "assess the effectiveness of various methodologies that have the potential for improving the accuracy of projecting insured Florida losses resulting from hurricanes and to adopt findings regarding the accuracy or reliability of these methodologies for use in residential rate filings." The



Commission has established 45 standards that need to be met before a catastrophe model is acceptable for ratemaking purposes in the state of Florida. The AIR hurricane model has been reviewed and has met the standards of the Commission annually since 1996.

Catastrophe modeling has become widely used and accepted. AIR was the first organization to have its model approved under the rigorous standards of the Florida Hurricane Commission. AIR's simulation methodology is a robust technique for estimating potential hurricane losses. It is based on mathematical/statistical models that represent real-world systems. As with all models, these representations are not intended to represent specific prior or future events.

The hurricane model used in this report is Atlantic Tropical Cyclone Model v.7.00.505, CLASIC/2 V7.0.

EXECUTIVE SUMMARY

To estimate the hurricane loss potential for NCRB, AIR simulated 10,000 years of potential hurricanes using the AIR/AEF Climate-Conditioned Hurricane Catalog. This catalog factors in climatological factors that influence hurricane frequency and severity, including the El Niño Southern Oscillation (ENSO), the variability of sea surface temperatures in the tropical Atlantic, and the North Atlantic Oscillation (NAO). The simulation was performed to include occurrence demand surge. Occurrence demand surge is demand surge resulting from the given hurricane occurrence.

The long-term average annual aggregate hurricane loss for the NCRB Dwelling policies is \$62.0 million.

In the 10,000-year sample, 4,317 hurricanes resulted in losses to North Carolina's insured properties net of deductibles. Given that a hurricane has occurred, the estimated average hurricane loss is \$144 million.

The largest simulated hurricane loss is \$5.2 billion. This loss resulted from a category 5 hurricane with landfall in New Hanover County, North Carolina. Note that higher occurrence losses, that is, losses in excess of \$5.2 billion are possible. They have, however, a very low probability of occurrence. Nevertheless, it should be understood that the largest simulated hurricane losses do not represent the worst possible scenarios.

Hurricane events of specified probabilities of exceedance and estimated return times appear below.

Annual Maximum Occurrence Loss

Hurricane Occurrence (\$millions)	Estimated Probability of Exceedance	Estimated Average Return Time (years)
122.8	0.100	10
346.1	0.050	20
749.0	0.020	50
1,199.7	0.010	100
1,833.3	0.004	250
2,405.8	0.002	500
2,860.0	0.001	1000

Actual hurricane losses are influenced by a number of characteristics, the most important of which is intensity as measured by wind speed, commonly expressed in terms of Saffir-Simpson (SS) category. Given the same landfall point, storms with higher wind speeds typically result in larger losses than do storms with lower wind speeds. Other



characteristics that influence loss amounts include radius of maximum winds, forward speed, and storm track.

Actual losses also depend on the geographical distribution of exposures in relation to the area affected by the storm. That is, a severe hurricane could result in a smaller overall loss than a less severe hurricane if the less severe hurricane strikes an area of higher property value.

EXPOSURE INFORMATION AND ASSUMPTIONS

The NCRB provided exposure information used to generate the loss estimates. The exposure file contained information on number of risks, coverage amounts of insurance, and construction class by line of business and by NCRB territory. NCRB requested that AIR allocate territory exposure to ZIP Code. This was completed using AIR's database of industry exposure by ZIP Code using the following information:

- The 2003 total earned insurance years by line of business, construction class, and territory
- AIR's proprietary database of insured residential properties by line of business, construction class, and five-digit ZIP Code
- A five-digit ZIP Code to territory mapping algorithm

The information on house-years and insurance-years by line of business, construction class, and territory was provided by the Insurance Services Office (ISO) and represents the Full Statistical Plan experience of companies reporting to either ISO or the National Association of Independent Insurers. House years and insurance years were then distributed to the five digit ZIP Codes within each territory using a territory to zip mapping developed by AIR in conjunction with the NCRB and AIR's proprietary database of insured residential properties by five digit ZIP Code. This database was developed using U.S. Census data and other information.

Consistent in the level of building values provided by NCRB, the amount of insurance years provided by NCRB was increased by 10% to reflect non-primary coverage (loss of use).

Exhibit Expo.NCRB shows total insured values, number of risks, and average values by territory.

Exhibit Expo.NCRB

Insured Value by Territory - All Coverages North Carolina

Territory	Total*
5	
Value	5,790,084,600
Num. Risks	49,577
Avg. Value	116,790
Avg. Ded \$	250
6	
Value	3,550,916,500
Num. Risks	31,398
Avg. Value	113,094
Avg. Ded \$	250

Territory	Total*
32	
Value	1,353,335,500
Num. Risks	17,046
Avg. Value	79,393
Avg. Ded \$	250
34	
Value	1,465,302,100
Num. Risks	22,825
Avg. Value	64,197
Avg. Ded \$	250
36	
Value	1,115,026,700
Num. Risks	16,109
Avg. Value	69,218
Avg. Ded \$	250
38	
Value	1,440,478,400
Num. Risks	17,463
Avg. Value	82,487
Avg. Ded \$	250
39	
Value	1,377,129,700
Num. Risks	20,180
Avg. Value	68,242
Avg. Ded \$	250
41	
Value	1,093,996,200
Num. Risks	27,133
Avg. Value	40,320
Avg. Ded \$	250
42	
Value	5,048,218,500
Num. Risks	65,866
Avg. Value	76,644
Avg. Ded \$	250
43	
Value	2,632,187,500
Num. Risks	41,882
Avg. Value	62,848
Avg. Ded \$	250
44	
Value	273,072,486
Num. Risks	5,832
Avg. Value	46,823
Avg. Ded \$	250



Territory	Total*
45	
Value	1,512,503,359
Num. Risks	32,423
Avg. Value	46,649
Avg. Ded \$	250
46	
Value	542,960,663
Num. Risks	11,363
Avg. Value	47,783
Avg. Ded \$	250
47	
Value	2,426,908,071
Num. Risks	50,523
Avg. Value	48,036
Avg. Ded \$	250
53	
Value	1,411,263,516
Num. Risks	19,530
Avg. Value	72,261
Avg. Ded \$	250
57	
Value	2,178,854,086
Num. Risks	37,285
Avg. Value	58,438
Avg. Ded \$	250
60	
Value	6,925,917,919
Num. Risks	129,822
Avg. Value	53,349
Avg. Ded \$	250
Total	
Value	40,138,155,800
Num. Risks	596,257
Avg. Value	67,317
Avg. Ded \$	250

*US Dollars

LONG-TERM AVERAGE LOSSES

Exhibit AAL.NCRB shows the long run average annual hurricane loss potential by territory.

Exhibit Dist.NCRB shows North Carolina's distribution of Dwelling average annual hurricane losses and total insurance in force by territory. The coastal territories account for much higher shares of loss than exposure due to their vulnerability to the hurricane peril.

Exhibit AAL.NCRB

Average Annual Loss by Territory – All Coverages

North Carolina

Territory	Total*
5	18,291,919
6	14,511,637
32	455,058
34	859,095
36	157,647
38	245,537
39	241,156
41	1,129,592
42	15,496,245
43	6,438,048
44	94,067
45	1,255,023
46	137,180
47	1,164,076
53	490,306
57	363,997
60	699,706
Total	62,030,289

*US Dollars

Exhibit Dist.NCRB

Distribution of Exposure and Loss by Territory – All Coverages

North Carolina

Territory	Insured Value*	Percent of Total	Est. Avg. Annual Loss*	Percent of Total
5	5,790,084,600	14.4	18,291,919	29.5
6	3,550,916,500	8.8	14,511,637	23.4
32	1,353,335,500	3.4	455,058	0.7
34	1,465,302,100	3.7	859,095	1.4
36	1,115,026,700	2.8	157,647	0.3
38	1,440,478,400	3.6	245,537	0.4
39	1,377,129,700	3.4	241,156	0.4
41	1,093,996,200	2.7	1,129,592	1.8
42	5,048,218,500	12.6	15,496,245	25.0
43	2,632,187,500	6.6	6,438,048	10.4
44	273,072,486	0.7	94,067	0.2
45	1,512,503,359	3.8	1,255,023	2.0
46	542,960,663	1.4	137,180	0.2
47	2,426,908,071	6	1,164,076	1.9
53	1,411,263,516	3.5	490,306	0.8
57	2,178,854,086	5.4	363,997	0.6
60	6,925,917,919	17.3	699,706	1.1
Total	40,138,155,800	100	62,030,289	100.0

*US Dollars

ESTIMATED PURE PREMIUMS AND LOSS COSTS

ExhibitLossCosts.NCRB shows the estimated hurricane loss costs and pure premiums by territory. ExhibitLossCostsBuild.NCRB and ExhibitLossCostsCont.NCRB show results for the building and contents exposure separately. Clearly, the coastal territories are most vulnerable to hurricane losses. The estimated loss costs are highest in coastal territories 5 and 6. These territories form part of the eastern tip of North Carolina, an area of relatively high hurricane frequency.

For all exhibits, the estimated loss costs are per \$100 of exposure. The estimated hurricane pure premiums are calculated by dividing the estimated average annual losses by the number of risks. The estimated hurricane pure premiums show the amounts, exclusive of expenses and provisions for profit and contingencies, that need to be collected each year to cover only the long run hurricane loss potential.

Exhibit LossCosts.NCRB

Loss Costs by Territory – All Coverages

North Carolina

Territory	Insured Value	Risk Count	Average Annual Loss	Pure Premium	Loss Cost (Per \$100)
5	5,790,084,600	49,577	18,291,919	368.96	0.3159
6	3,550,916,500	31,398	14,511,637	462.18	0.4087
32	1,353,335,500	17,046	455,058	26.70	0.0336
34	1,465,302,100	22,825	859,095	37.64	0.0586
36	1,115,026,700	16,109	157,647	9.79	0.0141
38	1,440,478,400	17,463	245,537	14.06	0.0170
39	1,377,129,700	20,180	241,156	11.95	0.0175
41	1,093,996,200	27,133	1,129,592	41.63	0.1033
42	5,048,218,500	65,866	15,496,245	235.27	0.3070
43	2,632,187,500	41,882	6,438,048	153.72	0.2446
44	273,072,487	5,832	94,067	16.13	0.0344
45	1,512,503,359	32,423	1,255,023	38.71	0.0830
46	542,960,663	11,363	137,180	12.07	0.0253
47	2,426,908,071	50,523	1,164,076	23.04	0.0480
53	1,411,263,516	19,530	490,306	25.11	0.0347
57	2,178,854,086	37,285	363,997	9.76	0.0167
60	6,925,917,918	129,822	699,706	5.39	0.0101
Total	40,138,155,800	596,257	62,030,289	104.03	0.1545

Exhibit LossCostsBuild.NCRB

Loss Costs by Territory – Building

North Carolina

Territory	Insured Value	Risk Count	Average Annual Loss	Pure Premium	Loss Cost (Per \$100)
5	5,079,080,600	25,988	17,304,596	665.87	0.3407
6	3,040,746,500	16,492	13,396,040	812.28	0.4406
32	1,301,305,500	12,847	451,172	35.12	0.0347
34	1,403,271,100	16,642	850,507	51.11	0.0606
36	1,074,201,700	12,908	156,368	12.11	0.0146
38	1,390,492,400	13,787	243,655	17.67	0.0175
39	1,331,843,700	16,818	239,198	14.22	0.0180
41	935,255,200	16,567	1,076,225	64.96	0.1151
42	4,022,067,500	38,807	13,801,062	355.63	0.3431
43	2,163,529,500	26,222	5,897,545	224.91	0.2726
44	256,668,776	4,317	92,560	21.44	0.0361
45	1,408,828,688	23,140	1,231,935	53.24	0.0874
46	505,301,095	8,161	134,721	16.51	0.0267
47	2,263,049,246	36,158	1,143,653	31.63	0.0505
53	1,359,129,081	14,626	485,910	33.22	0.0358
57	2,084,467,956	29,396	359,762	12.24	0.0173
60	6,544,381,259	97,180	689,708	7.10	0.0105
Total	36,163,619,801	410,056	57,554,616	140.36	0.1592

Exhibit LossCostsCont.NCRB

Loss Costs by Territory – Contents

North Carolina

Territory	Insured Value	Risk Count	Average Annual Loss	Pure Premium	Loss Cost (Per \$100)
5	711,004,000	23,589	987,322	41.86	0.1389
6	510,170,000	14,906	1,115,597	74.84	0.2187
32	52,030,000	4,199	3,886	0.93	0.0075
34	62,031,000	6,183	8,589	1.39	0.0138
36	40,825,000	3,201	1,280	0.40	0.0031
38	49,986,000	3,676	1,881	0.51	0.0038
39	45,286,000	3,362	1,959	0.58	0.0043
41	158,741,000	10,566	53,367	5.05	0.0336
42	1,026,151,000	27,059	1,695,183	62.65	0.1652
43	468,658,000	15,660	540,503	34.51	0.1153
44	16,403,711	1,515	1,507	0.99	0.0092
45	103,674,671	9,283	23,088	2.49	0.0223
46	37,659,568	3,202	2,458	0.77	0.0065
47	163,858,825	14,365	20,424	1.42	0.0125
53	52,134,435	4,904	4,395	0.90	0.0084
57	94,386,130	7,889	4,235	0.54	0.0045
60	381,536,659	32,642	9,998	0.31	0.0026
Total	3,974,535,999	186,201	4,475,672	24.04	0.1126

DISTRIBUTIONS OF POTENTIAL LOSSES

The following exhibits show the estimated probability distributions of annual occurrence losses and annual aggregate losses for the exposure data provided.

An annual occurrence loss is the largest loss caused by a single simulated event in a single year. The probability distribution of annual occurrence losses displays the probability of experiencing losses of specified amounts resulting from a single hurricane in a single year. The annual aggregate loss is the sum of all losses caused by all simulated events in a single year. The probability distribution of annual aggregate losses displays the probability of experiencing aggregate losses of specified amounts resulting from all hurricanes in a single year.

In the tables, probabilities of exceedance are expressed as return periods, which may be interpreted as follows.

10-year loss: Probability of exceedance, 0.100. The loss likely to be equaled or exceeded 10 percent of the time, or in one year out of every 10. It represents the 90th percentile of the annual loss distribution. In a 10,000-year simulation, it is the 1,000th worst simulated loss.

20-year loss: Probability of exceedance, 0.050. The loss likely to be equaled or exceeded 5 percent of the time, or in one year out of every 20. It represents the 95th percentile of the annual loss distribution. In a 10,000-year simulation, it is the 500th worst simulated loss.

50-year loss: Probability of exceedance, 0.020. The loss likely to be equaled or exceeded 2 percent of the time, or in one year out of every 50. It represents the 98th percentile of the annual loss distribution. In a 10,000-year simulation, it is the 200th worst simulated loss.

100-year loss: Probability of exceedance, 0.010. The loss likely to be equaled or exceeded 1 percent of the time, or in one year out of every 100. It represents the 99th percentile of the annual loss distribution. In a 10,000-year simulation, it is the 100th worst simulated loss.

250-year loss: Probability of exceedance, 0.004. The loss likely to be equaled or exceeded 0.4 percent of the time, or in one year out of every 250. It represents the 99.6th percentile of the annual loss distribution. In a 10,000-year simulation, it is the 40th worst simulated loss.

500-year loss: Probability of exceedance, 0.002. The loss likely to be equaled or exceeded 0.2 percent of the time, or in one year out of every 500. It represents the 99.8th percentile of the annual loss distribution. In a 10,000-year simulation, it is the 20th worst simulated loss.



1,000-year loss: Probability of exceedance, 0.001. The loss likely to be equaled or exceeded 0.1 percent of the time, or in one year out of every 1,000. It represents the 99.9th percentile of the annual loss distribution. In a 10,000-year simulation, it is the 10th worst simulated loss.

Average loss: The long-term average loss, either occurrence or aggregate. It is calculated by summing either the maximum occurrence or aggregate losses for all the simulated years and dividing by 10,000.

Exhibit Prob_Dist.NCRB

Probability Distribution of Losses

Annual Occurrence Losses

Return Period	Total*
10	122,837,417
20	346,133,953
50	749,019,920
100	1,199,705,073
250	1,833,338,827
500	2,405,816,262
1000	2,860,010,561
Estimated Average	60,329,301

*US Dollars

Annual Aggregate Losses

Return Period	Total*
10	125,868,209
20	360,924,551
50	772,417,084
100	1,215,449,413
250	1,833,338,827
500	2,433,059,788
1000	2,980,864,590
Estimated Average	62,030,289

*US Dollars

PREFILED TESTIMONY
OF
JAMES H. VANDER WEIDE

2006 DWELLING FIRE AND EXTENDED COVERAGE
INSURANCE RATE FILING
BY THE NORTH CAROLINA RATE BUREAU

Q. WHAT IS YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS?

A. My name is James H. Vander Weide. I am Research Professor of Finance and Economics at the Fuqua School of Business of Duke University. I am also President of Financial Strategy Associates, a firm that provides strategic and financial consulting services to corporate clients. My business address is 3606 Stoneybrook Drive, Durham, North Carolina.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PRIOR ACADEMIC EXPERIENCE.

A. I graduated from Cornell University with a Bachelor's Degree in Economics and then attended Northwestern University where I earned a Ph.D. in Finance. I joined the faculty of the School of Business at Duke University where I was subsequently named Assistant Professor, Associate Professor, and then Professor.

Since joining the faculty I have taught courses in corporate finance, investment management, and management of financial institutions. I have also taught a graduate seminar on the

theory of public utility pricing and lectured in executive development seminars on the cost of capital, financial analysis, capital budgeting, mergers and acquisitions, cash management, short-run financial planning, and competitive strategy.

I have served as Program Director and taught in numerous executive education programs at the Fuqua School of Business, including the Duke Advanced Management Program, the Duke Executive Program in Telecommunications, Competitive Strategies in Telecommunications, and the Duke Program for Manager Development for managers from the former Soviet Union. I also teach in tailored programs developed for corporations such as ABB, Accenture, Allstate, Ameritech, AT&T, Bell Atlantic, BellSouth, Carolina Power & Light, Contel, Fisons, Glaxo Wellcome, GTE, Lafarge, MidAmerican Energy, New Century Energies, Norfolk Southern, Pacific Bell Telephone, The Rank Group, Siemens, Southern New England Telephone, TRW, and Wolseley PLC.

In addition to my teaching and executive education activities, I have written research papers on such topics as portfolio management, the cost of capital, capital budgeting, the effect of regulation on the performance of public utilities, and cash management. My articles have been

published in *American Economic Review*, *Financial Management*, *International Journal of Industrial Organization*, *Journal of Finance*, *Journal of Financial and Quantitative Analysis*, *Journal of Bank Research*, *Journal of Accounting Research*, *Journal of Cash Management*, *Management Science*, *The Journal of Portfolio Management*, *Atlantic Economic Journal*, *Journal of Economics and Business*, and *Computers and Operations Research*. I have written a book titled *Managing Corporate Liquidity: an Introduction to Working Capital Management*, and a chapter for *The Handbook of Modern Finance*, "Financial Management in the Short Run."

Q. HAVE YOU PREVIOUSLY PRESENTED EVIDENCE ON THE COST OF CAPITAL AND OTHER REGULATORY ISSUES?

A. Yes. As an expert on financial and economic theory, I have testified on the cost of capital, competition, risk, incentive regulation, forward-looking economic cost, economic pricing guidelines, depreciation, accounting, valuation, and other financial and economic issues in approximately 370 cases before the U.S. Congress, the Federal Communications Commission, the National Telecommunications and Information Administration, the Federal Energy Regulatory Commission, the Canadian Radio-Television and Telecommunications Commission, the public service commissions of 40 states and the District of

Columbia, the insurance commissions of five states, the Iowa State Board of Tax Review, and the National Association of Securities Dealers. In addition, I have testified as an expert witness in proceedings before the U.S. District Court for the Northern District of California; U.S. District Court for the District of Nebraska; United States District Court for the District of New Hampshire; U.S. District Court for the Eastern District of North Carolina; Superior Court, North Carolina; the U.S. Bankruptcy Court for the Southern District of West Virginia; and the United States District Court for the Eastern District of Michigan.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been asked by the North Carolina Rate Bureau to make an independent appraisal of the aggregate cost of equity capital for the companies writing dwelling fire and extended coverage insurance in North Carolina and to recommend a rate of return on equity that is fair, that allows those companies to attract and retain capital on reasonable terms, that is commensurate with returns on investments of comparable risk, and that maintains those companies' financial integrity.

Q. WHAT DO YOU MEAN BY THE PHRASE "COST OF EQUITY CAPITAL?"

A. A firm's cost of equity capital is the rate of return expectation that is required in the marketplace on equity investments of comparable risk. If an investor does not expect to earn a return on an equity investment in a firm that is at least as large as the return the investor could expect to earn on other investments of comparable risk, then the investor will not invest in that firm's shares. Thus, a firm's cost of equity capital is also the rate of return expectation that is required in the marketplace in order to induce equity investors to purchase shares in that firm.

Q. IS THE COST OF EQUITY CAPITAL THE SAME AS THE RETURN ON EQUITY?

A. No. The cost of equity capital is a market-based concept that reflects investors' future expectations, while the return on equity is an accounting concept that measures results of past performance. The return on equity is equal to income available for common equity divided by the book value of common equity.

Q. HAVE YOU FORMED AN OPINION REGARDING THE COST OF EQUITY CAPITAL FOR THE AVERAGE COMPANY WRITING DWELLING FIRE AND EXTENDED COVERAGE INSURANCE IN NORTH CAROLINA?

A. Yes.

Q. WHAT IS YOUR OPINION IN THAT REGARD?

A. The cost of equity capital for such a company is in the range 11.0 percent to 13.7 percent.

Q. WHAT ECONOMIC PRINCIPLES DID YOU CONSIDER IN ARRIVING AT THAT OPINION?

A. There are two primary economic principles relevant to my appraisal of the cost of equity capital. The first, relating to the demand for capital, states that a firm should continue to invest in its business only so long as the return on its investment is greater than or equal to its cost of capital. In the context of a regulated firm, this principle suggests that the regulatory agency should establish revenue levels which will offer the firm an opportunity to earn a return on its investment that is at least equal to its cost of capital.

The second principle, relating to the supply of capital, states that rational investors are maximizing their total return on capital only if the returns they expect to receive on investments of comparable risk are equal. If these returns are not equal, rational investors will reduce or completely eliminate investments in those activities yielding lower expected returns for a given level of risk and will increase investments in those activities yielding

higher expected returns. The second principle implies that regulated firms will be unable to obtain the capital required to expand service on reasonable terms unless they are able to provide investors returns equal to those expected on investments of comparable risk.

Q. DO THESE ECONOMIC PRINCIPLES APPLY TO THE SETTING OF INSURANCE RATES?

A. Yes. These are general economic principles, which apply to investing in any business activity, including insurance.

Q. HOW DID YOU GO ABOUT DETERMINING THE COST OF EQUITY CAPITAL FOR THE AVERAGE COMPANY WRITING DWELLING FIRE AND EXTENDED COVERAGE INSURANCE IN NORTH CAROLINA?

A. I used two generally accepted methods to estimate the cost of equity: (i) the Discounted Cash Flow (DCF) Model, and (ii) the Risk Premium Approach.

Q. PLEASE DESCRIBE THE DCF MODEL.

A. The DCF Model suggests that investors value an asset on the basis of the future cash flows they expect to receive from owning the asset. Thus, investors value an investment in a bond because they expect to receive a sequence of semi-annual coupon payments over the life of the bond and a terminal payment equal to the bond's face value at the time

the bond matures. Likewise, investors value an investment in a firm's stock because they expect to receive a sequence of dividend payments and, perhaps, expect to sell the stock at a higher price sometime in the future.

A second fundamental principle of the DCF approach is that investors value a dollar received in the future less than a dollar received today. This is because, if they had the dollar today, they could invest it in an interest earning account and increase their wealth. This principle is called the time value of money.

Applying the two fundamental DCF principles noted above to an investment in a bond suggests that investors should value their investment in the bond on the basis of the present value of the bond's future cash flows. Thus, the price of the bond should be equal to:

Equation 1

$$P_B = \frac{C}{(1+i)} + \frac{C}{(1+i)^2} + \dots + \frac{C+F}{(1+i)^n}$$

where:

- P_B = Bond price;
- C = Cash value of the coupon payment (assumed for notational convenience to occur annually rather than semi-annually);
- F = Face value of the bond;

- i = The rate of interest the investor could earn by investing his money in an alternative bond of equal risk; and
 n = The number of periods before the bond matures.

Applying these same principles to an investment in a firm's stock suggests that the price of the stock should be equal to:

Equation 2

$$P_s = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_n + P_n}{(1+k)^n}$$

where:

- P_s = Current price of the firm's stock;
 $D_1, D_2 \dots D_n$ = Expected annual dividend per share on the firm's stock;
 P_n = Price per share of stock at the time the investor expects to sell the stock; and
 k = Return the investor expects to earn on alternative investments of the same risk, i.e., the investor's required rate of return.

Equation (2) is frequently called the Annual Discounted Cash Flow (DCF) Model of stock valuation.

Q. HOW DO YOU USE THE DCF MODEL TO DETERMINE THE COST OF EQUITY CAPITAL?

A. The "k" in the equation is the cost of equity capital. We make certain simplifying assumptions regarding the other factors in the equation and then mathematically solve for "k."

Q. WHAT ARE THE ASSUMPTIONS YOU MAKE?

A. Most analysts make three simplifying assumptions. First, they assume that dividends are expected to grow at the constant rate ("g") into the indefinite future. Second, they assume that the stock price at time "n" is simply the present value of all dividends expected in periods subsequent to "n." Third, they assume that the investors' required rate of return, "k," exceeds the expected dividend growth rate, "g."

Q. DOES THE ANNUAL DCF MODEL OF STOCK VALUATION PRODUCE APPROPRIATE ESTIMATES OF A FIRM'S COST OF EQUITY CAPITAL?

A. No. The Annual DCF Model of stock valuation produces appropriate estimates of a firm's cost of equity capital only if the firm pays dividends just once a year. Since most firms pay dividends quarterly, the Annual DCF Model produces downwardly biased estimates of the cost of equity. Investors can expect to earn a higher annual effective return on an investment in a firm that pays quarterly dividends than in one which pays the same amount of dollar dividends once at the end of each year. A complete analysis of the implications of the quarterly payment of dividends on the DCF Model is provided in Exhibit RB-10. For the reasons

cited there, I employed the Quarterly DCF Model throughout my calculations.

Q. PLEASE DESCRIBE THE QUARTERLY DCF MODEL YOU USED.

A. The Quarterly DCF Model I used is described by Equation 10 on page 11 in Exhibit RB-10. This equation shows that the cost of equity is: the sum of the dividend yield and the growth rate, where the dividend in the dividend yield is the equivalent dividend at the end of the year, and the growth rate is the expected growth in dividends or earnings per share.

Q. HOW DID YOU APPLY THE DCF APPROACH TO OBTAIN THE COST OF EQUITY CAPITAL FOR THE COMPANIES WRITING DWELLING FIRE AND EXTENDED COVERAGE INSURANCE IN NORTH CAROLINA?

A. I applied the DCF approach to two groups of companies: Value Line's group of property/casualty insurance companies and the S&P 500.

Q. WHY DID YOU APPLY THE DCF APPROACH TO THE S&P 500 AS WELL AS TO VALUE LINE'S PROPERTY/CASUALTY INSURANCE COMPANIES?

A. As I noted previously, the cost of equity is defined as the rate of return investors expect to earn on investments in other companies of comparable risk. I applied the DCF approach to the S&P 500 because they are a large group of

companies that, on average, are typically viewed as being comparable in risk to the property/casualty insurance industry. The use of a larger set of comparable risk companies should provide an accurate estimate of the cost of equity for the companies writing dwelling fire and extended coverage insurance in North Carolina.

Q. DID YOU INCLUDE ALL THE VALUE LINE PROPERTY/CASUALTY INSURANCE COMPANIES?

A. No. Among the Value Line property/casualty insurance companies, I deleted any firm which had recently lowered its dividend and which had fewer than three five-year earnings forecasts available from I/B/E/S (formerly known as the Institutional Brokers Estimate System, now part of Thomson Financial). The Value Line property/casualty companies I used are shown in Exhibit RB-8.

Q. WHAT CRITERIA DID YOU USE TO SELECT COMPANIES IN THE S&P 500?

A. I included those firms which pay dividends and which have at least three five-year earnings forecasts available from I/B/E/S. I excluded the insurance companies in the S&P 500, as identified by I/B/E/S Thomson Financial, because I had already calculated DCF results for the Value Line property/casualty insurance companies. To be conservative, I

also eliminated those companies whose DCF results exceeded the mean by one standard deviation. The S&P 500 companies I used are shown in Exhibit RB-9.

Q. WHY DID YOU ELIMINATE ANY COMPANY WHICH HAD RECENTLY LOWERED ITS DIVIDEND OR WHICH FAILS TO PAY DIVIDENDS?

A. I eliminated those companies because it is difficult to make a reliable estimate of the future dividend growth rate for companies that have recently lowered their dividends or do not pay dividends. If a company has recently lowered its dividend, investors do not know whether the company will again lower its dividend in the future, or whether the company will attempt to increase its dividend back toward its previous level. If a company does not pay a dividend, one cannot mathematically apply the DCF approach.

Q. HOW DID YOU ESTIMATE THE GROWTH COMPONENT OF THE QUARTERLY DCF MODEL?

A. I used the average of analysts' estimates of future earnings per share (EPS) growth reported by I/B/E/S. As part of their research, financial analysts working at Wall Street firms periodically estimate EPS growth for each firm they follow. The EPS forecasts for each firm are then published. The forecasts are used by investors who are contemplating purchasing or selling shares in individual companies.

Q. WHAT IS I/B/E/S?

A. I/B/E/S is a collection of analysts' forecasts for a broad group of companies expressed in terms of a mean forecast and a standard deviation of forecast for each firm. The mean forecast is used by investors as an estimate of future firm performance.

Q. WHY DID YOU USE THE I/B/E/S GROWTH ESTIMATES?

A. The I/B/E/S growth rates (1) are widely circulated in the financial community, (2) include the projections of a large number of reputable financial analysts who develop estimates of future growth, (3) are reported on a timely basis to investors, and (4) are widely used by institutional and other investors. For these reasons, I believe these estimates represent unbiased estimates of investors' expectations of each firm's long-term growth prospects and, accordingly, are incorporated by investors into their return requirements. Consequently, in my opinion, they provide the best available estimate of investors' long-term growth expectations.

Q. WHY DID YOU RELY EXCLUSIVELY ON ANALYSTS' PROJECTIONS OF FUTURE EPS GROWTH IN ESTIMATING THE INVESTORS' EXPECTED

GROWTH RATE RATHER THAN LOOKING AT PAST HISTORICAL GROWTH RATES?

A. There is considerable empirical evidence that analysts' forecasts are more highly correlated with stock prices than are firms' historical growth rates, and, thus, that investors actually use these forecasts.

Q. HAVE YOU PERFORMED ANY STUDIES CONCERNING THE USE OF ANALYSTS' FORECASTS AS THE BEST ESTIMATE OF INVESTORS' EXPECTED GROWTH RATE, G ?

A. Yes, I prepared a study in conjunction with Willard T. Carleton, Karl Eller Professor of Finance at the University of Arizona, on why analysts' forecasts provide the best estimate of investors' expectations of future long-term growth. This study is described in a paper entitled "Investor Growth Expectations and Stock Prices: the Analysts versus Historical Growth Extrapolation," published in the Spring 1988 edition of *The Journal of Portfolio Management*.

Q. PLEASE SUMMARIZE THE RESULTS OF YOUR STUDY.

A. First, we performed a correlation analysis to identify the historically-oriented growth rates which best described a firm's stock price. Then we did a regression study comparing the historical growth rates with the consensus analysts'

forecasts. In every case, the regression equations containing the average of analysts' forecasts statistically outperformed the regression equations containing the historical growth estimates. These results are consistent with those found by Cragg and Malkiel, the early major research in this area. These results are also consistent with the hypothesis that investors use analysts' forecasts, rather than historically-oriented growth calculations, in making buy and sell decisions. They provide overwhelming evidence that the analysts' forecasts of future growth are superior to historically-oriented growth measures in predicting a firm's stock price.

Q. WHAT PRICE DID YOU USE IN YOUR DCF MODEL?

A. I used a simple average of the monthly high and low stock prices for each firm for the three-month period, September, October, and November 2005. These high and low stock prices were obtained from Thomson Financial.

Q. WHY DID YOU USE THE THREE-MONTH AVERAGE STOCK PRICE, P_0 , IN APPLYING THE DCF METHOD?

A. I used a three-month average stock price in applying the DCF method because stock prices fluctuate daily, while financial analysts' forecasts for a given company are generally changed less frequently, often on a quarterly basis. Thus,

to match the stock price with an earnings forecast, it is appropriate to average stock prices over a three-month period.

Q. PLEASE EXPLAIN YOUR INCLUSION OF FLOTATION COSTS.

A. All firms, which have sold securities in the capital markets, have incurred some level of flotation costs, including underwriters' commissions, legal fees, printing expense, etc. These costs are paid from the proceeds of the stock sale and must be recovered over the life of the equity issue. Costs vary depending upon the size of the issue, the type of registration method used and other factors, but in general these costs range between four percent and five percent of the proceeds from the issue. In addition to these costs, for large equity issues there is likely to be a decline in price associated with the sale of shares to the public. On average, the decline due to market pressure has been estimated at two percent to three percent.

These cost ranges have been developed and confirmed in a number of generally accepted studies. I believe a combined five percent allowance for flotation costs and market pressure is a conservative estimate that can be used in applying the DCF Model in this proceeding.

Q. PLEASE SUMMARIZE THE RESULTS OF YOUR APPLICATION OF THE DCF METHOD TO THE PROPERTY/CASUALTY INSURANCE COMPANIES AND THE S&P 500.

A. As shown in Exhibits RB-8 and RB-9, the average DCF cost of equity capital for my group of Value Line property/casualty companies is 13.7 percent, and for the S&P 500 companies is 13.5 percent.

Q. WHAT CONCLUSION DO YOU REACH FROM YOUR DCF ANALYSIS ABOUT THE COST OF EQUITY CAPITAL FOR COMPANIES WRITING DWELLING FIRE AND EXTENDED COVERAGE INSURANCE IN NORTH CAROLINA?

A. On the basis of my DCF analysis, I would conclude that for companies writing dwelling fire and extended coverage insurance in North Carolina the cost of equity is in the range 13.5 percent to 13.7 percent.

Q. YOU SAID THE SECOND METHOD YOU USED TO ESTIMATE THE COST OF EQUITY CAPITAL FOR COMPANIES WRITING DWELLING FIRE AND EXTENDED COVERAGE INSURANCE IN NORTH CAROLINA WAS A RISK PREMIUM APPROACH. PLEASE DESCRIBE THAT APPROACH.

A. I performed a study of the comparable returns received by bond and stock investors over the last 78 years. I estimated the returns on stock and bond portfolios, using stock price and dividend yield data on the S&P 500 stock portfolio and bond yield data on Moody's A-rated utility bonds.

My study consisted of analyzing the historically achieved returns on broadly based stock and bond portfolios going back to 1926. For stocks, I used the S&P 500 stock portfolio and for bonds I used Moody's A-rated utility bonds. The resulting annual returns on the stock and bond portfolios purchased in each year from 1926 through 2003 are shown on Exhibit RB-11. The difference between the stock return and the bond return over that period of time on an arithmetic average basis was 5.2 percentage points.

Q. WHAT CONCLUSIONS DO YOU DRAW FROM YOUR RISK PREMIUM ANALYSES?

A. My own studies, combined with my analysis of other studies, provide strong evidence for the belief that investors today require an equity return of approximately 5.2 percentage points above the expected yield on A-rated long-term debt issues.

Interest rates on Moody's seasoned A-rated utility bonds during the three months September through November 2004 ranged from 5.5 percent to 5.9 percent. On the basis of this information and my knowledge of bond market conditions, I conclude that the long-term yield on A-rated utility bonds is approximately 5.7 percent. Adding a 5.2 percentage point risk premium to the 5.7 percent expected yield on A-rated

utility bonds, I obtain an expected return on equity of approximately 11.0 percent.¹

Q. BASED ON YOUR ANALYSES, WHAT IS YOUR OPINION AS TO THE COST OF CAPITAL FOR THE AVERAGE INSURANCE COMPANY WRITING DWELLING FIRE AND EXTENDED COVERAGE INSURANCE IN NORTH CAROLINA?

A. Based on my review and studies, I believe that a conservative estimate of the cost of common equity capital for the average insurance company writing dwelling fire and extended coverage insurance in North Carolina is in the range 11.0 percent to 13.7 percent.

Q. IS THE COST OF EQUITY A FAIR RETURN ON EQUITY?

A. No. The cost of equity is a market-based concept that reflects the return investors expect on the market value of their investment. The fair return on equity is an accounting concept that expresses the accounting rate of return the company earns on the book value of its investment. The cost of equity and the fair return on equity will be equal only when the market value of equity is equal to the book value of equity. Generally, the market value of equity is greater than the book value of equity for both the average firm and the average property/casualty insurer. When the market value

¹ Apparent discrepancy due to rounding.

of equity is greater than the book value of equity, the fair rate of return on equity must exceed the cost of equity capital for equity investors to have a reasonable expectation of earning their required return on investment.

Q. DID YOU CONVERT YOUR COST OF EQUITY CAPITAL TO A FAIR RETURN ON EQUITY?

A. No. In this proceeding I have not converted my cost of equity capital to the fair return on equity. The data that I previously used to convert my cost of equity to a fair return on equity has not been updated in several years. Given recent experience in the capital markets, I am confident that the fair return on equity would exceed the cost of equity. However, in the absence of data necessary to perform an explicit study, to be conservative, I recommend that my cost of equity estimate also be used as an estimate of the fair return on equity.

SUMMARY OF DISCOUNTED CASH FLOW ANALYSIS FOR
PROPERTY/CASUALTY INSURANCE COMPANIES

<i>Company</i>	<i>D₀</i>	<i>P₀</i>	<i>g</i>	<i>k</i>
ACE Limited	0.230	49.337	11.66	13.8%
Allstate Corp.	0.320	53.970	10.40	13.1%
Berkley (W.R.)	0.050	41.077	13.20	13.8%
Chubb Corp.	0.430	90.580	11.18	13.4%
Cincinnati Financial	0.305	41.960	10.25	13.5%
Everest Re Group Ltd.	0.110	97.326	13.25	13.8%
Fidelity National	0.250	39.573	11.75	14.7%
HCC Insurance Hldgs.	0.075	28.953	15.67	16.8%
Old Republic	0.170	25.910	9.75	12.6%
PartnerRe Ltd.	0.380	63.767	12.20	15.0%
PMI Group	0.053	39.267	11.67	12.2%
Progressive (Ohio)	0.030	110.529	9.94	10.1%
RLI Corp.	0.160	49.892	11.75	13.2%
SAFECO Corp.	0.250	53.915	10.67	12.7%
Selective Ins. Group	0.220	52.053	13.86	15.7%
XL Capital Ltd.	0.500	67.110	11.67	15.2%
Average				13.7%

Notes:

- d_0 = Latest quarterly dividend per *Value Line*.
- d_1, d_2, d_3, d_4 = Expected next four quarterly dividends.
- P_0 = Average of the monthly high and low stock prices during the three months ending November 2005 per Thomson Financial.
- FC = Flotation costs.
- g = I/B/E/S forecast of future earnings growth October 31, 2005.
- k = Cost of equity using the quarterly version of the DCF Model and a five percent allowance for flotation costs and market pressure (selling costs) as shown by the formula below:

$$k = \frac{d_1(1+k)^{25} + d_2(1+k)^{50} + d_3(1+k)^{75} + d_4}{P_0(1-FC)} + g$$

SUMMARY OF DISCOUNTED CASH FLOW ANALYSIS FOR
S&P 500 COMPANIES

COMPANY	D_0	P_0	g	k
3M	1.68	74.193	11.64%	14.3%
ABBOTT LABS.	1.10	42.510	9.40%	12.4%
AETNA	0.04	86.387	16.25%	16.3%
AIR PRDS. & CHEMS.	1.28	56.343	9.34%	12.0%
ALBERTO CULVER	0.46	43.512	11.50%	12.7%
ALBERTSONS	0.76	23.978	7.35%	11.0%
ALCOA	0.60	25.082	14.20%	17.1%
ALTRIA GROUP INCO.	3.20	72.240	8.50%	13.6%
AMBAC FINANCIAL	0.60	70.952	11.33%	12.3%
AMER. STANDARD	0.60	42.168	13.33%	15.0%
AMEREN	2.54	52.812	5.21%	10.6%
AMERICAN EXPRESS	0.48	49.897	13.21%	14.4%
AMERIPRISE FINL.	0.44	37.317	10.60%	12.0%
AMERISOURCEBERGEN	0.20	76.690	11.95%	12.3%
AMSOUTH BANC.	1.04	25.458	7.67%	12.4%
ANADARKO PETROLEUM	0.72	91.227	13.00%	13.9%
ANHEUSER-BUSCH COS.	1.08	42.992	7.56%	10.4%
APACHE	0.40	69.222	11.83%	12.5%
APPLIED MATS.	0.12	17.152	15.36%	16.2%
ARCHER-DANLS.-MIDL.	0.34	23.873	8.75%	10.4%
AT&T	1.29	23.767	5.98%	12.2%
AUTOMATIC DATA PROC.	0.74	44.818	12.13%	14.1%
AVERY DENNISON	1.56	55.045	11.00%	14.3%
AVON PRODUCTS	0.66	27.715	11.57%	14.4%
BANK OF AMERICA	2.00	43.452	8.79%	14.2%
BANK OF NEW YORK CO.	0.84	30.730	10.79%	14.0%
BARD C R	0.52	64.467	15.64%	16.6%
BAUSCH & LOMB	0.52	77.458	14.67%	15.5%
BAXTER INTL.	0.58	38.741	11.25%	13.0%
BB & T	1.52	41.010	9.30%	13.6%
BEAR STEARNS	1.00	106.678	9.80%	10.9%
BECTON DICKINSON	0.86	53.293	12.18%	14.1%
BELLSOUTH	1.16	26.030	10.38%	15.6%
BIOMET	0.25	35.547	15.48%	16.3%
BLACK & DECKER	1.12	82.732	9.79%	11.4%
BOEING	1.00	66.173	13.96%	15.8%
BRUNSWICK	0.60	38.950	12.40%	14.2%
BURL. NTHN. SANTA FE C	0.80	60.007	14.80%	16.4%
BURLINGTON RES.	0.40	73.817	12.25%	12.9%
CAPITAL ONE FINL.	0.11	78.695	13.73%	13.9%
CARDINAL HEALTH	0.24	62.328	12.79%	13.2%
CATERPILLAR	1.00	55.837	11.75%	13.9%
CENDANT	0.44	18.977	13.20%	16.0%
CENTERPOINT EN.	0.24	13.868	9.75%	11.8%
CENTEX	0.16	65.963	14.67%	15.0%
CHARLES SCHWAB	0.10	14.349	13.78%	14.6%
CHEVRON	1.80	60.420	13.64%	17.2%
CINTAS	0.32	40.862	13.89%	14.8%
CIRCUIT CITY STORES	0.07	17.795	14.53%	15.0%
CIT GP.	0.64	46.187	10.70%	12.3%

COMPANY	D ₀	P ₀	g	k
CITIGROUP	1.76	46.050	9.58%	14.1%
CITIZENS COMMS.	1.00	12.967	4.75%	13.5%
CLEAR CHL.COMMS.	0.75	31.868	11.88%	14.7%
CLOROX	1.16	54.952	9.13%	11.6%
COCA COLA	1.12	42.765	9.03%	12.1%
COCA COLA ENTS.	0.16	19.708	9.08%	10.0%
COLGATE-PALM.	1.16	52.735	9.67%	12.2%
COMERICA	2.20	58.523	8.11%	12.5%
COMPASS BANCSHARES	1.40	46.984	9.46%	12.9%
COMPUTER ASSOCS.INTL.	0.16	27.873	10.26%	10.9%
CONAGRA FOODS	1.09	23.298	6.00%	11.3%
CONSTELLATION EN.	1.34	56.410	11.36%	14.2%
COOPER INDS.	1.48	69.492	9.36%	11.8%
COSTCO WHOLESALE	0.46	45.784	13.50%	14.7%
CVS	0.14	27.227	14.23%	14.8%
DANAHER	0.08	53.065	15.29%	15.5%
DARDEN RESTAURANTS	0.08	31.755	11.92%	12.2%
DEERE	1.24	62.798	7.75%	10.0%
DOLLAR GENERAL	0.18	18.968	14.72%	15.9%
DOMINION RES.	2.68	79.423	8.00%	11.9%
DOW CHEMICALS	1.34	44.127	11.57%	15.2%
DOW JONES & CO	1.00	37.002	12.92%	16.2%
DTE ENERGY	2.06	44.395	5.60%	10.9%
DU PONT E I DE NEMOURS	1.48	40.695	9.80%	14.1%
DUKE ENERGY	1.24	27.511	5.55%	10.6%
EASTMAN CHEMICALS	1.76	50.350	6.67%	10.6%
EATON	1.24	61.857	10.83%	13.2%
ECOLAB	0.35	32.550	13.00%	14.3%
ELI LILLY	1.52	52.580	9.43%	12.8%
EMERSON ELECTRIC	1.78	70.418	10.81%	13.8%
ENGELHARD	0.48	28.062	10.33%	12.3%
ENTERGY	2.16	71.559	7.38%	10.8%
EOG RES.	0.16	69.248	15.99%	16.3%
SLM	0.88	52.908	15.38%	17.4%
FAMILY DOLLAR STORES	0.38	21.712	11.31%	13.4%
FEDERATED DEPT.STRS.	1.00	64.439	10.44%	12.3%
FEDERATED INVR.'B'	0.60	33.895	10.89%	13.0%
FEDEX	0.32	88.660	15.05%	15.5%
FIFTH THIRD BANCORP	1.52	39.392	10.12%	14.7%
FIRST DATA	0.24	41.138	12.85%	13.5%
FIRST HORIZON NATIONAL	1.80	37.903	7.88%	13.4%
FLUOR	0.64	64.177	12.10%	13.3%
FORD MOTOR	0.40	8.978	6.40%	11.5%
FORTUNE BRANDS	1.44	79.875	12.40%	14.5%
FPL GROUP	1.42	44.212	6.31%	10.0%
FRANK.RES.	0.40	86.640	13.70%	14.3%
FREDDIE MAC	1.40	59.432	8.20%	10.9%
GANNETT	1.16	66.532	8.52%	10.5%
GAP	0.18	17.493	12.53%	13.8%
GENERAL DYNAMICS	1.60	117.398	10.54%	12.1%
GENERAL ELECTRIC	1.00	34.100	11.14%	14.6%
GENERAL MILLS	1.32	47.670	8.33%	11.5%
GENERAL MOTORS	2.00	28.307	5.33%	13.4%
GOLDEN WEST FINL.	0.32	60.317	13.28%	13.9%
GOLDMAN SACHS GP.	1.00	121.783	12.27%	13.2%
GRAINGER W W	0.96	65.522	12.29%	14.0%
GUIDANT	0.40	65.822	15.76%	16.5%

COMPANY	D_0	P_0	g	k
H & R BLOCK	0.50	24.842	11.17%	13.5%
HARLEY-DAVIDSON	0.64	49.675	12.50%	14.0%
HARRAHS ENTM.	1.45	64.746	14.57%	17.3%
HASBRO	0.36	19.735	10.33%	12.5%
HCA	0.60	48.482	12.01%	13.5%
HEALTH MAN.AS.A	0.24	22.633	13.83%	15.1%
HEINZ HJ	1.20	35.667	7.33%	11.2%
HEWLETT-PACKARD	0.32	28.240	11.63%	13.0%
HILTON HOTELS	0.16	21.302	15.17%	16.1%
HOME DEPOT	0.40	40.297	12.84%	14.0%
HONEYWELL INTL.	0.82	36.182	11.58%	14.3%
HUNTINGTON BCSH.	0.86	23.115	6.33%	10.6%
ILLINOIS TOOL WKS.	1.32	83.620	13.10%	15.0%
IMS HEALTH	0.08	24.858	12.59%	13.0%
INGERSOLL-RAND	0.64	38.438	12.29%	14.3%
INTERNATIONAL BUS.MACH.	0.80	82.153	10.71%	11.8%
ITT INDUSTRIES	0.72	106.605	12.76%	13.6%
JANUS CAPITAL GP.	0.04	16.488	11.11%	11.4%
JOHNSON & JOHNSON	1.32	62.848	11.03%	13.5%
JOHNSON CONTROLS	1.12	64.817	12.50%	14.6%
JONES APPAREL GROUP	0.48	28.038	10.00%	12.0%
JP MORGAN CHASE & CO.	1.36	35.663	9.74%	14.2%
KELLOGG	1.11	44.945	9.02%	11.9%
KEYCORP	1.30	32.363	7.16%	11.8%
KIMBERLY-CLARK	1.80	58.943	7.93%	11.4%
KINDER MORGAN KANS	3.00	92.127	11.50%	15.4%
KLA TENCOR	0.48	48.423	16.05%	17.3%
KNIGHT-RIDDER	1.48	58.693	7.04%	9.9%
L3 COMMUNICATIONS	0.50	78.892	12.63%	13.4%
LEGGETT&PLATT	0.64	21.191	12.10%	15.7%
LEHMAN BROS.HDG.	0.64	116.445	12.11%	12.8%
LENNAR 'A'	0.64	57.498	14.60%	15.9%
LIMITED BRANDS	0.60	20.552	11.28%	14.7%
LIZ CLAIBORNE	0.22	37.265	11.88%	12.6%
LOCKHEED MARTIN	1.00	60.922	10.94%	12.9%
LOWE'S COMPANIES	0.24	63.455	16.93%	17.4%
M&T BK.	1.80	106.613	10.00%	12.0%
MANOR CARE	0.60	38.450	15.12%	17.0%
MARATHON OIL	1.32	63.658	8.06%	10.4%
MARRIOTT INTL.'A'	0.42	61.967	14.74%	15.6%
MARSHALL & ILSLEY	0.96	42.920	9.83%	12.4%
MASCO	0.80	29.632	13.57%	16.8%
MATTEL	0.50	16.350	9.75%	13.3%
MAYTAG	0.36	17.725	7.75%	10.1%
MBIA	1.12	58.455	10.43%	12.7%
MBNA	0.56	25.380	9.41%	12.0%
MCCORMICK & CO NV.	0.72	31.130	9.42%	12.1%
MCDONALDS	0.67	33.035	8.30%	10.6%
MCGRAW-HILL	0.66	48.628	11.78%	13.4%
MCKESSON	0.24	46.587	14.36%	15.0%
MEDTRONIC	0.38	55.580	15.02%	15.9%
MELLON FINL.	0.80	32.315	10.25%	13.2%
MEREDITH	0.56	50.140	11.83%	13.2%
MERRILL LYNCH & CO.	0.80	62.568	10.65%	12.1%
MICROSOFT	0.32	26.608	10.88%	12.3%
MOLEX	0.20	25.950	14.67%	15.6%
MOLSON COORS BREWING 'B'	1.28	64.490	11.87%	14.2%

COMPANY	D_0	P_0	g	k
MONSANTO	0.68	63.167	14.00%	15.3%
MOODYS	0.22	53.047	14.75%	15.3%
MORGAN STANLEY	1.08	53.385	11.86%	14.3%
MOTOROLA	0.16	22.450	12.04%	12.9%
NAT.CITY	1.48	34.373	7.77%	12.7%
NATIONAL SEMICON.	0.12	24.525	14.69%	15.3%
NEW YORK TIMES 'A'	0.66	29.525	7.53%	10.1%
NEWELL RUBBERMAID	0.84	22.755	8.87%	13.2%
NIKE 'B'	1.24	83.003	13.50%	15.3%
NORDSTROM	0.34	34.825	12.58%	13.7%
NORTH FORK BANCORP.	0.88	25.582	9.64%	13.7%
NORTHERN TRUST	0.92	50.897	11.81%	14.0%
NORTHROP GRUMMAN	1.04	54.995	12.93%	15.2%
NOVELLUS SYSTEMS	0.15	24.035	16.55%	17.3%
OFFICEMAX	0.60	29.813	11.67%	14.1%
OMNICOM GP.	0.90	81.957	12.25%	13.6%
PALL	0.40	27.487	9.33%	11.0%
PARKER-HANNIFIN	0.92	64.812	12.50%	14.2%
PENNEY JC	0.50	49.535	13.96%	15.2%
PEOPLES ENERGY	2.18	38.178	4.47%	10.9%
PEPSI BOTTLING GP.	0.32	28.490	9.79%	11.1%
PEPSICO	1.04	57.358	10.94%	13.1%
PFIZER	0.76	23.563	6.89%	10.6%
PINNACLE WEST CAP.	2.00	42.678	6.00%	11.3%
PITNEY-BOWES	1.24	41.822	7.33%	10.7%
PLUM CREEK TIMBER	1.52	37.587	6.67%	11.3%
PNC FINL.SVS.GP.	2.00	59.307	8.51%	12.4%
PPG INDUSTRIES	1.88	59.598	8.52%	12.2%
PPL	1.00	31.190	7.17%	10.8%
PRAXAIR	0.72	48.465	10.66%	12.4%
PROCTER & GAMBLE	1.12	56.857	11.00%	13.3%
PROGRESS ENERGY	2.36	43.580	3.94%	10.0%
PULTE HOMES	0.16	40.807	14.67%	15.1%
QUEST DIAGNOSTICS	0.36	49.188	15.61%	16.5%
RADIOSHACK	0.25	23.573	11.00%	12.2%
REEBOK INTL.	0.30	57.017	13.14%	13.8%
REGIONS FINL.NEW	1.36	32.097	8.22%	13.1%
REYNOLDS AMERICAN	4.20	83.458	6.00%	11.7%
ROCKWELL AUTOMATION	0.90	53.482	14.50%	16.5%
ROCKWELL COLLINS	0.48	46.135	13.57%	14.8%
ROHM & HAAS	1.16	42.340	9.73%	12.9%
SABRE HDG.	0.36	20.337	10.00%	12.1%
SAFeway	0.20	24.001	9.11%	10.1%
SARA LEE	0.79	18.436	8.27%	13.2%
SCIENTIFIC ATLANTA	0.04	37.183	17.14%	17.3%
SHERWIN-WILLIAMS	0.82	43.267	11.75%	14.0%
SIEBEL SYS.	0.10	10.020	11.67%	12.8%
SIGMA ALDRICH	0.76	63.365	9.41%	10.8%
SNAP-ON	1.00	35.957	11.67%	15.0%
SOVEREIGN BANC.	0.24	22.480	8.83%	10.1%
SPRINT NEXTEL	0.50	24.200	14.37%	16.9%
STANLEY WORKS	1.16	46.250	12.00%	15.0%
STAPLES	0.17	22.103	16.10%	17.0%
STARWOOD HTLS.& RESORTS WWD.PAIRED CERTS.'B'	0.84	58.247	15.54%	17.3%
STATE STREET	0.72	52.598	12.30%	13.9%
SUNTRUST BANKS	2.20	71.010	9.31%	12.9%

COMPANY	D_0	P_0	g	k
SUPERVALU	0.65	31.913	7.58%	9.9%
SYMBOL TECHS.	0.02	9.570	17.00%	17.3%
SYNOVUS FINL.	0.73	27.773	13.50%	16.7%
SYSCO	0.68	32.073	13.43%	16.0%
T ROWE PRICE GP.	0.92	65.415	12.33%	14.0%
TARGET	0.40	54.343	15.13%	16.0%
TECO ENERGY	0.76	17.400	6.60%	11.6%
TEKTRONIX	0.24	24.750	12.25%	13.4%
TEXTRON	1.40	72.218	11.83%	14.1%
THE HERSHEY COMPANY	0.98	56.595	10.13%	12.2%
TIFFANY & CO	0.32	39.170	12.82%	13.8%
TIME WARNER	0.20	18.035	12.14%	13.5%
TJX COS.	0.24	21.778	13.10%	14.4%
TYCO INTL.	0.40	27.762	13.33%	15.1%
UNITED PARCEL SER.	1.32	71.800	14.02%	16.2%
UNITED TECHNOLOGIES	0.88	51.540	11.11%	13.1%
US BANCORP	1.20	29.120	9.96%	14.8%
UST	2.20	40.460	6.25%	12.5%
V F	1.16	55.775	9.33%	11.7%
VERIZON COMMS.	1.62	31.512	5.06%	10.9%
VIACOM 'B'	0.28	32.803	13.20%	14.2%
WACHOVIA	2.04	49.957	9.59%	14.4%
WAL MART STORES	0.60	46.186	13.71%	15.3%
WALGREEN	0.26	44.905	15.73%	16.4%
WALT DISNEY	0.24	25.077	13.02%	14.2%
WASHINGTON MUTUAL	1.96	40.020	9.44%	15.2%
WASTE MAN.	0.80	28.757	11.40%	14.7%
WELLS FARGO & CO	2.08	60.083	11.42%	15.5%
WENDY'S INTL.	0.68	47.060	11.71%	13.4%
WEYERHAEUSER	2.00	65.085	6.75%	10.2%
WILLIAMS COS.	0.30	22.635	14.84%	16.5%
WRIGLEY WILLIAM JR.	1.12	70.242	10.67%	12.5%
WYETH	1.00	44.780	8.23%	10.8%
YUM! BRANDS	0.46	49.173	11.22%	12.3%
ZIONS BANCORP.	1.44	72.073	10.75%	13.1%
Average				13.5%

Notes: In applying the DCF Model to the S&P 500, I included in the DCF analysis only those companies in the S&P 500 group which pay a dividend, have a positive growth rate, and have at least three analysts' long-term growth estimates. In addition, I excluded all companies classified by Thomson Financial as insurance companies. To be conservative, I also eliminated those companies with DCF results that differed from the mean by one standard deviation. To calculate DCF results for this large sample of companies, I have used the constant growth quarterly DCF model for ease of implementation. This model requires data only on the most recent quarterly dividend, whereas the quarterly DCF model used in analysis of the insurance companies requires the analyst to obtain data on the last four quarterly dividends for each company. The two quarterly DCF models produce approximately the same DCF result.

Notes:

- D₀ = Latest dividend per Thomson Financial.
- P₀ = Average of the monthly high and low stock prices September, October, November 2005 per Thomson Financial.
- FC = Flotation costs.
- g = I/B/E/S forecast of future earnings growth October 31, 2005.
- k = Cost of equity using the quarterly version of the DCF Model and a five percent allowance for flotation costs and market pressure (selling costs) as shown by the formula below:

$$k = \left[\frac{d_0(1+g)^{\frac{1}{4}}}{P_0(1-FC)} + (1+g)^{\frac{1}{4}} \right]^4 - 1$$

THE QUARTERLY DCF MODEL

The simple DCF Model assumes that a firm pays dividends only at the end of each year. Since firms in fact pay dividends quarterly and investors appreciate the time value of money, the annual version of the DCF Model generally underestimates the value investors are willing to place on the firm's expected future dividend stream. In this appendix, we review two alternative formulations of the DCF Model that allow for the quarterly payment of dividends.

When dividends are assumed to be paid annually, the DCF Model suggests that the current price of the firm's stock is given by the expression:

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_n + P_n}{(1+k)^n} \quad (1)$$

where

P_0 = current price per share of the firm's stock,
 D_1, D_2, \dots, D_n = expected annual dividends per share on the firm's stock,
 P_n = price per share of stock at the time investors expect to sell the stock, and
 k = return investors expect to earn on alternative investments of the same risk, i.e., the investors' required rate of return.

Unfortunately, expression (1) is rather difficult to analyze, especially for the purpose of estimating k . Thus, most analysts make a number of simplifying assumptions. First, they assume that dividends are expected to grow at the constant rate g into the indefinite future. Second, they assume that the stock price at time n is simply the present value of all dividends expected in periods subsequent to n . Third, they assume that the investors' required rate of return, k , exceeds the expected dividend growth rate g . Under the above simplifying assumptions, a firm's stock price may be written as the following sum:

$$P_0 = \frac{D_0(1+g)}{(1+k)} + \frac{D_0(1+g)^2}{(1+k)^2} + \frac{D_0(1+g)^3}{(1+k)^3} + \dots, \quad (2)$$

where the three dots indicate that the sum continues indefinitely.

As we shall demonstrate shortly, this sum may be simplified to:

$$P_0 = \frac{D_0(1+g)}{(k-g)}$$

First, however, we need to review the very useful concept of a geometric progression.

Geometric Progression

Consider the sequence of numbers 3, 6, 12, 24,..., where each number after the first is obtained by multiplying the preceding number by the factor 2. Obviously, this sequence of numbers may also be expressed as the sequence 3, 3 x 2, 3 x 2², 3 x 2³, ... This sequence is an example of a geometric progression.

Definition: A geometric progression is a sequence in which each term after the first is obtained by multiplying some fixed number, called the common ratio, by the preceding term.

A general notation for geometric progressions is: a, the first term, r, the common ratio, and n, the number of terms. Using this notation, any geometric progression may be represented by the sequence:

$$a, ar, ar^2, ar^3, \dots, ar^{n-1}.$$

In studying the DCF Model, we will find it useful to have an expression for the sum of n terms of a geometric progression. Call this sum S_n. Then

$$S_n = a + ar + \dots + ar^{n-1}. \quad (3)$$

However, this expression can be simplified by multiplying both sides of equation (3) by r and then subtracting the new equation from the old. Thus,

$$rS_n = ar + ar^2 + ar^3 + \dots + ar^n$$

and

$$S_n - rS_n = a - ar^n$$

or

$$(1 - r) S_n = a (1 - r^n)$$

Solving for S_n , we obtain:

$$S_n = \frac{a(1-r^n)}{(1-r)} \quad (4)$$

as a simple expression for the sum of n terms of a geometric progression. Furthermore, if $|r| < 1$, then S_n is finite, and as n approaches infinity, S_n approaches $a \div (1 - r)$. Thus, for a geometric progression with an infinite number of terms and $|r| < 1$, equation (4) becomes:

$$S = \frac{a}{1-r} \quad (5)$$

Application to DCF Model

Comparing equation (2) with equation (3), we see that the firm's stock price (under the DCF assumption) is the sum of an infinite geometric progression with the first term

$$a = \frac{D_0(1+g)}{(1+k)}$$

and common factor

$$r = \frac{(1+g)}{(1+k)}$$

Applying equation (5) for the sum of such a geometric progression, we obtain

$$S = a \cdot \frac{1}{(1-r)} = \frac{D_0(1+g)}{(1+k)} \cdot \frac{1}{1-\frac{1+g}{1+k}} = \frac{D_0(1+g)}{(1+k)} \cdot \frac{1+k}{k-g} = \frac{D_0(1+g)}{k-g}$$

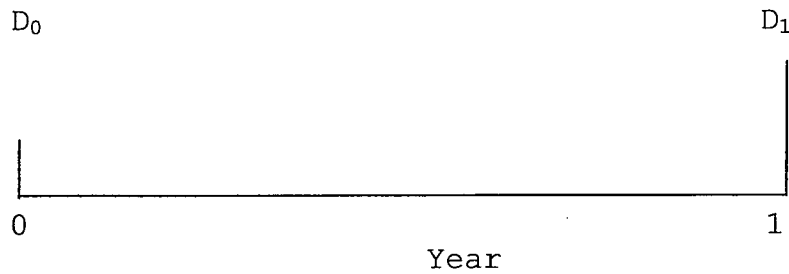
as we suggested earlier.

Quarterly DCF Model

The Annual DCF Model assumes that dividends grow at an annual rate of $g\%$ per year (see Figure 1).

Figure 1

Annual DCF Model

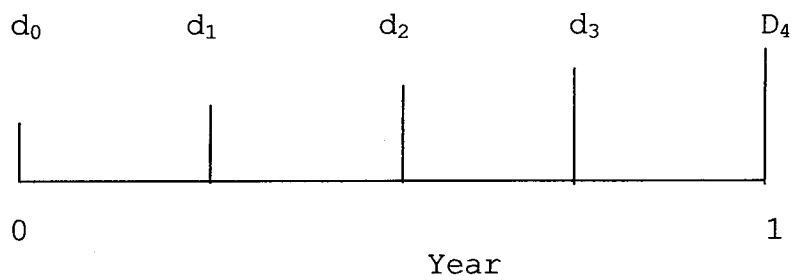


$$D_0 = 4d_0$$

$$D_1 = D_0(1 + g)$$

Figure 2

Quarterly DCF Model (Constant Growth Version)



$$d_1 = d_0(1+g)^{.25}$$

$$d_2 = d_0(1+g)^{.50}$$

$$d_3 = d_0(1+g)^{.75}$$

$$d_4 = d_0(1+g)$$

In the Quarterly DCF Model, it is natural to assume that quarterly dividend payments differ from the preceding quarterly dividend by the factor $(1 + g)^{.25}$, where g is expressed in terms of percent per year and the decimal .25 indicates that the growth has only occurred for one quarter of the year. (See Figure 2.) Using this assumption, along with the assumption of constant growth and $k > g$, we obtain a new expression for the firm's stock price, which takes account of the quarterly payment of dividends. This expression is:

$$P_0 = \frac{d_0(1+g)^{\frac{1}{4}}}{(1+k)^{\frac{1}{4}}} + \frac{d_0(1+g)^{\frac{2}{4}}}{(1+k)^{\frac{2}{4}}} + \frac{d_0(1+g)^{\frac{3}{4}}}{(1+k)^{\frac{3}{4}}} + \dots \quad (6)$$

where d_0 is the last quarterly dividend payment, rather than the last annual dividend payment. (We use a lower case d to remind the reader that this is not the annual dividend.)

Although equation (6) looks formidable at first glance, it too can be greatly simplified using the formula [equation (4)] for the sum of an infinite geometric progression. As the reader can easily verify, equation (6) can be simplified to:

$$P_0 = \frac{d_0(1+g)^{\frac{1}{4}}}{(1+k)^{\frac{1}{4}} - (1+g)^{\frac{1}{4}}} \quad (7)$$

Solving equation (7) for k , we obtain a DCF formula for estimating the cost of equity under the quarterly dividend assumption:

$$k = \left[\frac{d_0(1+g)^{\frac{1}{4}}}{P_0} + (1+g)^{\frac{1}{4}} \right]^4 - 1 \quad (8)$$

An Alternative Quarterly DCF Model

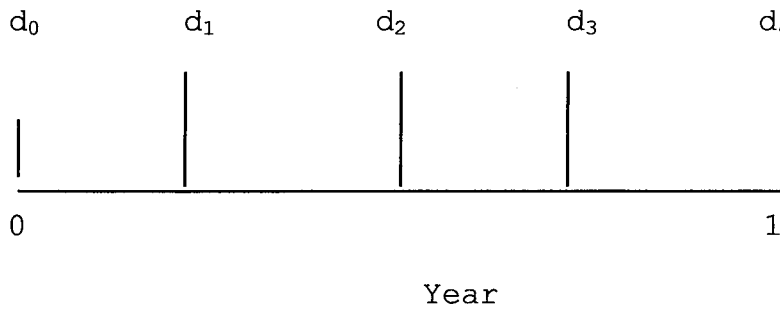
Although the constant growth Quarterly DCF Model [equation (8)] allows for the quarterly timing of dividend payments, it does require the assumption that the firm increases its dividend payments each quarter. Since this assumption is difficult for some analysts to accept, we now discuss a second Quarterly DCF Model that allows for constant quarterly dividend payments within each dividend year.

Assume then that the firm pays dividends quarterly and that each dividend payment is constant for four consecutive quarters. There are four cases to consider, with each case distinguished by varying assumptions about where we are evaluating the firm in relation to the time of its next dividend increase. (See Figure 3.)

Figure 3

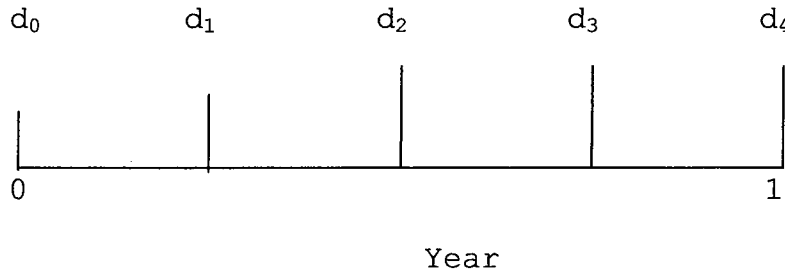
Quarterly DCF Model (Constant Dividend Version)

Case 1



$$d_1 = d_2 = d_3 = d_4 = d_0(1+g)$$

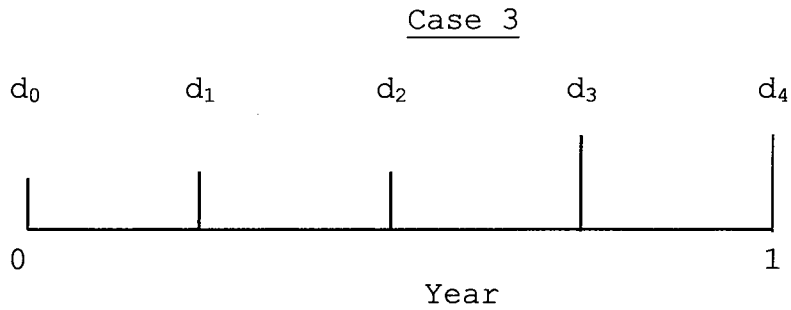
Case 2



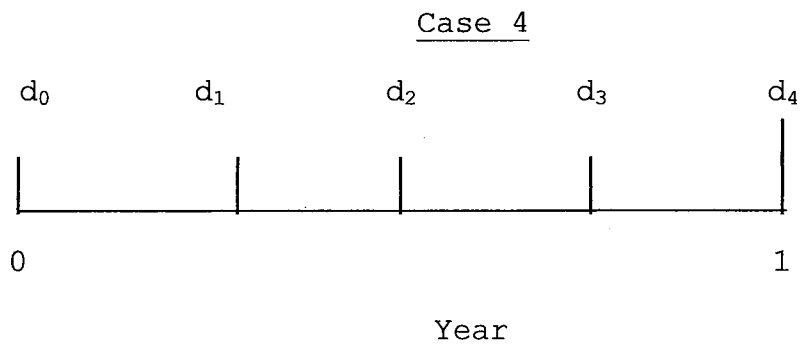
$$d_1 = d_0$$

$$d_2 = d_3 = d_4 = d_0(1+g)$$

Figure 3 (continued)



$$d_1 = d_2 = d_0$$
$$d_3 = d_4 = d_0(1+g)$$



$$d_1 = d_2 = d_3 = d_0$$
$$d_4 = d_0(1+g)$$

If we assume that the investor invests the quarterly dividend in an alternative investment of the same risk, then the amount accumulated by the end of the year will in all cases be given by

$$D_1^* = d_1 (1+k)^{3/4} + d_2 (1+k)^{1/2} + d_3 (1+k)^{1/4} + d_4$$

where d_1 , d_2 , d_3 and d_4 are the four quarterly dividends. Under these new assumptions, the firm's stock price may be expressed by an Annual DCF Model of the form (2), with the exception that

$$D_1^* = d_1 (1+k)^{3/4} + d_2 (1+k)^{1/2} + d_3 (1+k)^{1/4} + d_4 \quad (9)$$

is used in place of $D_0(1+g)$. But, we already know that the Annual DCF Model may be reduced to

$$P_0 = \frac{D_0(1+g)}{k-g}$$

Thus, under the assumptions of the second Quarterly DCF Model, the firm's cost of equity is given by

$$k = \frac{D_1^*}{P_0} + g \quad (10)$$

with D_1^* given by (9).

Although equation (10) looks like the Annual DCF Model, there

are at least two very important practical differences. First, since D_1^* is always greater than $D_0(1+g)$, the estimates of the cost of equity are always larger (and more accurate) in the Quarterly Model (10) than in the Annual Model. Second, since D_1^* depends on k through equation (9), the unknown "k" appears on both sides of (10), and an iterative procedure is required to solve for k .

COMPARATIVE RETURNS ON S&P 500 STOCKS
AND MOODY'S A-RATED UTILITY BONDS 1926-2003

Year	S&P 500 Stock Price	Stock Dividend Yield	Stock Return	A-rated Bond Price	Bond Return
2003	895.84	0.0180		62.26	
2002	1140.21	0.0138	-20.05%	57.44	15.35%
2001	1335.63	0.0116	-13.47%	56.40	8.93%
2000	1425.58	0.0118	-5.13%	52.60	14.82%
1999	1248.77	0.0130	15.46%	63.03	-10.20%
1998	963.35	0.0116	31.25%	62.43	7.38%
1997	766.22	0.0195	27.68%	56.62	17.32%
1996	614.42	0.0231	27.02%	60.91	-0.48%
1995	465.25	0.0287	34.93%	50.22	29.26%
1994	472.99	0.0269	1.05%	60.01	-9.65%
1993	435.23	0.0288	11.56%	53.13	20.48%
1992	416.08	0.0290	7.50%	49.56	15.27%
1991	325.49	0.0382	31.65%	44.84	19.44%
1990	339.97	0.0341	-0.85%	45.60	7.11%
1989	285.41	0.0364	22.76%	43.06	15.18%
1988	250.48	0.0366	17.61%	40.10	17.36%
1987	264.51	0.0317	-2.13%	48.92	-9.84%
1986	208.19	0.0390	30.95%	39.98	32.36%
1985	171.61	0.0451	25.83%	32.57	35.05%
1984	166.39	0.0427	7.41%	31.49	16.12%
1983	144.27	0.0479	20.12%	29.41	20.65%
1982	117.28	0.0595	28.96%	24.48	36.48%
1981	132.97	0.0480	-7.00%	29.37	-3.01%
1980	110.87	0.0541	25.34%	34.69	-3.81%
1979	99.71	0.0533	16.52%	43.91	-11.89%
1978	90.25	0.0532	15.80%	49.09	-2.40%
1977	103.80	0.0399	-9.06%	50.95	4.20%
1976	96.86	0.0380	10.96%	43.91	25.13%
1975	72.56	0.0507	38.56%	41.76	14.75%
1974	96.11	0.0364	-20.86%	52.54	-12.91%
1973	118.40	0.0269	-16.14%	58.51	-3.37%
1972	103.30	0.0296	17.58%	56.47	10.69%
1971	93.49	0.0332	13.81%	53.93	12.13%
1970	90.31	0.0356	7.08%	50.46	14.81%
1969	102.00	0.0306	-8.40%	62.43	-12.76%
1968	95.04	0.0313	10.45%	66.97	-0.81%
1967	84.45	0.0351	16.05%	78.69	-9.81%
1966	93.32	0.0302	-6.48%	86.57	-4.48%
1965	86.12	0.0299	11.35%	91.40	-0.91%
1964	76.45	0.0305	15.70%	92.01	3.68%
1963	65.06	0.0331	20.82%	93.56	2.61%
1962	69.07	0.0297	-2.84%	89.60	8.89%
1961	59.72	0.0328	18.94%	89.74	4.29%
1960	58.03	0.0327	6.18%	84.36	11.13%
1959	55.62	0.0324	7.57%	91.55	-3.49%
1958	41.12	0.0448	39.74%	101.22	-5.60%
1957	45.43	0.0431	-5.18%	100.70	4.49%
1956	44.15	0.0424	7.14%	113.00	-7.35%

COMPARATIVE RETURNS ON S&P 500 STOCKS
AND MOODY'S A-RATED UTILITY BONDS 1926-2003

Year	S&P 500 Stock Price	Stock Dividend Yield	Stock Return	A-rated Bond Price	Bond Return
1955	35.60	0.0438	28.40%	116.77	0.20%
1954	25.46	0.0569	45.52%	112.79	7.07%
1953	26.18	0.0545	2.70%	114.24	2.24%
1952	24.19	0.0582	14.05%	113.41	4.26%
1951	21.21	0.0634	20.39%	123.44	-4.89%
1950	16.88	0.0665	32.30%	125.08	1.89%
1949	15.36	0.0620	16.10%	119.82	7.72%
1948	14.83	0.0571	9.28%	118.50	4.49%
1947	15.21	0.0449	1.99%	126.02	-2.79%
1946	18.02	0.0356	-12.03%	126.74	2.59%
1945	13.49	0.0460	38.18%	119.82	9.11%
1944	11.85	0.0495	18.79%	119.82	3.34%
1943	10.09	0.0554	22.98%	118.50	4.49%
1942	8.93	0.0788	20.87%	117.63	4.14%
1941	10.55	0.0638	-8.98%	116.34	4.55%
1940	12.30	0.0458	-9.65%	112.39	7.08%
1939	12.50	0.0349	1.89%	105.75	10.05%
1938	11.31	0.0784	18.36%	99.83	9.94%
1937	17.59	0.0434	-31.36%	103.18	0.63%
1936	13.76	0.0327	31.10%	96.46	11.12%
1935	9.26	0.0424	52.84%	82.23	22.17%
1934	10.54	0.0336	-8.78%	66.78	29.13%
1933	7.09	0.0542	54.08%	79.55	-11.03%
1932	8.30	0.0822	-6.36%	70.67	18.23%
1931	15.98	0.0550	-42.56%	84.49	-11.63%
1930	21.71	0.0438	-22.01%	81.19	8.99%
1929	24.86	0.0336	-9.31%	83.95	1.48%
1928	17.53	0.0431	46.12%	86.71	1.43%
1927	13.40	0.0502	35.84%	83.28	8.92%
1926	12.65	0.0446	10.39%	80.81	8.01%

Average Return

Common Stocks	11.62%
A-rated Utility Bonds	6.44%
RISK PREMIUM	5.19%

Note: See Page 3 for an explanation of how stock and bond returns are derived and the source of the data presented.

Risk Premium Approach

Source of Data

Stock price and yield information is obtained from Standard & Poor's *Security Index Price Record*. Standard & Poor's derives the stock dividend yield by dividing the aggregate cash dividends (based on the latest known annual rate) by the aggregate market value of the stocks in the group. The bond price information is obtained by calculating the present value of a bond due in 30 years with a \$4.00 coupon and a yield to maturity of a particular year's indicated Moody's A-rated Utility bond yield. The values shown on pages 1 and 2 are the January values of the respective indices.

Calculation of Stock and Bond Returns

Sample calculation of "Stock Return" column:

$$\text{Stock Return (2002)} = \left[\frac{\text{Stock Price (2003)} - \text{Stock Price (2002)} + \text{Dividend (2002)}}{\text{Stock Price (2002)}} \right]$$

where Dividend (2002) = Stock Price (2002) x Stock Div. Yield (2002).

Sample calculation of "Bond Return" column:

$$\text{Bond Return (2002)} = \left[\frac{\text{Bond Price (2003)} - \text{Bond Price (2002)} + \text{Interest (2002)}}{\text{Bond Price (2002)}} \right]$$

where Interest = \$4.00.

**PREFILED TESTIMONY
OF
DAVID APPEL**

**2006 DWELLING FIRE AND EXTENDED COVERAGE INSURANCE RATE FILING
BY THE NORTH CAROLINA RATE BUREAU**

I. QUALIFICATIONS AND SUMMARY

Q. Please state your name and present business address.

A. My name is David Appel, and my business address is 1 Pennsylvania Plaza, New York, NY.

Q. What is your occupation?

A. I am Director of Economics Consulting and a Principal with the firm of Milliman - USA.

Q. What is Milliman - USA?

A. Milliman - USA (formerly Milliman & Robertson) is one of the nation's largest independently owned firms of actuaries and consultants. The company operates offices in 30 cities in the U.S., and, through our international network, Milliman Global, is affiliated with similar firms in more than 20 countries worldwide. Our U.S. employees number over 1,800 and our clients number in the thousands. They include insurers, self-insured entities, Federal and State Governments, private corporations, non-profit organizations, unions, and many others. I am a Principal with the firm, and I am in charge of its Economics Consulting practice.

Q. Please describe your educational and employment history.

A. A complete statement of my educational, employment and academic credentials is included as Exhibit RB-13 filed with this testimony.

To summarize, I have a B.A. in economics from Brooklyn College, City University of New York, and M.A. and Ph.D. degrees in economics from Rutgers University. Prior to joining Milliman, I was employed for nine years by the National Council on Compensation Insurance (NCCI), the nation's largest workers compensation insurance statistical, research and ratemaking organization. I joined NCCI as Research Economist in 1980, and held progressively responsible positions as Senior Research Economist, Director of Research, Assistant Vice President and finally Vice President beginning in July 1985. Prior to 1980, I was an instructor in economics at Rutgers University.

Q. Would you please describe some of your other professional activities?

A. Yes. Throughout my professional career, I have participated in a variety of academic and business activities related to insurance. I have been a member of the Board of Directors of the American Risk and Insurance Association, the leading learned society of insurance academics. I am currently a member of the editorial board of the Journal of Insurance Regulation (the official research publication of the National Association of Insurance Commissioners), as well as the journal Benefits Quarterly. I act as a peer referee for a number of scholarly journals in economics and insurance, and I maintain an active program of research and publication on issues of current interest in insurance economics. In addition, I was, for twelve years, an Adjunct Professor of Economics at Rutgers University.

Q. Have you ever published any papers or books?

A. Yes. During my career, I have authored many papers on various aspects of insurance that have been published in refereed books or scholarly journals. In addition, I have published a large number of papers in non-refereed journals as well. I have also co-edited three volumes of research papers dealing with various aspects of workers compensation and property-casualty insurance. My refereed publications are listed in Exhibit RB-13 filed with this testimony.

Q. Are you a member of any professional associations?

A. Yes, the American Economic Association and the American Risk and Insurance Association.

Q. Have you ever testified in insurance rate regulatory proceedings?

A. Yes. I have testified on many occasions in such proceedings, including numerous occasions in North Carolina since the early 1990's. A complete list is contained in Exhibit RB-13 filed with this testimony.

Q. What was the general nature of your testimony in these cases?

A. I have addressed a wide variety of insurance issues during public testimony, including such diverse topics as the impact of economic and demographic factors on insurance costs, the effects of regulation on insurance availability, the use of econometric and statistical models in insurance forecasting, and the use of modern financial theory in developing insurance prices. In North Carolina, my testimony in recent years has focused primarily on the last of these issues, specifically on matters relating to the cost of capital and the expected returns attributable to insurance operations.

Q. Have you been retained by the North Carolina Rate Bureau as a consultant with respect to the subject of profitability in this rate case?

A. Yes. I have considered the following specific matters in connection with this case:

1. Dr. Vander Weide's estimation of the cost of capital.
2. Whether other factors – notably interest rate sensitivity and the small firm size typical of dwelling fire and extended coverage insurers in North Carolina – create additional sources of risk which affect insurers' cost of capital.
3. Whether the expected costs of catastrophe reinsurance should be incorporated into the extended coverage insurance rates filed by the Rate Bureau and whether those costs should be apportioned to regions within the state proportional to the regional risk of the extended coverage insurance.
4. Whether the profits associated with underwriting extended coverage insurance in North Carolina should be apportioned to regions within the state proportional to the regional risk of that insurance.
5. The returns insurers would expect to earn from underwriting dwelling fire and extended coverage insurance in North Carolina, given that the filed underwriting profit provision is realized.

I have performed various studies and analyses on these matters.

Q. Have you reached any conclusions in regard to these matters?

A. Yes. I will summarize them in bullet form here, and then discuss them each more fully later in the testimony.

1. I have reviewed Dr. Vander Weide's cost of capital estimates, which rely on the two most widely recognized models used for this purpose, and find them to be reasonable. However, Dr. Vander Weide's estimates are based on the implicit assumption that insurers present investors with roughly average risk, relative to all possible investment activities. I believe that investors in the property-casualty insurance industry are subject to an above average degree of risk, and therefore I think it would be prudent to view Dr. Vander Weide's estimates as a conservative estimate of the return to which insurers are entitled.
2. I have considered the impact of two other factors on the risk and required return for insurers – interest rate sensitivity and the small firm size. As regards interest rate sensitivity, because of the high degree of financial leverage and the substantial share of medium and long term bonds in insurer asset portfolios, insurers are particularly subject to interest rate risk that cannot be diversified away. Based on my previous analyses, I have found that investors must be compensated for this risk in the form of an additional risk premium above that required for the average security. As regards firm size, I have on many occasions studied the size distribution of insurers in North Carolina and found that the firms providing insurance coverage in the state tend to be smaller than those used in Dr. Vander Weide's cost of capital analysis. Since there is conclusive evidence that, over the long run, smaller firms have earned higher returns,

this finding must be considered evidence that investors expect higher returns from small firms.

These analyses provide support for my opinion that Dr. Vander Weide's cost of capital estimates should be viewed as a conservative estimate of the return to which insurers are entitled.

3. I have considered the differential risk associated with underwriting extended coverage insurance in different regions within North Carolina, and have concluded that the risk due to catastrophe exposure is substantially greater in and around the coastal regions of the state. I have also considered the high cost of catastrophe reinsurance that is regularly purchased by property casualty insurance companies writing extended coverage insurance, and have concluded that standard ratemaking procedures fail to account for this cost. As a result, I recommend that an additional charge be included in the rates to cover the cost of a typical catastrophe reinsurance program. Furthermore, I believe that it is appropriate to apportion this additional charge across regions of the state, proportional to the relative risk by region.
4. Even after the benefits of reinsurance are taken into account, the residual risk of writing extended coverage insurance in North Carolina may still differ across regions within the state. As a consequence, I believe that it is appropriate to allocate the statewide profit built into extended coverage rates across regions, proportional to the relative risk by region after consideration of reinsurance.
5. In order to test the underwriting profit provision selected and filed by the Rate Bureau, I have estimated the returns insurers would expect to earn from North Carolina dwelling fire and extended coverage insurance, assuming the filed underwriting profit provisions are fully earned. I am aware that North Carolina law provides that insurers are entitled to expect to earn a return equal to the returns of industries of comparable risk, and that in calculating that expected return, investment income from capital and surplus funds is not to be considered. I refer to that operating return as the statutory return. However, as is evident from the attached exhibits, I have estimated insurer pro forma returns both including and excluding expected investment income from capital and surplus. (I refer to the return including investment income on surplus as the total return.) I have done this to demonstrate that if the filed underwriting profits are actually realized, and even if investment income on surplus is considered, insurer returns will not be excessive. Obviously, if returns are not excessive including investment income from capital and surplus, they will be non-excessive excluding such income.

Based on my calculations, the selected underwriting profit provisions generate statutory returns on net worth of 7.6% for dwelling fire and 7.2% for extended coverage. In addition, the total returns on net worth (i.e., including investment income on surplus) are 11.3% for dwelling fire and 11.3% for extended coverage. Since all these returns, even those that include investment income on surplus funds, are near the lower bound of Dr. Vander Weide's range for the fair rate of return, I conclude that the underwriting profit provisions are clearly not excessive.

II. COST OF CAPITAL REVIEW

Q. You said your first assignment was to review Dr. Vander Weide's estimate of the cost of capital. Are you familiar with Dr. Vander Weide's approach to estimating the cost of capital in insurance rate cases?

A. Yes. I am aware of the methodology upon which Dr. Vander Weide relies to estimate the cost of capital and have reviewed it on a number of occasions in the course of previous rate cases in North Carolina. Dr. Vander Weide has used the most widely recognized and accepted models for this purpose, namely the Discounted Cash Flow (DCF) model and the risk premium method. These models, when taken together and properly applied to a reasonably selected data set, provide acceptable estimates of the cost of capital for regulated insurers.

Q. What has Dr. Vander Weide concluded with respect to the fair rate of return in this case?

A. Dr. Vander Weide has concluded that the fair rate of return for insurers is in the range of 11.0 – 13.7% on net worth as determined under generally accepted accounting principles (GAAP).

Q. In your opinion, is this an appropriate estimate of the required rate of return?

A. Yes, however as I indicated a moment ago, I believe that Dr. Vander Weide may have been conservative in his calculation of the required rate of return. Dr. Vander Weide has assumed that the property-casualty industry presents investors with average risk. However, based on my studies, I conclude the following:

1. There is evidence that the industry is considerably above average with respect to the volatility of the returns that it provides to investors. This higher volatility of returns makes the property-casualty industry an investment of above average risk.
2. Since investors require higher returns from smaller firms, and since the firms in Dr. Vander Weide's cost of capital analysis are significantly larger than the average property-casualty insurer in North Carolina, his approach tends to underestimate the true cost of capital for North Carolina dwelling fire and extended coverage insurers.

III. INTEREST RATE RISK, INSURER SIZE AND THE COST OF CAPITAL

Q. Please turn to the impact of interest rate sensitivity on insurers' risk and required return and describe your analysis.

A. I considered whether there was any reason to believe that the interest rate sensitivity of insurers' asset portfolios contributed to insurer risk. To address this question, I considered both the theoretical and empirical dimensions of the issue. Based on these analyses, I have concluded that the high degree of financial leverage and large share of intermediate and long term bonds in insurer asset portfolios combine to create a significant exposure to interest rate changes. This high degree of interest rate risk causes property-casualty stock returns to have

a high degree of volatility, which requires additional compensation above that demanded for the average security.

Q. Why are investors concerned with the volatility of returns to investments in the stocks of property-casualty insurance companies?

A. One of the fundamental principles of financial economics is that investors are generally risk averse -- that is, all else equal, they would prefer stable (rather than volatile) streams of cash returns to their investments. For example, given a choice between receiving a certain \$1,000 per year on an investment of \$10,000, or an equally likely possibility of \$0 or \$2000, most investors would prefer to take the fixed \$1000 per year. Because of this aversion to risk, investors tend to hold diversified investment portfolios, as such portfolios enable the investor to reduce the variability in returns.

Q. Have regulatory authorities recognized the role of risk in determining the fair rate of return for regulated business?

A. Yes. The concept of risk and its relationship to required return is central to the two seminal judicial decisions regarding the fair rate of return for regulated businesses. These decisions were rendered in two cases before the U.S. Supreme Court - Bluefield Waterworks and Hope Natural Gas. In Bluefield, the Court stated:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties....

Bluefield Waterworks & Improvement Company v. Public Service Commission of West Virginia, 262 U.S. 679, 692-693 (1923).

In Hope, the Court stated:

From the investor or company point of view, it is important that there be enough revenue not only for operating expenses, but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with the returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944).

These decisions indicate a clear recognition of the relationship between risk and required return. Moreover, they emphasize the importance of providing returns which will attract

investors. Since investment funds are acquired in capital markets, this leads us to a consideration of the risk and required returns for property-casualty insurance industry stocks.

Q. What is your opinion regarding the riskiness of property-casualty insurance stocks?

A. The property-casualty insurance industry is often viewed as being of average risk, based on estimates of its market risk. However, I have found that property-casualty insurance stocks are subject to a high degree of interest rate risk in addition to market risk. It is this combination of market and interest rate risk that makes insurance stocks riskier than average.

Q. Can you please explain what you mean by market risk?

A. Yes. As I mentioned earlier, investors prefer stability rather than volatility in their investment returns. While virtually all securities have a certain degree of volatility in their expected returns, part of the risk that is associated with that volatility can be eliminated through the process of diversification. The portion of risk that can be eliminated by diversification is termed diversifiable risk.

Market risk is the risk associated with movements in the overall stock market. It is not possible to eliminate this sort of risk by holding a diversified portfolio of stocks, because there are certain economic events which influence the returns on all stocks simultaneously. These are system-wide events that make the stock market move as a whole.

In general, risk that is not diversifiable is known as systematic risk. Systematic risk stems from events that take place on an economy-wide basis. Investors can only diversify away risks that have offsetting factors somewhere else in the economy. For instance, if one company has a bad year due to reasons specific to it alone, it is highly likely that another company will have a good year which will offset the bad performance. That sort of risk is diversifiable. However, events that take place economy-wide without offsetting factors are not diversifiable.

Q. How is market risk measured?

A. A value that is frequently applied for the purpose of measuring market risk is known as beta. Beta measures the sensitivity of an individual security's return (or price) to changes in the returns (or price) of a broad market index. For example, if a security has a beta of 1.5, then a 10% excess return in the stock market as a whole would imply an expected 15% excess return on that specific security, where excess return is defined as the excess of the security's return over the rate of interest on U.S. Treasury Bills. Such a security would be viewed as having above average market risk because it is more sensitive to the factors that cause fluctuations in the overall stock market.

According to the theory that justifies the use of beta (the Capital Asset Pricing Model), securities with betas equal to one are deemed of average risk, while those with betas greater (less) than one are deemed to be of greater (less) than average risk. Since the value of beta for the property-casualty insurance stocks followed by Value Line is approximately one, this

has often led to the conclusion that the property-casualty insurance industry has average risk. However, empirical research has cast considerable doubt on the ability of beta to quantify adequately the risks to which investors are exposed. This has led researchers to consider other factors, such as interest rate risk, in explaining the required returns to investors, particularly when considering the stocks of financial institutions such as insurers.

Q. You have made reference to the term interest rate risk. Can you please define this term?

A. Yes. Interest rate risk refers to the risk that the value of fixed income investments will fluctuate with changes in interest rates. Suppose an investor buys a long term bond for \$10,000 that yields a return of 10% per year, but then interest rates go up to 11% one year later. That specific investor will be unable to earn 11%, because of the previous investment in the lower yielding bond. If the bond is sold at that time, he or she will suffer a loss in value - a capital loss - because other investors must be compensated for purchasing a bond that yields less than current market rates. Consequently, the value of a bond goes down when interest rates go up.

Q. Does this mean that investments in bonds are riskier than investments in equities?

A. No, it just means that there is also risk associated with holding bonds, particularly those with a relatively long term to maturity. Investments in equities are still considerably riskier than investments in long term bonds, as evidenced by the fact that returns to large company stocks have had a much higher mean and standard deviation than returns on long term government bonds over the past 80 year period.

Q. Does interest rate risk affect investments in property-casualty insurance stocks?

A. Yes. Property-casualty insurance companies invest large amounts of funds in bonds issued by both corporations and governmental bodies. (In fact, according to Best's Aggregates and Averages, in 2000 these companies had more than one and a half times their statutory surplus invested in bonds alone.) The risk that investors face is that when interest rates change, the values of the bonds also change, and hence their investments in property-casualty stocks are subject to interest rate risk. This fact is widely recognized by the financial community.

Since investors cannot diversify away interest rate risk, only the prospect of higher returns will induce them to purchase interest-sensitive stocks. That is, investors must be compensated for purchasing interest-sensitive stocks because they are increasing their exposure to interest rate risk.

Q. Why is interest rate risk different from market risk?

A. Interest rate risk is a separate source of volatility for insurance stocks. Interest rates often change as a result of changes in expectations of future inflation. These changes primarily affect firms that hold what are called nominal assets and liabilities. Nominal assets and liabilities have cash flows that are fixed in nominal terms (for example, accounts receivable,

most contracts, and bonds) and are thus subject to erosion in value due to inflation. On the other hand, the cash flows associated with manufacturing and service operations tend to fluctuate with the price level. Since most non-financial firms hold relatively few nominal assets and liabilities, their stocks are not particularly sensitive to changes in interest rates that are due to changes in expected inflation. Therefore interest rate risk adds additional risk to insurance stocks, above and beyond market risk, that is not diversifiable.

Changes in interest rates that are not associated with changes in expected inflation will affect all stocks. This accounts for the moderate degree of correlation between changes in long term interest rates and returns to common stocks. However, the fact that most stocks are not very sensitive to changes in interest rates that are due to changes in expected inflation means that interest rate risk is not fully captured in measures of market risk.

Q. Is it possible to measure interest rate risk?

A. Yes, and I have conducted a number of studies designed specifically to address this issue during the past several years. For purposes of this testimony, I will refer to the most recent of these studies, which was conducted early in 1999.

Q. Did you update this study for your testimony in this case?

A. No, I did not. I originally performed this analysis in 1995, and subsequently updated it in 1997 and 1999. Although the details of the empirical results were not identical in each case, they differed only very slightly from year to year, and were sufficiently similar that I felt it was unnecessary to update it for this testimony. In my opinion, the results from the 1999 study are perfectly acceptable for the purpose to which they are put in this testimony.

Q. Is a more detailed discussion of these studies available in your testimony in other cases in North Carolina?

A. Yes. In the testimony I submitted with the 2003 auto rate filing, there is a complete discussion of this research and its conclusions.

Q. Can you please briefly summarize the principal conclusions of your work in this area?

A. Yes. Since insurer assets on average have a substantially longer financial duration than insurance liabilities, when interest rates change, the value of insurer equity is subject to potentially wide fluctuation. While the market risk for insurers as measured by beta is roughly average, the degree of interest rate risk to which the industry is exposed is considerably higher than average. Since this risk cannot be entirely diversified away, the overall risk associated with an investment in property/casualty insurance is greater than average. As a consequence, insurers are entitled to a rate of return above that allowed for the average risk investment in the U.S. economy.

Q. Have you also conducted an empirical study of the risks of investing in the property-casualty insurance industry?

A. Yes. I calculated the mean and standard deviation of the returns to investing in the property-casualty insurance industry, and compared them to the same statistics for investments in a portfolio of average risk common stocks (i.e., the S&P 500). In order to do this, I gathered data on prices, dividends, and number of shares outstanding from the December 31, 1998 edition of Compustat Research Insight. This data source contains up to 20 years of historical information on 141 property-casualty insurance stocks; to my knowledge, this is one the largest collections of data on property-casualty insurance companies that has ever been assembled for this purpose. My studies show that the standard deviation of returns to investors in property-casualty insurance stocks was greater than the standard deviation of returns on the S&P 500 while the mean return was higher over the entire period from 1980 to 1998.

These data indicate that insurance stocks are more volatile, and hence riskier, than the average security in the economy. In addition, the higher than average returns for these securities indicate that investors have been compensated for this additional risk.

Q. Why are returns to investing in property-casualty insurance stocks more volatile than investing in the stocks that make up the Standard & Poor's 500?

A. I believe that there are three main reasons for this.

First, the high degree of financial leverage and mismatched durations of assets and liabilities contributes to the volatility of returns to investors in insurance stocks.

Second, the insurance industry is in the business of bearing risk. Individuals and corporations transfer to property-casualty insurers potential liability for a wide range of possible adverse events, ranging from property damage to professional liability. In light of the unforeseen events that can occur, and, in the recent past, actually have occurred, investors in property-casualty insurance stocks are subject to considerable risk.

Finally, insurance is in the unique position of being a highly competitive industry that is also subject to a high degree of regulation. This combination of regulation and competition creates an environment in which insurers are subject not only to the demands of the market but also to the pressures of the political process. There is substantial evidence that regulation can increase risk for a regulated enterprise, and when that is combined with an aggressively competitive industrial structure, risk is increased.

Q. You said that the combination of regulation and competition increased risk for insurers. Can you describe what you mean?

A. Yes. Traditionally, direct price and rate of return regulation has been imposed on industries known as "public utilities," such as generation and transmission of electric power, distribution of natural gas, provision of local water and sewer service and the like. Because of the nature of the production process, these industries are characterized as "natural

monopolies," meaning that it is most efficient for a single producer to provide the service in question. In such circumstances, the state normally grants a monopoly to a single provider and then regulates that firm directly to prevent abuse of monopoly power.

Property-casualty insurance differs dramatically from this model. Rather than a single firm providing service, there are in most states literally hundreds of firms competing in the market, none of which typically have significant market power. (For example, in North Carolina there are more than 125 insurer groups writing fire and extended coverage insurance in the state.) These firms compete aggressively to increase market share and attract the best insureds by offering a variety of price and quality combinations that are best tailored to their business objectives. This vigorous competition provides discipline in the marketplace, and, when combined with direct rate of return regulation, the risk for insurers is increased.

I should note that in the past a number of competitively structured industries (such as airlines, trucking, and telecommunications) were subject to regulation, but in recent years there has been a movement to deregulate these activities. This is due in part to the widespread agreement that competition itself is an adequate regulator.

Q. You also said that you considered whether the size distribution of North Carolina insurers should impact the cost of capital in this case. Can you please describe this issue briefly and discuss its implications for this case?

A. Yes. It is a well established fact of empirical finance that small stocks tend to outperform large stocks. Ibbotson Associates, for instance, reports that firms in the tenth decile of stocks listed on the principal U.S. stock exchanges have outperformed the market as a whole by approximately 3.3 percentage points over the period 1926 to 2002, even after accounting for the fact that these firms have above average betas. Therefore an adjustment should be made to the cost of capital to the extent that the property-casualty insurance industry is composed of small stocks.

Q. Have you conducted any studies with respect to the significance of the small stock effect?

A. Yes. As with interest rate risk, I have conducted a number of studies of this issue in previous years, and in each instance I have found that (1) investors have earned higher returns from small stocks than from large stocks, and (2) the insurers in Dr. Vander Weide's cost of capital analysis are among the largest companies in the U.S. economy. The insurers in Dr. Vander Weide's analysis are larger, on average, than the companies in the property-casualty insurance industry, and they are larger, on average, than the companies writing dwelling fire and extended coverage insurance in North Carolina.

These facts suggest that the cost of capital for insurers writing dwelling fire and extended coverage insurance in North Carolina should be higher than for those firms contained in Dr. Vander Weide's cost of capital analysis. This reaffirms my conclusion that the cost of capital that Dr. Vander Weide has presented is conservative.

Q. Without describing in detail the studies you have undertaken in the past, what are your conclusions from the evidence you have reviewed on firm size and investors' required returns?

A. There are two principal findings from my analysis of firm size, rates of return, and cost of capital:

1. There is conclusive evidence that, over the long run, smaller firms have earned higher returns, and this finding must be considered evidence that investors expect higher returns from small firms.
2. The firms in Dr. Vander Weide's cost of capital analysis are among the larger firms in the U.S. economy, and they are significantly larger than the average property-casualty insurer, both nationally and in the North Carolina dwelling fire and extended coverage insurance market.

In summary, the estimates from Dr. Vander Weide's cost of capital analysis should be viewed as a lower-bound estimate for property-casualty insurers writing North Carolina dwelling fire and extended coverage insurance.

Q. Can you please summarize your testimony on the cost of capital of the property-casualty insurance industry?

A. Yes. Professor Vander Weide has assumed that the property-casualty insurance industry presents investors with risks comparable to the average investment in equities. My analysis has shown that property-casualty insurance stocks are subject to additional volatility due to interest rate sensitivity, and are relatively small when compared with the broad cross section of publicly traded firms in the U.S. economy. Since these additional risks require compensation in the form of a higher return, I conclude that Professor Vander Weide has been conservative in his calculation of the required rate of return on property-casualty insurance investments.

IV. NET COST OF REINSURANCE & REGIONAL ALLOCATION OF STATEWIDE PROFIT

Q. You said you considered whether the net cost of reinsurance should be included in extended coverage (EC) rates in North Carolina, and whether the profit in the rates should be allocated proportional to risk. Can you please discuss your evaluation of these issues?

A. Yes. I will briefly outline the problem and then discuss each of the issues separately.

To begin with, extended coverage is one of the insurance coverages that is subject to the potential for catastrophic loss. In such lines (earthquake, homeowners, and other property coverages), individual catastrophic events can result in enormous losses, far in excess of what the typical insurer could bear. Thus, for these coverages, insurers routinely purchase reinsurance to manage their exposure to extreme events. This raises several concerns from a

ratemaking perspective, since direct ratemaking procedures typically do not provide for the cost of reinsurance.

Second, the exposure to catastrophic loss varies substantially by geographic region within North Carolina. It is well known that the coastal counties in the state are subject to severe exposure to the hurricane peril, while the interior regions to the west are subject to considerably less exposure. Since the need for reinsurance is a function of the degree of catastrophe exposure, the cost of reinsurance should reflect such regional differences as exist within the state. Accordingly, in considering the cost of reinsurance in primary rates, we allocate the statewide cost across regions, proportional to risk.

Finally, even after the consideration of reinsurance, substantial differences in risk across regions remain. Therefore, to the extent that the underwriting profit in the rates is intended to compensate the insurer for risk, that profit should also be spread regionally proportional to the risk that remains after the benefits of reinsurance are considered. Similar to the cost of reinsurance, we also allocate the profit in the statewide rates across regions, proportional to the residual risk that remains after the benefits of reinsurance.

Q. You mentioned that direct ratemaking does not include the cost of reinsurance. Can you please explain?

A. Yes. Consider the following observations regarding direct ratemaking:

Direct ratemaking is the typical approach used when making insurance rates on an industrywide basis. In insurance, the use of the terminology "direct" refers to an analysis done without consideration of reinsurance. Typically a primary insurer sells policies to the public, and earns "direct premiums" in exchange for bearing the risk of future losses and expenses. The primary insurer, however, may "reinsure" some of its exposure by ceding a portion of the direct premium in exchange for the commitment by the reinsurer to bear a specified portion of future losses and expenses. When an analysis is done including the consideration of reinsurance, it is termed a "net" analysis.

The direct approach depends on calculating a premium that covers the costs of direct losses and expenses and provides a fair rate of return on the capital used to support the insurance transaction. Because everything is done on a direct basis, reinsurance costs are never explicitly considered. However, when the fair rate of return and the amount of capital at risk are determined, these values are based on actual market data. The actual amount of capital insurers hold, and the return required on that capital base, both reflect the effects of reinsurance; if reinsurance were unavailable, primary insurers would have to hold substantially more capital and would be viewed as riskier than they currently are.

The direct ratemaking procedure implicitly considers reinsurance costs, in the sense that it includes an allowance for all losses (both primary and reinsured) and a provision for expenses and profit based on those total losses. However, the manner in which the profit is determined effectively assumes that the reinsured loss layer has the same capitalization and requires the same rate of return as the primary layer, an assumption which is demonstrably untrue. Even if the fair rate of return for reinsurers is no higher than that required for primary insurers, we know that reinsurers have significantly higher amounts of surplus relative to premium than primary insurers, particularly for reinsurers that underwrite catastrophe

coverage. To the extent that the direct ratemaking procedure includes a profit provision based on the primary insurers' required return and amount of capital, it understates the actual cost of insurance.

Q. Is this a problem in ratemaking in lines where reinsurance is prevalent?

A. Yes. So long as markets require reinsurers to carry more capital per unit of exposure than primary insurers, the traditional ratemaking procedure will not properly provide for the true cost of reinsurance. In fact, the traditional procedure provides a rate that is biased downward, because it assumes that the reinsured layer has the same capital costs as the primary layer of coverage. While this bias may be small for certain lines of business, it is large for EC insurance in North Carolina, because of the significant catastrophe potential in the state and the large portion of expected EC losses that are attributable to hurricanes.

Q. What analysis did you perform to address this issue?

A. To address this issue and provide for a rate that will cover all the costs of the insurance transaction (as is required by basic economic and actuarial principles), I developed a procedure to include the "net cost of reinsurance" as an expense in the direct EC rates in North Carolina. By net cost of reinsurance, I mean the expense and profit components of the reinsurance rate, since the loss costs are already included in the direct premium. This procedure is conceptually identical to that employed in Florida, where insurers make rates using direct losses and expenses, but then add in a provision which covers the cost to the primary insurer of the reinsurer's profit and expense.

Q. Please describe your analysis.

A. To implement this procedure, I adopted the standard ratemaking assumption used in North Carolina – i.e., that there is a single aggregate company that is the composite of all carriers in the state. I then assumed that company was subject to a catastrophe reinsurance program typical of carriers writing property insurance in North Carolina, with provisions as follows:

- An attachment point equal to twice the annual average hurricane loss. (The attachment point is the loss level at which the reinsurer begins to share in the loss.)
- A limit equal to the one in a hundred year event (the 99th percentile of the statewide aggregate loss distribution from Applied Insurance Research (AIR)). The limit is the maximum loss amount upon which the reinsurer will share the costs under the contract.
- A 10% quota share retention in the reinsured layer. (Quota share refers to a provision where the primary insurers share a specified percentage of the reinsured loss).

Given that the expected annual hurricane loss in North Carolina is approximately \$62 million, and the 99th percentile of the hurricane loss distribution (i.e., the one in a hundred

year event) is approximately \$1.22 billion, this program implies that the reinsurer will bear 90% of all losses in excess of \$124 million, with a maximum payment of approximately \$982 million (i.e., 90% of \$1.22 billion – \$124 million).

These provisions were based on a review of publicly available information on the reinsurance programs of a number of the largest writers in North Carolina and discussions with actuaries, risk managers and reinsurance brokers familiar with these types of exposures. However, I should note that I developed these provisions several years ago, and I believe they are relatively conservative in today's environment. That is, in light of recent catastrophe experience, it is my impression that primary insurers will be seeking greater reinsurance protection in the future than may have been typical prior to the last several years. (For example, insurers may elect lower attachment points, higher limits and/or a smaller quota share in the reinsured layers.) If this were the case, the amount of reinsured losses would increase relative to losses retained, and the ultimate cost of providing EC coverage in the state would increase.

Given the program described above and the AIR statewide aggregate loss distributions, I then determined the amount of losses that would be subject to reinsurance coverage, as a share of the total hurricane losses in the state. Based on the estimated reinsured losses, I then developed an estimated "competitive market" reinsurance premium, following a series of steps that are described below. Before describing the individual steps in that process, however, I should note two considerations in connection with the use of the AIR model in this filing.

First, in developing the hurricane loss estimates for use in this filing, AIR ran two separate models, one based on 100,000 iterations of its proprietary model using the full 105 year history of hurricane activity as the basis for projected hurricane frequency, and the other based on 10,000 iterations of the model using an alternative event file. This alternative event file was provided by Accurate Environmental Forecasting, Inc. (AEF), and it reflects the higher frequency and severity of hurricanes that has been observed in recent years.

When calculating the base rates for this filing, the NCRB relied upon the AIR model using the full 105 year storm set to estimate the level of hurricane losses to be included in the rates. However, I am aware that reinsurers are currently relying on models that use substantially higher hurricane frequencies and/or severities to estimate expected losses for property exposures, to reflect the widespread recognition that we are entering a phase of increasing activity in the hurricane cycle. Since it is appropriate to rely on the models used in the reinsurance market in setting the price of reinsurance, and later, in allocating that cost to zone, I relied on the AIR model loss estimates using the alternative event set from AEF.

Second, I also note that in projecting losses using either model, AIR's estimates reflect the phenomenon of "demand surge." Demand surge refers to the fact that, subsequent to the occurrence of a large natural catastrophe, the prices of labor and materials required to repair or replace damaged property tend to increase because of the surge in demand for such resources. This is exactly what one would expect given the underlying dynamics of supply and demand; with resources (particularly labor) that are relatively fixed in supply in the short run, a rapid increase in demand is expected to increase prices. This phenomenon has been observed following natural disasters such as Hurricane Andrew, the Northridge earthquake, and the like. In estimating the damages attributable to catastrophic events, it is appropriate to

include all factors that affect the level of expected losses, including, of course, factors that affect the price of the resources required to respond to those events.

Given the reinsurers' estimated hurricane losses, I then calculated the competitive market price of reinsurance as follows:

- I loaded the reinsured loss for LAE, using the Incurred Loss/Incurred LAE ratio from the filing.
- I assumed that the reinsurer incurred fixed expenses equal to 10% of losses plus LAE.
- I assumed the reinsurer set an underwriting profit provision that would yield a return on net worth, after consideration of all investment income, of 13.0%. I determined the reinsurer's net worth such that the reinsurer premium to surplus ratio would be .41, the historical average ratio for professional reinsurers from Best's Aggregates and Averages.

I believe these assumptions are, in general, quite conservative. Reinsurer expenses exceed the 10% value assumed in the calculations: 10% is an estimate of the overhead costs associated with the reinsurance operation, but it includes no consideration of acquisition costs. In addition, although the reinsurer premium to surplus ratio has averaged .41 over the past decade, the current ratio is lower. Moreover, the amount of surplus required to support catastrophe exposures is greater than that required to support the average reinsurance exposure; hence the premium to surplus ratio that is applicable to catastrophe exposures should be lower than average. If the expense provision was higher, or the premium to surplus ratio was lower, the reinsurer expense and profit load would be higher, leading to a higher estimated rate level.

Having determined the reinsurance premium that a competitive reinsurance market would produce under the assumptions described above, I then subtracted expected losses and LAE from the premium to leave the net cost of reinsurance. This latter amount was then divided by projected direct written premium to determine the expected net cost of reinsurance as a percent of direct premium, which turned out to be 19.13% (comprised of the reinsurance expense cost of 2.15% and the cost of reinsurer capital of 16.98%). In the next step, that amount was added as an expense in the rates.

Q. Are the results of your calculations shown in an exhibit?

A. Yes. Exhibit RB-14 shows the calculations giving rise to the estimated net cost of reinsurance. This exhibit contains two pages; the first page shows the derivation of the statewide premium, part of which is required to determine the reinsurer's premium. The second page shows the derivation of the reinsurance premium, based on the portion of insured hurricane losses and the reinsurer's capitalization and required return. As can be seen in the second page, the reinsurance premium is 34.36% of statewide direct premium, while the net cost of reinsurance is 19.13% of premium. The net cost of reinsurance is the total reinsurance premium less the primary insurer's loss and expense recovery, which is in

turn equal to the reinsurer's expense cost of 2.15% (RB-14, Sheet 2, line 18) and the cost of reinsurer capital of 16.98% (RB-14, Sheet 2, line 19).

Q. In your opinion, it is appropriate to include the net cost of reinsurance in EC insurance rates in North Carolina?

A. Yes. Insurers in North Carolina incur a substantial cost for bearing the risk of EC insurance in the state. The market cost of bearing that risk (whether the risk is retained by the insurer or transferred to a reinsurer) must be included in the rates. In the analysis described above, I have estimated a competitive market reinsurance premium that reasonably (albeit very conservatively) reflects the net cost of reinsurance to the primary insurer. Since this is a legitimate cost of the risk transfer inherent in the purchase of EC insurance, it should properly be included in the rates.

Q. You said that the next step was to allocate the cost of reinsurance across regions in the state proportional to risk. Can you please discuss your analysis of this issue?

A. Yes. It is widely agreed that EC insurance in North Carolina is subject to substantial catastrophe exposure due to the possibility that hurricanes and other serious windstorms may strike the state. However that catastrophe potential differs significantly from region to region within the state; in coastal counties, for example, the hurricane risk is far higher than it is in the interior mountainous regions to the west. As a consequence, the risk to which insurers and reinsurers are exposed differs across the state as well. Since the need for reinsurance arises from the catastrophe exposure, it seems clear that regional differences in relative risk should be taken into account when determining the allocation of reinsurance costs within the state.

Q. How did you analyze the regional differences in risk and allocate reinsurance costs to region?

A. To address this issue, I developed a general simulation model that calculates regional differences in risk within North Carolina. Based on the model results, costs can be allocated to different territories in proportion to the risk each territory contributes to the state as a whole. I used this model to allocate both the cost of reinsurance as well as the underwriting profit to three different zones in the state. As a general rule, since the risk in the coastal territories is far greater than the risk in the interior, the cost of reinsurance and the required profit in those territories is greater, as a percent of premium, than in the less risky territories.

Q. Can you please describe the model you developed?

A. In broad terms, my approach involved the following steps:

- (1) Determine appropriate measures of risk;
- (2) Build a Monte Carlo simulation model to calculate the risk measures in each territory;
- (3) Allocate statewide total profit proportional to risk.

I describe each of these steps briefly below. However, before outlining the general model, I should note that we did not conduct our analysis at the level of the individual territory, but rather at the "zone" level. That is, we aggregated the territories into three distinct zones for purposes of allocating profit: Zone 1 - coastal (territories 5, 6, 42 and 43); Zone 2 - central (territories 32, 34, 41, 44, 45, 46, 47 and 53); and Zone 3 – foothills and mountains (territories 36, 38, 39 57 and 60).

- (1) **Determine Appropriate Measure of Risk:** To select appropriate risk measures, I reviewed relevant citations from the actuarial and economics literature relating to this issue. Based on this review, I selected three bases for measuring risk: variance of losses, standard deviation of losses and probability of ruin. Each of these has merit, and support in the literature, as a measure of relative risk across the various zones within the state.
- (2) **Build a Simulation Model to Calculate Risk by Zone:** Calculating risk by zone using the measures noted above involves estimating the distribution of annual aggregate losses by zone. To do this, I built a two part simulation model that separately estimates hurricane and non-hurricane losses. For the hurricane loss estimates, I relied on the AIR model using the AEF event file that reflects the recent higher frequency and severity of hurricanes. This model produced estimated hurricane losses by territory, which were then aggregated to the zone level. For non-hurricane losses, I built a Monte Carlo simulation model based on ISO data to estimate the annual aggregate loss distribution across all non-hurricane perils. I then summed hurricane and non-hurricane losses from each iteration to derive the distribution of total losses by zone. From this distribution, I was able to calculate the variance and standard deviation of losses, as well as the probability of ruin.

I should note that I applied this model separately to both the reinsurer and the primary insurer, for two distinct purposes. In the case of the reinsurer, my intention was to allocate the net cost of reinsurance – that is, the reinsurance expense cost and the cost of reinsurer capital – to zone proportional to the risk borne by the reinsurer. In the case of the primary insurer, my intention was to allocate the underwriting profit in the rates – that is, the primary insurer's compensation for risk – to zone, proportional to the residual risk retained by the primary insurer after considering the losses ceded to the reinsurer.

- (3) **Allocate Reinsurance Costs and Statewide Profit Proportional to Risk:** For the variance and standard deviation methods of measuring risk, I calculated the values of both variables in each zone, and then took the sum across all the zones as an estimate of the statewide total value. (The assumption that the statewide total variance is the sum of the individual zone variances is equivalent to assuming that there is zero correlation of losses across zones, and the assumption that the total standard deviation is the sum of the individual zone standard deviations is equivalent to assuming that there is perfect correlation of losses across zones. The actual result is clearly somewhere in between the two.) This was done separately for the reinsurer, based on ceded losses, and for the primary insurer, based on net (retained) losses. Each zone was then allocated a share of the net cost of reinsurance and total profit based on its share of total risk. Under the probability of ruin method, I ranked total losses (hurricane plus non-hurricane) across all iterations from largest to smallest, and found

the iteration in which actual losses were equal to the losses that would produce ruin (i.e., the level of losses that would just exceed the sum of premium net of expenses, plus investment income and surplus). I then determined the proportion of those losses attributable to each zone, and allocated reinsurance costs and profit according to those percentages.

As I mentioned earlier, it is important to emphasize that the departure point for the risk based allocation process is the total cost of reinsurance and required profit in the state as a whole. That is, only after these amounts are determined are they then allocated to zone. Thus, there is no additional profit or return resulting from our analysis, and the allocation is independent of the methodology used to determine the cost of reinsurance or the overall profit.

Q. Can you please describe the results of your analysis?

A. The details of the analysis are contained in Exhibit RB-15 attached to this testimony. This exhibit, comprised of three pages, shows the allocation of reinsurance costs and statewide profit to zones depending on the selected allocation method. (The total statewide profit and reinsurance cost was determined in Exhibit RB-14, described above.) The underwriting profit and contingencies, cost of reinsurer capital and reinsurer expenses for each zone, all as a percentage of premium, based on the three methods just described, are summarized in the table below.

Summary: Reinsurance Costs and Profit by Zone

		<i>Zone 1</i>	<i>Zone 2</i>	<i>Zone 3</i>	<i>Sum</i>
Standard Deviation Method	Underwriting Profit and Contingencies	10.5%	2.4%	-0.3%	8.0%
	Cost of Reinsurer Capital	20.0%	12.4%	4.9%	17.0%
	Reinsurer Expenses	2.6%	1.3%	0.4%	2.2%
	Total Profit plus Reinsurance Cost	33.1%	16.1%	5.0%	27.1%
Variance Method	Underwriting Profit and Contingencies	11.5%	-2.9%	-4.2%	8.0%
	Cost of Reinsurer Capital	21.3%	4.2%	0.7%	17.0%
	Reinsurer Expenses	2.5%	1.6%	0.4%	2.2%
	Total Profit plus Reinsurance Cost	35.3%	2.9%	-3.1%	27.1%
Probability of Ruin Method	Underwriting Profit and Contingencies	8.6%	8.4%	4.4%	8.0%
	Cost of Reinsurer Capital	19.9%	14.5%	4.9%	17.0%
	Reinsurer Expenses	2.7%	1.2%	0.3%	2.2%
	Total Profit plus Reinsurance Cost	31.2%	24.0%	9.7%	27.1%
Average Across Methods		33.2%	14.3%	3.9%	27.1%
Selected Values		33.0%	14.5%	4.0%	

Because each of the aforementioned methods has some support in the risk measurement literature, I averaged the per zone total profit and reinsurance cost factors from the three methods. The final values used in the calculations were then selected by the Rate Bureau.

- Q. Have you recommended regional profit differentials in any other lines of insurance when you have testified in North Carolina?
- A. Yes, but only in homeowners, since the other insurance coverages subject to the jurisdiction of the Rate Bureau are not subject to such extreme regional variation in risk. In the case of EC insurance, however, it is important for reasons of equity and economic efficiency to address this question forthrightly.
- Q. Does your methodology result in higher overall costs than would have been the case without the allocations?
- A. No, it does not; the allocation method itself is simply a manner in which to spread the costs across policyholders consistent with risk. Thus, it does not impose any additional costs on North Carolina policyholders in the aggregate; rather it simply apportions the costs in a manner that is consistent with the risks different policyholders impose.
- Q. In your opinion, is it appropriate to allocate statewide profit and reinsurance costs proportional to these measures of risk?
- A. Yes. It is obvious that the relative risk of EC insurance varies geographically. As such, the cost for bearing that risk should be allocated proportional to the measurement of the risk. The three measures selected for this analysis have broad support in the actuarial and economic literature, and in my opinion are quite reasonable for the purpose to which they are put.

V. PROJECTED RETURN ATTRIBUTABLE TO INSURANCE OPERATIONS

- Q. Earlier you said that you had calculated the statutory and total returns insurers would expect from underwriting dwelling fire and EC insurance in North Carolina. Have you conducted such an analysis?
- A. Yes, I have. I developed a model using traditional insurance profitability analyses and have calculated the statutory and total returns on equity that would be expected to arise assuming that actual underwriting and investment results materialize exactly as projected in this filing. The results are contained in Exhibits RB-16 and RB-17 filed with this testimony.
- Q. What do you mean when you say you calculated the returns on equity that would be expected to arise *assuming* that actual underwriting and investment results materialize exactly as projected in this filing?
- A. The rate of return presented in these exhibits is based on a series of assumptions regarding such inputs as underwriting profit, investment gain, leverage, and the like. If these assumptions actually materialize, then the rates of return calculated in the exhibits will

prevail. However, to the extent that these assumptions are not realized, the rate of return will differ from that calculated in the exhibits. Therefore, I want to stress that these results are conditional on the assumptions underlying the analysis. To emphasize that fact, I use the term "pro forma" in connection with the rate of return calculations.

Q. Are you aware of the provisions of G.S. 58-36-10, providing that in making rates the NCRB is to consider investment income earned and realized on unearned premium and loss reserves?

A. Yes, and I understand that investment income on capital and surplus is not to be considered. As I have already indicated, I have estimated and presented the returns that can be expected if the filed underwriting profit provisions are fully earned and realized, both excluding and including investment income on capital and surplus, and all of those returns are either below or at the low end of Dr. Vander Weide's range for the industry's fair rate of return. Since the NCRB's filed underwriting profit provisions generate expected returns that are not excessive even if the investment income on capital and surplus is included, the expected returns which exclude that investment income cannot be excessive.

Q. Can you please now describe the components of the model you developed?

A. Yes. The model really consists of a single page for each line of business, which calculates the rate of return on equity attributable to undertaking the insurance activity. It sets forth estimates of income derived from underwriting, installment fees and investment of reserves and estimates of costs, comprised of losses, expenses and taxes. This exhibit is supported by several other exhibits which provide calculations of investment yield rates, tax rates, premium to surplus and net worth to surplus ratios, and installment fee income. I will describe the principal elements of these exhibits below.

Q. Before you begin describing the exhibits, is it true that the format of the rate of return model has changed from that which you presented in previous dwelling fire and EC insurance rate filings?

A. Yes. In this year's filing, the Rate Bureau has chosen to develop rates using a "pure premium" as opposed to a "loss ratio" approach to ratemaking. It is well known that, under identical assumptions, these two methods are equally valid and produce identical results. However, because of the change to the pure premium method, there are several changes in the rate of return exhibits as well.

The most significant of these changes are related to the fact that the rate of return calculations are now performed on a net premium basis (where net refers to the fact that premium are displayed on a net of deviations basis, and dividends and deviations are not considered in the rate of return analysis). Previously, premiums were displayed on a manual basis, and deviations and dividends were reflected in the same manner as an expense. This change is consistent with the manner in which the Rate Bureau has developed the rate indication.

Q. Can you now please describe the principal elements of the model?

A. Yes.

1. Underwriting profit is the difference between earned premiums and incurred losses and expenses, all expressed as a percent of net earned premium. (Net premium is premium net of deviations, which are assumed to be 3.8% for dwelling fire and 2.6% for EC.)
2. Installment fee income is projected based on historical installment revenues.
3. Taxes are calculated assuming that the regular corporate tax rate applies to statutory underwriting (plus installment fee) income, and that an additional tax liability applies due to the reserve discounting and revenue offset provisions of the 1986 Tax Reform Act. Taxes on investment income are calculated assuming that the current statutory tax rates apply to the various classes of investment income earned.
4. Investment gain on the insurance transaction is estimated as the product of an investment yield rate and the investible funds available from loss, loss adjustment expense and unearned premium reserves (*i.e.*, policyholder supplied funds). The investment yield rate is derived as the average of the "embedded yield" and the "current yield," based on the actual portfolios of securities held by insurers. This estimated yield rate includes income from interest, dividends, real estate, and other assets, as well as realized capital gains. The investible funds are estimated using the well known ISO State-X calculation, modified as described below.
5. In my estimates of the expected total return, investment gain on surplus is estimated as the product of the aforementioned investment yield rate and the amount of surplus attributable to the insurance transaction. The amount of surplus attributable to the transaction includes an adjustment to reflect the additional surplus required to support the prepayment of expenses. (In statutory accounting, the prepayment of expenses acts to reduce statutory surplus. Since prepaid expenses are already deducted from investible reserves in the investment income calculation, they are added back here to avoid deducting them from the investible balance twice.)

Q. In previous testimony in North Carolina, you identified certain changes you made to the traditional rate of return analysis that is performed using this model. Did you continue these changes for this year's filing?

A. Yes, I modified the rate of return calculation from the traditional analysis in two ways.

First, I removed the reduction of investible funds by the amount of agents' balances from the ISO State-X calculation. However, it continues to be true that the funds represented by agents' balances are not available for investment by insurers. Therefore, in the rate of return calculation, the investment income from this modified State-X calculation is reduced by the investment income attributable to agents' balances. This calculation recognizes (1) that the majority of agents' balances represent premiums not yet paid by insureds because of

installment payment plans, and hence is unavailable for investment and (2) that for the minority of premiums collected by agents but not yet remitted to the companies, the investment income on that premium is additional compensation to the agents and a cost to the companies as part of the insurance transaction.

In addition, I adjusted the trended loss, LAE and fixed expense ratios to reflect the proposed rate change. That is to say, I have divided the trended loss and expense ratios at present rates by one plus the proposed premium level change to reflect the change in these ratios that occurs when rates are changed.

Q. Could you please clarify how the underwriting profit provision contained in the rate filing was determined?

A. Yes. The issue of how that Rate Bureau determines the underwriting profit and contingency factor has routinely arisen in rate hearings in North Carolina over the past several years. Although it is evident from my exhibits that the Rate Bureau selects an underwriting profit and contingency provision to be included in the rates, there has been lengthy cross examination on this issue in every rate hearing in recent memory. Therefore, to clarify this matter, I will briefly discuss the procedure used by the Rate Bureau to determine the underwriting profit and contingency factor that is included in the proposed rates.

Prior to making a rate filing in any Rate Bureau line of business, the appropriate committee of the Rate Bureau meets to review data and determine values for a number of the important components of the proposed rates. One of these components is the underwriting profit factor. To determine this value, a procedure is followed in which I provide the committee with the estimated returns on equity (both statutory returns as well as returns adjusted to include investment income on surplus) associated with alternative underwriting profit provisions, and the committee then selects a provision that is consistent with the cost of capital that has been developed by Prof. Vander Weide. Thus, the process is best described as one in which I test alternative underwriting profit provisions, and the committee selects a value based on these tests.

Q. How do you know what values of the underwriting profit provision to test?

A. I have been performing this type of analysis on behalf of the NCRB for many years, and I am quite familiar with the dynamics of these models. Therefore, it is relatively easy to know the general range of values around which the underwriting profit is likely to fall. Normally, for each line of business, I will select approximately five or six values of the underwriting profit provision to test, that comprise a range of perhaps two to three percentage points, and the committee typically selects a value within that range. (For example, for this filing, I believe I tested underwriting profit provisions for both Fire and EC in one-half percentage point increments ranging from 6.5% to 9.0%, and the committee selected a value of 8.0% for each line.) Of course, if the committee is not satisfied with the range of values I propose, it is relatively straightforward to calculate returns associated with alternative values proposed by the committee.

Q. From what you've said, it appears that the NCRB *selects* an underwriting profit provision, rather than *deriving* such a provision from the cost of capital. Is that correct, and if so, isn't it

true that actuarial standards of practice require that the underwriting profit provision be *derived* from an underlying cost of capital?

- A. It is correct that the Rate Bureau committee selects an underwriting profit provision and then tests whether that provision results in an expected rate of return on net worth that is consistent with the cost of capital. However, despite what appears to be suggested by DOI witnesses, it is *not true* that actuarial standards of practice require that an underwriting profit be derived from the cost of capital. In fact, that issue is addressed explicitly in ASOP # 30, entitled "Treatment of Underwriting Profit and Contingency Factors and the Cost of Capital in Property/Casualty Insurance Rate-making." Section 3.1 of that ASOP states the following:

Estimating the Cost of Capital and the Underwriting Profit Provision
– Property/casualty insurance rates should provide for all expected costs, including an appropriate cost of capital associated with the specific risk transfer. This cost of capital can be provided for by estimating that cost and translating it into an underwriting profit provision, after taking leverage and investment income into account. Alternatively, the actuary may develop an underwriting profit provision and test that profit provision for consistency with the cost of capital. The actuary may use any appropriate method, as long as such method is consistent with the considerations in this standard.

The procedure utilized by the Rate bureau is exactly the approach articulated in this section (i.e., "the actuary may develop an underwriting profit provision and test that profit provision for consistency with the cost of capital").

- Q. Could you please clarify how you selected your investment yield rate and premium to surplus ratio?

- A. Yes. To select the investment yield rate, I was asked by the Rate Bureau to compute the average of what are known as the "embedded" and "current" yields, where each was based on the actual asset portfolios insurers currently hold. The Commissioner adopted an approach of averaging the embedded and current yields in his 1994 automobile decision, and in his decision in the 1996 case, he selected a yield which approximated the yield obtained from this approach. Since that time, the Rate Bureau has chosen to follow that methodology.

To estimate the embedded yield, I calculated the ratio of 2004 investment income divided by average invested assets and added to that an estimate of the ten year average ratio of realized capital gains to invested assets. The sum of these two is the estimated embedded yield.

To estimate the current yield, I determined the yields available in today's capital markets for the portfolio of securities currently held by the property-casualty insurance industry. I then calculated a weighted average of these yield rates based on the proportion of assets held by the industry in each of the various securities such as stocks, bonds, real estate and the like.

As far as the premium to surplus ratio is concerned, I also relied on information which reflects the actual degree of leverage for insurers writing dwelling fire and EC insurance in North Carolina. My premium to surplus ratio is calculated by using the ten year (1995-2004)

average premium to surplus ratio for the top 30 company groups which wrote dwelling fire and EC insurance in North Carolina.

Q. Can you please provide the results of your calculations regarding the projected rate of return to the insurance transaction if your underlying assumptions are realized?

A. Yes. For the dwelling fire line of coverage, I estimate that insurers should expect to earn a statutory return on GAAP equity (excluding investment income on surplus) of 7.6%. If one includes consideration of investment income on surplus, the expected total rate of return on GAAP equity equals 11.3%.

For the EC line of coverage, the expected statutory rate of return on GAAP equity is 7.2%, while the total rate of return including investment income on surplus is 11.3%.

All these returns fall at the lower end of, or below, the range of Dr. Vander Weide's cost of capital.

Q. Are there any factors that might impact the realization of these projected returns?

A. Yes. In order for the aggregate industry to achieve the returns projected in these exhibits, every assumption in the model must be realized exactly. However, even if every other projection in the filing is exactly realized, the industry will still not realize these projected returns because the filing does not reflect the current surplus position of the aggregate industry. For the sake of stability in the ratemaking process, the premium to surplus ratios used in my calculations are based on long term historical data. The most recent data show that the aggregate industry writing dwelling fire and extended coverage insurance in North Carolina has more surplus in relation to premiums than the historical averages used in my calculations. Therefore, even if all other assumptions were realized exactly, the calculated rate of return would overstate the returns the aggregate industry would reasonably expect.

VII. CONCLUSION

Q. Based on the studies you have conducted, have you come to any conclusions regarding the underwriting profit provision that has been filed by the Rate Bureau in this case?

A. Yes. Based on my evaluation of Dr. Vander Weide's cost of capital estimates, my consideration of insurer specific risk characteristics, and my estimation of projected and expected returns, I believe that the filed underwriting profit provision complies with North Carolina law and the return expected to be realized by insurers will not be excessive.

Q. Does this conclude your testimony?

A. Yes, it does.

DAVID APPEL

One Pennsylvania Plaza
New York, NY 10119
(646) 473-3000

PROFESSIONAL EXPERIENCE:

1989 to present **MILLIMAN, INC.**
Principal & Director - Economics Consulting

Responsible for the formation, development and management of
a national consulting practice in insurance economics.

1980 to 1989 **NATIONAL COUNCIL ON COMPENSATION INSURANCE**
Economic and Social Research Division

1985 to 1989 Vice President
1983 Assistant Vice President
Responsible for all economic and social research of NCCI

1982 Director of Economic and Social Research
1981 Senior Research Economist
1980 Associate Research Economist

1976 to 1997 **RUTGERS UNIVERSITY**

1981-97 Associate of the Graduate Faculty,
Department of Economics, Newark, New Jersey

1981-93 Teach variety of graduate courses including:
Microeconomic Theory, Industrial Organization, Public Finance

1978-80 Instructor, Department of Economics,
New Brunswick, New Jersey

1976-78 Adjunct Instructor, Department of Economics,
Newark, New Jersey

EDUCATION:

1980 Ph.D., Economics, Rutgers University
1976 M.A., Economics, Rutgers University
1972 B.A., Economics, Brooklyn College, CUNY
Certified ARIAS Arbitrator and Umpire
Member: AAA Panel of Neutrals

PAPERS AND PUBLICATIONS

"Comment on Jaffee and Russell" in Deregulating Property-Liability Insurance, J. David Cummins, Editor, Brookings Institution Press, Washington, DC, 2002

"Dynamic Financial Analysis of a Workers Compensation Insurer", CAS Call Papers Program, 1997 (with Susan Witcraft and Mark Mulvaney)

"The Impact of Managed Care on Workers Compensation Claim Costs," in a volume of conference proceedings published by the Workers' Compensation Research Institute, September 1994, (with Philip Borba).

"Health Care Costs in Workers' Compensation", Benefits Quarterly, Vol. 9, No. 4, Fourth Quarter, 1993

"The Transition From Temporary to Permanent Disability: A Longitudinal Analysis" in Workers' Compensation Insurance: Claims Costs, Prices and Regulation, David Durbin and Philip Borba, Editors, Kluwer Academic Publishers, Boston, 1992, (with Richard Butler, David Durbin and John Worrall)

"Leverage, Interest Rates and Workers' Compensation Survival" in Workers' Compensation Insurance: Claims Costs, Prices and Regulation, David Durbin and Philip Borba, Editors, Kluwer Academic Publishers, Boston, 1992, (with Richard Butler, David Durbin and John Worrall)

Benefits, Costs and Cycles in Workers' Compensation, Kluwer Academic Publishers, Boston, 1990, (co-editor with Philip Borba)

"Benefit Increases in Workers' Compensation", Southern Economics Journal, January 1990, (with Richard J. Butler)

"Internal Rate of Return Criteria in Ratemaking", NCCI Digest, Vol. IV, Issue III, September 1990, (with Richard J. Butler).

"Social Inflation in Workers' Compensation: The Phenomenon of Benefit Utilization", Proceedings of the Casualty Loss Reserve Seminar, 1988. Also in Contingencies, Nov./Dec., 1989.

Workers' Compensation Insurance Pricing: Current Programs and Proposed Reforms, Kluwer Academic Publishers, Boston, 1988,(co-editor with Philip Borba)

"Prices and Costs of Workers' Compensation" in Workers' Compensation Insurance Pricing: Current Programs and Proposed Reforms, Kluwer Academic Publishers, Boston, 1988, (with Philip Borba)

"1986 Tax Reform Act: Effects on Workers' Compensation Profitability", NCCI Digest, Vol. II, Issue II, July 1987 (with James Gerofsky)

"The Propensity for Permanently Disabled Workers' to Hire Legal Services" , Industrial and Labor Relations Review, April 1987, (with Philip Borba)

"Sex, Marital Status, and Medical Utilization by Injured Workers", Journal of Risk and Insurance, Vol. LIV, No. 1, March 1987, (with John Worrall and Richard Butler)

"The Impact of Workers' Compensation Benefits on Low Back Claims" in Clinical Concepts in Regional Musculoskeletal Illness, Nortin M. Hadler, ed. (Boston: 1986, Grune and Stratton), (with John Worrall)

"Workers' Compensation and Employment: An Industry Analysis" in Disability and the Labor Market: Economic Problems, Policies and Programs, M. Anne Hill and Monroe Berkowitz, eds., (Ithaca:1986 ILR Press), (with James Lambrinos)

"Some Benefit Issues in Workers' Compensation", in Workers' Compensation Benefits: Adequacy, Equity, Efficiency. (Ithaca:1985 ILR Press), (with John Worrall)

Workers' Compensation Benefits: Adequacy, Equity, Efficiency. (co-editor with John Worrall), (Ithaca:1985 ILR Press)

"Survivorship and the Size Distribution of the Property-Liability Insurance Industry", Journal of Risk and Insurance, October 1985, (with John Worrall and Richard Butler).

"Regulating Competition-The Case of Workers' Compensation Insurance", Journal of Insurance Regulation, (with James Gerofsky), June 1985.

"The Wage Replacement Rate and Benefit Utilization in Workers' Compensation Insurance", Journal of Risk and Insurance, September 1982 (with John Worrall)

"Property Damages", in Joseph Seneca and Peter Asch, The Benefits of Air Pollution Control in New Jersey, Center for Coastal and Environmental Studies, Rutgers University, 1979

WORKING PAPERS

"Workers' Compensation Pricing: The Role of Policyholder Dividends" (with David Durbin)

"The Impact of Lifetime Work on Mortality: Do Unisex Pensions Matter?" (with Richard J. Butler)

"Regulatory Survival: Rate Changes in Workers' Compensation" (with Richard J. Butler and John D. Worrall)

"Framing, Firm Size and Financial Incentives in Workers' Compensation Insurance" (with Richard J. Butler and John D. Worrall)

"Application of NAIC Profitability Models to Long Tailed Lines of Insurance" (with James Gerofsky)

INVITED PRESENTATIONS

New Orleans, Louisiana, March 11, 2005
CAS Ratemaking Seminar
"Including Reinsurance Costs in Primary Insurance Rates"

Philadelphia, Pennsylvania, March 11, 2004
CAS Ratemaking Seminar
"The Consideration of Risk Loads and Reinsurance Costs in Primary Insurance Ratemaking"

New York, New York, December 12, 2003
Goldman Sachs Insurance Conference
"Interest Rate Changes and Insurance Underwriting"

San Antonio, Texas, March 28, 2003
CAS Ratemaking Seminar
"The Consideration of Risk Loads and Reinsurance Costs in Primary Insurance Ratemaking"

San Antonio, Texas, March 27, 2003
CAS Ratemaking Seminar
"Rate of Return Models in Insurance Ratemaking"

San Diego, California, May 20, 2002
CAS Annual Meeting
"The Actuary as an Expert Witness"

Tampa, Florida, March 7, 2002
CAS Ratemaking Seminar
"Parameterizing Rate of Return Models in Insurance Ratemaking"

Chicago, Illinois, December 10, 2001
NAIC Meeting
"The Impact of Proposition 103 in California"

Kansas City, Missouri, April 30, 2001
NAIC Meeting
"Personal Lines Regulation"

Las Vegas, Nevada, March 12, 2001
CAS Ratemaking Seminar
"Parameterizing Rate of Return Models in Insurance Ratemaking"

Washington DC, January 18, 2001
Brookings Institution Conference on Insurance Regulation
"Auto Insurance Experience in California"

Bermuda, September 14, 2000
Ace Insurance Worldwide Actuarial Conference
"Rate of Return Models In Property Casualty Insurance Ratemaking"

Orlando, Florida, June 9, 1998
Florida Managed Care Institute Annual Conferennce
"Issues in Integrated Health Care"

Seattle, Washington, July 21, 1997
CAS Dynamic Financial Analysis Seminar
"Dynamic Financial Analysis of a Workers Compensation Insurer"

Boston, Massachusetts, March 14, 1997
CAS Ratemaking Seminar
"Discounted Cash Flow Models in Insurance Ratemaking"

East Lansing, Michigan, July 15, 1996
National Symposium on Workers Compensation
"Managed Care in Workers Compensation"

New Orleans, Louisiana, March 20, 1996
Global Business Research Seminar: Partnerships Between Insurers and Providers
"Integrating the Data Systems"

Orlando, Florida, November 15, 1995
Global Business Research Seminar: Documenting Savings From Managed Care
"Evaluating Savings From Managed Care"

Orlando, Florida, October 27, 1995
Self Insurance Association of America Annual Meeting
"Managed Care in Workers Compensation: A Magic Act or Humbug?"

San Diego, California, October 16, 1995
Global Business Research Seminar: Documenting Savings From Managed Care
"Technical Issues in Measuring Savings From Managed Care"

Durham, North Carolina, September 6, 1995
North Carolina HMO Association Annual Meeting
"Workers Compensation in North Carolina: Risks and Opportunities for HMO's"

Washington, DC, May 22, 1995
Global Business Research Seminar: Outcomes for Workers' Compensation Managed Care
"Measuring and Reporting the Savings"

Orlando, Florida, April 13, 1995
NCCI Annual Meeting
"Managed Care in Workers Compensation"

Phoenix, Arizona, April 3, 1995
Casualty Actuarial Society Seminar on Profitability
"Rate of Return Models - Selecting the Parameters"

New Orleans, Louisiana, March 16, 1995
Casualty Actuarial Society Ratemaking Seminar
"Discounted Cash Flow Models for Insurance Ratemaking"

Orlando, Florida, March 14, 1995
Standard & Poor's Rating Conference
"Consolidation in the Property/Casualty Insurance Industry"

Minneapolis, Minnesota, October 11, 1994
Casualty Actuarial Society Seminar on Medical Cost Containment

"Managed Care and Workers' Compensation"

Toronto, Ontario, August 22, 1994
American Risk and Insurance Association Annual Meeting
"Current Issues in Workers' Compensation"

Boston, Massachusetts, May 17, 1994
Casualty Actuarial Society Annual Meeting
"Standard Of Practice on Profit and Contingency"

Hartford, Connecticut, April 20, 1994
University of Connecticut Blue Cross/Blue Shield Symposium
"24 Hour Coverage - What Will It Involve"

Atlanta, Georgia, March 10, 1994
Casualty Actuarial Society Ratemaking Seminar
"Cash Flow Models for Insurance Ratemaking"

Cambridge, Massachusetts, March 2, 1994
Workers' Compensation Research Institute Health Care Reform Conference
"Early Results of the Florida Pilot Project"

Phoenix, Arizona, November 15, 1993
Casualty Actuarial Society Annual Meeting
"The Use Of Managed Care in Workers' Compensation"

New York, New York, October 20, 1993
Insurance Information Institute/Reinsurance Association of America Research Conference
The Impact of Health Care Reform on Casualty Insurance"

Somerset, New Jersey, July 13, 1993
National Symposium on Workers' Compensation
"Economic Analysis of Workers' Compensation Issues"

Boston, Massachusetts, June 30, 1993
Institute of Actuaries of Japan Special Meeting
"Health Care Costs in Workers' Compensation"

Dallas, Texas, June 15, 1993
Stirling-Cooke Workers' Compensation Seminar
"Workers' Compensation Medical Costs: Trends, Causes and Solutions"

New York, New York, June 3, 1993
New York Business Group On Health
"The Crisis in Workers' Compensation Health Care"

Mauna Lani Bay, Hawaii, May 3, 1993
Western Association of Insurance Brokers Annual Meeting
"Trends in Insurance Insolvency"

Kingston, Ontario, April 28, 1993
Queen's University Workers' Compensation Conference
"Exposure Bases for Workers' Compensation: Equity vs. Practicality"

Sanibel Island, Florida, March 29, 1993

Workers' Compensation Reinsurance Bureau Annual Meeting
"The Use of Managed Care in Workers' Compensation"

Baltimore, Maryland, March 23, 1993
CAMAR Annual Meeting
"Estimating the Cost of Capital in Insurance Ratemaking"

Philadelphia, Pennsylvania, December 1, 1992
Economic Issues in Workers' Compensation Seminar,
"Rate of Return Regulation in Workers' Compensation"

Seattle, Washington, October 16, 1992
Casualty Actuarial Society Seminar on Profitability
"Risk Based Capital Standards for Property Casualty Insurers"

Washington, DC, August 18, 1992
American Risk and Insurance Association Annual Meeting
"The Crisis in Workers' Compensation"

New York, New York, May 19, 1992
Executive Enterprises Institute Seminar: Winning Approval of Rate and Form Filings
"Determining a Fair Rate of Return for Property/Casualty Insurers"

Palm Beach, Florida, April 23, 1992
NCCI Annual Meeting
"Is the Workers' Compensation Industry Competitive?"

Philadelphia, Pennsylvania, March 20, 1992
University of Pennsylvania/Duncanson & Holt Special Seminar
"Current Issues in Workers' Compensation"

Dallas, Texas, March 12, 1992
Casualty Actuarial Society Ratemaking Seminar
"Profitability Models in Insurance Ratemaking: Estimating the Parameters"

Houston, Texas, December 11, 1991
NCCI/NAIC Commissioners Symposium
"Rate Adequacy: Solvency and Safety Implications"

New York, New York, November 17, 1991
Executive Enterprises Institute Seminar: Winning Approval of Rate and Form Filings
"Determining a Fair Rate of Return for Property/Casualty Insurers"

Philadelphia, Pennsylvania, November 12, 1991
Casualty Actuarial Society Annual Meeting
"The Impact of Medical Costs on Casualty Coverages"

New York, New York, May 17, 1991
Executive Enterprises Institute Seminar: Winning Approval of Rate and Form Filings
"Determining a Fair Rate of Return for Property/Casualty Insurers"

Kiawah Island, South Carolina, April 15 & 16, 1991
Casualty Actuarial Society Seminar on Profitability
"Cost of Capital Estimation: Lessons From Public Utilities"

Chicago, Illinois, March 14, 1991
Casualty Actuarial Society Ratemaking Seminar
"The Use of Profitability Models in Insurance Ratemaking"

Orlando, Florida, October 24, 1990,
Financial Management Association Annual Meeting,
"Current Issues in Insurance Rate Regulation: California Prop. 103 and Pennsylvania Act 6"

New Brunswick, New Jersey, May 18, 1990,
Joint Conference on Workers' Compensation,
"Current State Issues and Benefit Reforms"

Orlando, Florida, May 8, 1990,
National Association of Insurance Commissioners Southeast Zone Raters Conference,
"Loss Cost Rating for Workers' Compensation"

Orlando, Florida, April 3, 1990,
Workers' Compensation Reinsurance Bureau Annual Meeting,
"Medical Costs in Workers' Compensation: Recent Trends in Cost Containment"

Philadelphia, Pennsylvania, March 15, 1990,
CAS Ratemaking Seminar,
"Rate of Return Models in Insurance Regulation: Return on Sales vs. Return on Equity"

Chicago, Illinois, November 10, 1989,
Alliance of American Insurers Research Committee,
"Recent Developments in Rate Regulation: California Proposition 103"

New York, New York, October 5, 1989,
NCCI Legal Trends Seminar,
"Medical Cost Containment in Workers' Compensation"

Philadelphia, Pennsylvania, September 7, 1989,
Workers' Compensation Congress,
"Medical Cost Containment in Workers' Compensation"

Denver, Colorado, August 21, 1989,
American Risk and Insurance Association Annual Meeting,
"Regulatory Survival: Rate Changes in Workers' Compensation" (with Richard J. Butler)

Hilton Head, South Carolina, April 4, 1989,
Workers' Compensation Reinsurance Bureau Annual Meeting,
"Prospects for Workers' Compensation in the 1990's"

Mountain Lakes, New Jersey, March 29, 1989,
St. Clares-Riverside Medical Center,
"Stress in the Workplace"

Dallas, Texas, March 16, 1989,
Casualty Actuarial Society Ratemaking Seminar,
"The Impact of Tax Reform on Insurance Profitability"

New Orleans, Louisiana, December 15, 1988,
NAIC-NCCI Commissioners School,
"A Forecast for Workers' Compensation"

Philadelphia, Pennsylvania, November 17, 1988,
Economic Issues in Workers' Compensation Seminar,
"The Impact of Regulation on the Probability of Insolvency" (with John D. Worrall and David Durbin)

Boston, Massachusetts, November 14, 1988,
American Public Health Association Annual Meeting,
"Stress in the Workplace"

Atlanta, Georgia, September 14, 1988,
Casualty Loss Reserve Seminar,
"Estimating the Cost of Social Inflation in Workers' Compensation"

Reno, Nevada, August 15, 1988,
American Risk and Insurance Association Annual Meeting,
"Benefit Increases in Workers' Compensation"

New York, New York, June 13, 1988,
National Association Of Insurance Commissioners Annual Meeting,
"Alternative Rate of Return Models for Insurance Regulation"

Syracuse, New York, May 5, 1988,
Current Issues in Workers' Compensation Symposium,
"Workers' Compensation Stress Claims"

Hilton Head, South Carolina, April 22, 1988,
Workers' Compensation Reinsurance Bureau Annual Meeting,
"A Forecast for Workers' Compensation Insurers"

Absecon, New Jersey, April 19, 1988,
Pennsylvania Coal Mine Rating Bureau Annual Meeting,
"The Use of Rate of Return Models in Insurance Rate Regulation"

Philadelphia, Pennsylvania, November 17, 1987,
Economic Issues in Workers' Compensation Seminar,
"The Transition to Permanent Disability Status" (with John D. Worrall and David Durbin)

Charlotte, North Carolina, October 20, 1987,
American Insurance Association Government Affairs Conference,
"Prospects for Workers' Compensation in 1988"

Minneapolis, Minnesota, September 29, 1987,
Minnesota Workers' Compensation Reinsurance Association Annual Meeting,
"Economic and Demographic Characteristics of Workers' Compensation Claims"

Airlie, Virginia, July 7, 1987,
National Symposium on Workers' Compensation,
"Forecasting Workers' Compensation Experience"

Santa Clara, California, June 30, 1987,
Symposium on Recent Advances in Ratemaking,
"Econometric Models of Workers' Compensation Losses"

Storrs, Connecticut, May 1, 1987,
University of Connecticut Symposium on Current Issues in Workers' Compensation,

"Current Research in Workers' Compensation"

Philadelphia, Pennsylvania, April 16, 1987,
Wharton School Graduate Seminar Series,
"Impact of Tax Reform on Workers' Compensation Profitability"

Boca Raton, Florida, December 4, 1986,
National Association of Insurance Commissioners/NCCI Commissioners School,
Panel Discussion on Current Issues in Workers' Compensation

Philadelphia, Pennsylvania, November 7, 1985,
Wharton School, University of Pennsylvania, Graduate Seminar Series,
"Litigation in Workers' Compensation"

Vancouver, British Columbia, August 19, 1985,
American Risk and Insurance Association Annual Meeting,
"Earnings Loss and Permanent Disability"

Washington, D.C., April 23, 1985,
Washington Conference on the Economics of Disability,
"Employment Effects of Workers' Compensation Insurance"

Schenectady, New York, January 18, 1985,
Union University Graduate Business Seminar Series,
"The Use of Modern Portfolio Theory in Insurance Regulation"

EXPERT TESTIMONY

Raleigh, North Carolina, September 28, 2005
Auto Insurance Rate Hearing

Providence, Rhode Island, September 27, 2005
Norcal Medical Malpractice Insurance Rate Hearing

San Francisco, CA, August 23, 2005
Safeco Insurance Company Earthquake Rate Hearing

Boston, Massachusetts, April 15, 2005
Massachusetts Workers Compensation Rate Hearing

Lawrence, Massachusetts, February 14, 2005
Highground, Inc. v. Mazonson

New York, NY, January 21, 2005
NFHA v. Prudential Deposition

Austin, Texas, July 13, 2004
Medical Protective Insurance Company Medical Malpractice Insurance Rate Hearing

Austin, Texas, December 16, 2003
Biennial Title Insurance Rate Hearing

Providence, Rhode Island, November 17, 2003
Norcal Medical Malpractice Insurance Rate Hearing

San Francisco, California, September 16, 2003
Century National Proposition 103 Rollback Hearing

Austin, Texas, September 11, 2003
Farmers Insurance Exchange Homeowner Rate Rollback Hearing

Austin, Texas, September 2, 2003
State Farm Lloyds Homeowners Rate Rollback Hearing

Austin, Texas, May 21, 2003
Farmers Insurance Group Settlement Hearing

Boston, Massachusetts, April 29, 2003
Massachusetts Workers Compensation Rate Hearing

Los Angeles, California, March 12, 2003
SCPIE Medical Malpractice Rate Hearing

Raleigh, North Carolina, July 17, 2002
Auto Insurance Rate Hearing

Tallahassee, Florida, February 25, 2002
NCCI Workers Compensation Insurance Rate Hearing

Austin, Texas, February 5, 2002

Biennial Title Insurance Rate Hearing

Raleigh, North Carolina, September 24, 2001
Auto Insurance Rate Hearing

Boston, Massachusetts, August 14, 2001
Massachusetts Auto Insurance Bureau Rate Hearing

Austin, Texas, March 6, 2001
Texas Auto Benchmark Rate Hearing

Boston, Massachusetts, August 23, 2000
Massachusetts Auto Insurance Bureau Rate Hearing

Austin, Texas, December 7, 1999
Texas Auto Insurance Plan Association Rate Hearing

Raleigh, North Carolina, December 3, 1999
Auto Insurance Rate Hearing

Austin, Texas, November 3, 1999
Biennial Title Insurance Rate Hearing

Austin, Texas, September 8, 1999
Texas Auto Benchmark Rate Hearing

Boston, Massachusetts, August 13, 1999
Massachusetts Auto Insurance Bureau Rate Hearing

Austin, Texas, June 22, 1999
Texas Property Benchmark Rate Hearing

Honolulu, Hawaii, December 16, 1998
NCCI Workers Compensation Insurance Rate Hearing

Richmond, Virginia, November 15, 1998
NCCI Workers Compensation Insurance Rate Hearing

Boston, Massachusetts, October 9, 1998
Massachusetts Auto Insurance Bureau Rate Hearing

Austin, Texas, May 19, 1998
Texas Auto Insurance Plan Association Rate Hearing

Austin, Texas, April 7, 1998
Auto Insurance Benchmark Rate Hearing

Austin, Texas, February 17, 1998
Property Insurance Benchmark Rate Hearing

Austin, Texas, November 18, 1997
Biennial Title Insurance Rate Hearing

Tallahassee, Florida, September 8, 1997

NCCI Workers Compensation Insurance Rate Hearing

Austin, Texas, April 8, 1997
Texas Auto Insurance Plan Association Rate Hearing

Austin, Texas, March 10, 1997
Auto Insurance Benchmark Rate Hearing

San Francisco, California, March 4, 1997
Insurance Department Hearing on Rating Factors

Raleigh, North Carolina, July 16, 1996
Auto Insurance Rate Hearing

San Francisco, California, March 11, 1996
Century National Proposition 103 Rollback Hearing

Sacramento, California, January 30, 1996
Hartford Steam Boiler Proposition 103 Rollback Hearing

San Francisco, California, January 8, 1996
SAFECO Insurance Company Earthquake Rate Hearing

Austin, Texas, December 21, 1995
Residential Property Insurance Benchmark Rate Hearing

Clearwater, Florida, December 8, 1995
Florida Windstorm Underwriting Association Rate Hearing

Austin, Texas, November 28, 1995
Private Passenger Auto Insurance Benchmark Rate Hearing

Austin, Texas, October 31, 1995
Texas Automobile Insurance Plan Association Rate Hearing

Sacramento, California, April 18, 1995
California Insurance Department Hearing on Auto Insurance Rating Factors

Portland, Maine, April 13, 1995
Workers Compensation Assigned Risk Pool Fresh Start Hearing

San Francisco, California, February 6, 1995
Farmers Insurance Group Earthquake Insurance Rate Hearing

Austin, Texas, January 6, 1995
Special Hearing on Classification Rules for Automobile Insurance

Austin, Texas, December 15, 1994
Residential Property Insurance Benchmark Rate Hearing

Austin, Texas, October 4, 1994
Texas Automobile Insurance Plan Association Rate Hearing

Austin, Texas, September 27, 1994
Private Passenger Auto Insurance Benchmark Rate Hearing

Raleigh, North Carolina, July 19, 1994
Private Passenger Auto Insurance Rate Hearing

San Francisco, California, December 22, 1993
Century National Homeowner's Insurance Rate Hearing

Raleigh, North Carolina, October 13, 1993
Homeowners/Farmowners Insurance Rate Hearing

Tallahassee, Florida, October 4, 1993
Workers' Compensation Insurance Rate Hearing

Boston, Massachusetts, September 9, 1993
Automobile Insurance Rate Hearing

Austin, Texas, March 4, 1993
Residential Property Insurance Benchmark Rate Hearing

Austin, Texas, February 10, 1993
Automobile Insurance Benchmark Rate Hearing

Honolulu, Hawaii, November 18, 1992
Liberty Mutual Insurance Automobile Rate Hearing

Raleigh, North Carolina, November 13, 1992
Workers' Compensation Insurance Rate Hearing

Tallahassee, Florida, October 29, 1992
Workers' Compensation Insurance Rate Hearing

San Francisco, California, October 14, 1992
Workers' Compensation Insurance Rate Hearing

Atlanta, Georgia, September 24, 1992
Workers' Compensation Insurance Rate Hearing

Nashville, Tennessee, May 27, 1992
Workers' Compensation Insurance Rate Hearing

San Francisco, California, May 13, 1992
Workers' Compensation Insurance Rate Hearing

Los Angeles, California, April 10, 1992
Mercury General Proposition 103 Rollback Proceedings

Austin, Texas, January 27, 1992
Texas Automobile Insurance Plan Rate Hearing

Austin, Texas, December 17, 1991
Automobile Insurance Rate Hearing

Raleigh, North Carolina, December 16, 1991
Workers' Compensation Insurance Rate Hearing

San Francisco, California, October 22, 1991
Workers' Compensation Rate Hearing

Los Angeles, California, May 23, 1991,
Proposition 103 RCD-2 Proceedings

San Francisco, California, April 9, 1991
California Workers' Compensation Rate Study Commission

Nashville, Tennessee, March 20, 1991
Workers' Compensation Insurance Rate Hearing

Los Angeles, California, March 12, 1991,
California Workers' Compensation Rate Study Commission

Olympia, Washington, February 26, 1991,
House Financial Institutions/Insurance Committee Hearing on Rules for Insurance Regulatory Legislation

Olympia, Washington, November 27, 1990,
Insurance Department Public Hearing on Proposed Rules for Ratemaking

Harrisburg, Pennsylvania, November 12, 1990,
Allstate Insurance Company Automobile Insurance Rate Hearing

Tallahassee, Florida, November 1, 1990,
Scanlan v. Martinez, et.al., Superior Court of Leon County

San Bruno, California, October 1, 1990,
SAFECO Insurance Group Proposition 103 Rate Rollback Hearing

Austin, Texas, July 23, 1990,
Texas State Board of Insurance Special Hearing on Investment Income in Ratemaking

Harrisburg, Pennsylvania, July 18, 1990,
Pennsylvania National Mutual Insurance Company Automobile Insurance Rate Hearing

Harrisburg, Pennsylvania, June 28, 1990,
Harleysville Mutual Insurance Company Automobile Insurance Rate Hearing

Columbia, South Carolina, March 30, 1990,
Workers' Compensation Insurance Rate Hearing

San Bruno, California, March 19, 1990,
California Proposition 103 Generic Hearing

Denver, Colorado, December 12, 1989,
Workers' Compensation Insurance Rate Hearing

Tampa, Florida, October 23, 1989,
Workers' Compensation Insurance Rate Hearing

Austin, Texas, October 17, 1989,
Workers' Compensation Insurance Rate Hearing

Los Angeles, California, September 25, 1989,

SAFECO Insurance Company of America Proposition 103 Rate Hearing

Austin, Texas, August 29, 1989,
Texas Insurance Advisory Association Property Insurance Rate Hearing

Providence, Rhode Island, April 13, 1989,
Workers' Compensation Insurance Rate Hearing

Augusta, Maine, January 24, 1989,
Workers' Compensation Insurance Rate Hearing

Hartford, Connecticut, November 14, 1988,
Workers' Compensation Insurance Rate Hearing

Tallahassee, Florida, November 3, 1988,
Workers' Compensation Insurance Rate Hearing

Austin, Texas, November 2, 1988,
Workers' Compensation Insurance Rate Hearing

Montgomery, Alabama, June 30, 1988,
Workers' Compensation Insurance Rate Hearing

Augusta, Maine, March 24, 1988,
Workers' Compensation Insurance Rate Hearing

Austin, Texas, October 27, 1987,
Workers' Compensation Insurance Rate Hearing

Tallahassee, Florida, October 9, 1987,
Workers' Compensation Insurance Rate Hearing

Atlanta, Georgia, August 6, 1987,
Workers' Compensation Insurance Rate Hearing

Augusta, Maine, February 24, 1987,
Workers' Compensation Insurance Rate Hearing

Tallahassee, Florida, November 14, 1986,
Workers' Compensation Insurance Rate Hearing

Austin, Texas, November 18, 1986,
Workers' Compensation Insurance Rate Hearing

Augusta, Maine, May 28, 1986,
Workers' Compensation Insurance Rate Hearing

Tallahassee, Florida, December 6, 1985,
Workers' Compensation Insurance Rate Hearing

Oklahoma City, Oklahoma, October 10, 1985,
Workers' Compensation Insurance Rate Hearing

Austin, Texas, July 23, 1985,
Workers' Compensation Insurance Rate Hearing

Austin Texas, June 14, 1985,
Workers' Compensation Insurance Rate Hearing

Tallahassee, Florida, November 18, 1984,
Workers' Compensation Insurance Rate Hearing

Austin, Texas, August 29, 1984,
Workers' Compensation Insurance Rate Hearing

Portland, Oregon, March 6, 1984,
National Association of Insurance Commissioners,
Public Hearing on Investment Income and Insurance Profitability

Tallahassee, Florida, February 25, 1984,
Workers' Compensation Insurance Rate Hearing

Tallahassee, Florida, August 18, 1983,
Workers' Compensation Insurance Rate Hearing

Austin Texas, July 13, 1983,
Workers' Compensation Insurance Rate Hearing

Oklahoma City, Oklahoma, March 6, 1983,
Workers' Compensation Insurance Rate Hearing

Baton Rouge, Louisiana, March 16, 1982,
Louisiana Insurance Commission Public Hearing on Investment Income

Providence, Rhode Island, February 3, 1982,
Workers' Compensation Insurance Rate Hearing

Augusta, Maine, October 1, 1981,
Workers' Compensation Insurance Rate Hearing

**NORTH CAROLINA RATE BUREAU
DWELLING EXTENDED COVERAGE
EXHIBIT RB-14, Sheet 1**

**EC Underwriting Profit and Contingency Calculation
Statewide Total**

	<i>Total</i>
(1) Expected Value of Net Losses	54,540,177
(2) Expected Value of Ceded Losses	25,555,103
(3) Expected Value of All Losses	80,095,280
(1)+(2)	
(4) Commission and Brokerage	14.90%
(5) Other Acquisition	4.08%
(6) General	3.56%
(7) Taxes Licenses and Fees	2.60%
(8) Reinsurance Expense Cost	2.15%
(9) Cost of Reinsurer Capital	16.98%
(10) Net Profit and Contingencies	8.00%
(11) Loss Adjustment Expense Factor	1.109
(12) Total Indicated Premium	186,098,026
(3) x (11) / (1-Sum[(4) to (10)])	
(13) Total Indicated Underwriting Profit	14,887,842
(10) x (12)	
(14) Investment Income on Reserves as a Percentage of Losses & LAE	5.95%
(15) Total Indicated Investment Income on Reserves	3,597,757
(1) x (11) x (14)	
(16) Total Profit excluding Investment Income on Surplus	18,485,600
(13) + (15)	
(17) Premium/Allocated Surplus Ratio	1.20
(18) Total Available Surplus	155,211,031
(12)/(17)	
(19) Available for Allocation	173,696,630
(16) + (18)	

Notes:

1. (1)-(3) from Simulation
2. (4)-(7), (11) from ISO
3. (8), (9) See Exhibit RB-14, Sheet 2
4. (14), (17) Milliman Analysis

**NORTH CAROLINA RATE BUREAU
DWELLING EXTENDED COVERAGE
EXHIBIT RB-14, Sheet 2**

**EC Calculation of Reinsurance Cost
Statewide Total**

	<i>Total</i>
(1) Hurricane Losses	62,030,289
(2) Loss Adjustment Expense Factor	1.109
(3) Hurricane Losses and Loss Expenses (1) x (2)	68,791,590
(4) Percent Reinsured	0.524
(5) Reinsured Losses (3) x (4)	36,049,949
(6) Reinsurance Expense Factor	0.90
(7) Reinsurance Loss+Expenses (5) / (6)	40,055,499
(8) Reinsurance Expense Cost (7)-(5)	4,005,550
(9) Reinsurance Premium to Surplus Ratio	0.41
(10) Reinsurer Underwriting Return Percent of Surplus	15.32%
(11) Reinsurer Underwriting Return Percent of Premium (10) / (9)	37.35%
(12) Reinsurance Premium (7) / (1.000-(11))	63,940,084
(13) Reinsurer Expected Underwriting Profit (12)-(7)	23,884,584
(14) Direct Losses	87,046,894
(15) Direct Losses and LAE (14) x (2)	96,535,006
(16) Direct Variable Expense (Excl Reinsurance)	33.14%
(17) Direct Premium Including Reinsurance Cost ((15) + (13) + (8)) / (1.000-(16))	186,098,026
(18) Reinsurance Expense Cost as % of Direct Premium (8) / (17)	2.15%
(19) Cost of Reinsurer Capital as % of Direct Premium	16.98%
(20) Reinsurance Premium as % of Direct Premium (12) / (17)	34.36%

Notes:

- (1), (5) from Simulation, includes AEF
- (2), (16) from Sheet 1
- (4) Assumes 90% hurricane losses are reinsured from 2xmean to 1/100 year event.
- (6), (9) Milliman Analysis.
- (10) Underwriting return that produces reasonable after-tax return on surplus.
- (14) from Simulation, includes AEF ceded losses
- (19) =((13)+ (5) - Sheet1(2) x (2)) / (17)

NORTH CAROLINA RATING BUREAU
 DWELLING EXTENDED COVERAGE
 EXHIBIT RB-15, Sheet 1

Using Standard Deviation to Allocate Profit

	Zone 1	Zone 2	Zone 3	Sum
Allocation of Primary Company Amounts				
(1) Standard Deviation of Net Losses	120,950,316	10,862,637	6,441,724	138,254,677
(2) Allocation Percent [(1) / Sum(1)]	87.86%	7.86%	4.66%	100.00%
(3) Expected Profit to Allocate	16,171,888	1,452,409	861,303	18,485,600
(4) Expected Losses	28,360,307	12,184,107	13,995,762	54,540,177
(5) Loss Adjustment Expense Factor	1.109	1.109	1.109	1.109
(6) Expected Losses and Loss Expenses [(4) x (5)]	31,451,581	13,512,175	15,521,300	60,485,057
(7) Expected Investment Income on Policy Reserves Percent	5.95%	5.95%	5.95%	5.95%
(8) Underwriting Profit and Contingencies (3) - (6) x (7)	14,301,092	648,681	(61,932)	14,887,842
(9) Underwriting Expense Percent	25.14%	25.14%	25.14%	25.14%
Allocation of Reinsurer Amounts				
(10) Standard Deviation of Ceded Losses	125,682,308	16,411,657	6,038,141	148,132,106
(11) Allocation Percent [(1) / Sum(1)]	84.84%	11.08%	4.08%	100.00%
(12) Expected Profit to Allocate	22,084,153	2,883,759	1,060,987	26,028,899
(13) Expected Ceded Losses	22,684,820	2,340,782	529,500	25,555,103
(14) Additional AEF Ceded Losses	6,213,168	627,480	110,967	6,951,614
(15) Loss Adjustment Expense Factor	1.109	1.109	1.109	1.109
(16) Expected Losses and Loss Expenses [(13) + (14)] x (15)]	32,047,869	3,291,802	710,278	36,049,949
(17) Expected Investment Income on Policy Reserves Percent	5.95%	5.95%	5.95%	5.95%
(18) Cost of Reinsurer Capital (12) - (16) x (17) + (14) x (15)	27,068,292	3,383,832	1,141,800	31,593,925
(19) Reinsurer Expenses (Total (19) allocated with (16))	3,555,657	366,898	82,995	4,005,550
Summary of Expense Provisions				
(20) Indicated Premium [(6) + (8) + (13) x (15) + (18) + (19)] / (1,000 - (9))	135,631,964	27,394,489	23,071,573	186,098,026
(21) Underwriting Profit and Contingencies (Percent) (8) / (20)	10.54%	2.37%	-0.27%	8.00%
(22) Cost of Reinsurer Capital (Percent) (18) / (20)	19.96%	12.35%	4.95%	16.98%
(23) Reinsurer Expenses (Percent) (19) / (20)	2.62%	1.34%	0.36%	2.15%

Notes:

- (1), (4), (10), (13), (14) from Simulation.
- Sum(3) from Exh. RB14, Sh. 1 (16); Zone amounts from Sum and Allocation Percentage (2).
- (5), (7), (15), (17) from Exh. RB14, Sh. 1.
- (9) from Exh. RB14, Sh. 1 (4) through (7).
- Sum(12)=Exh. RB14, Sh. 2 (13) + Exh. RB14, Sh. 2 (5)* Exh. RB14, Sh. 1 (14); Zone amounts from Sum and Allocation Percentage (11).
- Sum(19) from Exh. RB14, Sh. 2 (8); Zone amounts from Sum and Allocation based on (16).

NORTH CAROLINA RATING BUREAU
 DWELLING EXTENDED COVERAGE
 EXHIBIT RB-15, Sheet 2

Using Variance to Allocate Profit

	Zone 1	Zone 2	Zone 3	Sum
Allocation of Primary Company Amounts				
(1) Variance of Net Losses (in billions)	14,628,979	117,997	41,496	14,788,472
(2) Allocation Percent [(1) / Sum(1)]	98.92%	0.80%	0.28%	100.00%
(3) Expected Profit to Allocate	18,286,234	147,496	51,870	18,485,600
(4) Expected Losses	28,360,307	12,184,107	13,995,762	54,540,177
(5) Loss Adjustment Expense Factor	1.109	1.109	1.109	1.109
(6) Expected Losses and Loss Expenses [(4) x (5)]	31,451,581	13,512,175	15,521,300	60,485,057
(7) Expected Investment Income on Policy Reserves Percent	5.95%	5.95%	5.95%	5.95%
(8) Underwriting Profit and Contingencies (3) - (6) x (7)	16,415,438	(656,232)	(871,364)	14,887,842
(9) Underwriting Expense Percent	25.14%	25.14%	25.14%	25.14%
Allocation of Reinsurer Amounts				
(10) Variance of Ceded Losses (in billions)	15,796,042	269,342	36,459	16,101,844
(11) Allocation Percent [(1) / Sum(1)]	98.10%	1.67%	0.23%	100.00%
(12) Expected Profit to Allocate	25,534,565	435,397	58,937	26,028,899
(13) Expected Ceded Losses	22,684,820	2,340,782	529,500	25,555,103
(14) Additional AEF Ceded Losses	6,213,168	627,480	110,967	6,951,614
(15) Loss Adjustment Expense Factor	1.109	1.109	1.109	1.109
(16) Expected Losses and Loss Expenses [(13) + (14)] x (15)]	32,047,869	3,291,802	710,278	36,049,949
(17) Expected Investment Income on Policy Reserves Percent	5.95%	5.95%	5.95%	5.95%
(18) Cost of Reinsurer Capital (12) - (16) x (17) + (14) x (15)	30,518,704	935,469	139,751	31,593,925
(19) Reinsurer Expenses (Total (19) allocated with (16))	3,555,657	366,898	82,995	4,005,550
Summary of Expense Provisions				
(20) Indicated Premium [(6) + (8) + (13) x (15) + (18) + (19)] / (1,000 - (9))	143,065,518	22,380,762	20,651,746	186,098,026
(21) Underwriting Profit and Contingencies (Percent) (8) / (20)	11.47%	-2.93%	-4.22%	8.00%
(22) Cost of Reinsurer Capital (Percent) (18) / (20)	21.33%	4.18%	0.68%	16.98%
(23) Reinsurer Expenses (Percent) (19) / (20)	2.49%	1.64%	0.40%	2.15%

Notes:

- (1), (4), (10), (13), (14) from Simulation.
- Sum(3) from Exh. RB14, Sh. 1 (16); Zone amounts from Sum and Allocation Percentage (2).
- (5), (7), (15), (17) from Exh. RB14, Sh. 1.
- (9) from Exh. RB14, Sh. 1 (4) through (7).
- Sum(12)=Exh. RB14, Sh. 2 (13) + Exh. RB14, Sh. 2 (5)* Exh. RB14, Sh. 1 (14); Zone amounts from Sum and Allocation Percentage (11).
- Sum(19) from Exh. RB14, Sh. 2 (8); Zone amounts from Sum and Allocation based on (16).

**NORTH CAROLINA RATING BUREAU
DWELLING EXTENDED COVERAGE
EXHIBIT RB-15, Sheet 3**

Using Losses at Probability of Ruin to Allocate Profit

	<u>Zone 1</u>	<u>Zone 2</u>	<u>Zone 3</u>	<u>Sum</u>
Allocation of Primary Company Amounts				
(1) Net Losses at Probability of Ruin	125,314,618	33,324,937	19,413,137	178,052,692
(2) Allocation Percent [(1) / Sum(1)]	70.38%	18.72%	10.90%	100.00%
(3) Expected Profit to Allocate	13,010,283	3,459,827	2,015,490	18,485,600
(4) Expected Losses	28,360,307	12,184,107	13,995,762	54,540,177
(5) Loss Adjustment Expense Factor	1.109	1.109	1.109	1.109
(6) Expected Losses and Loss Expenses [(4) x (5)]	31,451,581	13,512,175	15,521,300	60,485,057
(7) Expected Investment Income on Policy Reserves Percent	5.95%	5.95%	5.95%	5.95%
(8) Underwriting Profit and Contingencies (3) - (6) x (7)	11,139,487	2,656,099	1,092,256	14,887,842
(9) Underwriting Expense Percent	25.14%	25.14%	25.14%	25.14%
Allocation of Reinsurer Amounts				
(10) Ceded Losses at Probability of Ruin	183,751,999	35,983,120	9,977,706	229,712,824
(11) Allocation Percent [(1) / Sum(1)]	79.99%	15.66%	4.34%	100.00%
(12) Expected Profit to Allocate	20,821,050	4,077,269	1,130,580	26,028,899
(13) Expected Ceded Losses	22,684,820	2,340,782	529,500	25,555,103
(14) Additional AEF Ceded Losses	6,213,168	627,480	110,967	6,951,614
(15) Loss Adjustment Expense Factor	1.109	1.109	1.109	1.109
(16) Expected Losses and Loss Expenses [(13) + (14)] x (15)]	32,047,869	3,291,802	710,278	36,049,949
(17) Expected Investment Income on Policy Reserves Percent	5.95%	5.95%	5.95%	5.95%
(18) Cost of Reinsurer Capital (12) - (16) x (17) + (14) x (15)	25,805,189	4,577,342	1,211,394	31,593,925
(19) Reinsurer Expenses (Total (19) allocated with (16))	3,555,657	366,898	82,995	4,005,550
Summary of Expense Provisions				
(20) Indicated Premium [(6) + (8) + (13) x (15) + (18) + (19)] / (1,000 - (9))	129,721,320	31,670,373	24,706,333	186,098,026
(21) Underwriting Profit and Contingencies (Percent) (8) / (20)	8.59%	8.39%	4.42%	8.00%
(22) Cost of Reinsurer Capital (Percent) (18) / (20)	19.89%	14.45%	4.90%	16.98%
(23) Reinsurer Expenses (Percent) (19) / (20)	2.74%	1.16%	0.34%	2.15%

Notes:

1. (1), (4), (10), (13), (14) from Simulation.
2. Sum(3) from Exh. RB14, Sh. 1 (16); Zone amounts from Sum and Allocation Percentage (2).
3. (5), (7), (15), (17) from Exh. RB14, Sh. 1.
4. (9) from Exh. RB14, Sh. 1 (4) through (7).
5. Sum(12)=Exh. RB14, Sh. 2 (13) + Exh. RB14, Sh. 2 (5)* Exh. RB14, Sh. 1 (14); Zone amounts from Sum and Allocation Percentage (11).
6. Sum(19) from Exh. RB14, Sh. 2 (8); Zone amounts from Sum and Allocation based on (16).

NCRB - PRO FORMA STATUTORY RETURN			
DWELLING FIRE			
	Pre-Tax	Tax Liability	Post-Tax
1. Premiums	100.00%		
Loss & Loss Adjustment Expense	59.94%		
Commission & Brokerage	15.90%		
General Expense	6.82%		
Other Acquisition Expense	6.24%		
Taxes, Licenses and Fees	3.10%		
2. Pro-Forma Underwriting Profit	8.00%		
3. Installment Fee Income	0.70%		
4. Regular tax		3.05%	
5. Additional tax due to TRA		0.20%	
6. Return from Underwriting (post-tax)			5.46%
7. Investment Gain on Insurance Transaction	3.41%		
Less Investment Income on Agents Balances	0.70%		
Net Investment Gain on Insurance Transaction	2.70%	0.71%	2.00%
8. Statutory Return as a % of Premium (post-tax)			7.45%
9. Premium-to-Net Worth Ratio			1.019
10. Statutory Return as a % of Net Worth (post-tax)			7.60%

Note: Lines (1) to (8) are all expressed as a % of premium.

Assumptions

(a) UW Tax Rate =	35.00%
(b) Inv. Income Tax Rate =	26.15%
(c) Inv. Yield =	5.08%
(d) P/S Ratio =	1.18
(e) NW/S Ratio =	1.16
(f) Installment Fee Income=	0.70%
(g) Additional TRA tax=	0.20%

NOTES TO EXHIBIT RB-16, Page 1

1. The expense provisions are those used on page C-1 of Exhibit RB-1.
2. Selected by Rate Bureau.
3. See assumption (f) below.
4. $[(2)+(3)] \times (a)$.
5. See assumption (g) below.
6. $(2) + (3) - [(4) + (5)]$.
7. Pages 7-10. Investment income on agents' balances equals $.139 \times 1.031 \times (c)$, where .139 is agents' balances for premiums due less than 90 days and 1.031 is the factor to include the effect of agents' balances or uncollected premiums overdue for more than 90 days.
8. $(6) + (7)$.
9. $(d)/(e)$.
10. $(8) \times (9)$.

ASSUMPTIONS

- (a) Internal Revenue Code.
- (b) See RB-16, pp. 11-13; 1-avg post-tax yield/avg pre-tax yield.
- (c) See RB-16, pp. 11-13; average of current and embedded yields.
- (d) See RB-16, p. 14
- (e) See RB-16, p. 15.
- (f) See RB-16, p. 3.
- (g) See RB-16, pp. 4-6

**NCRB - PRO FORMA STATUTORY RETURN
ADJUSTED TO INCLUDE INVESTMENT INCOME ON SURPLUS
DWELLING FIRE**

	Pre-Tax	Tax Liability	Post-Tax
1. Premiums	100.00%		
Loss & Loss Adjustment Expense	59.94%		
Commission & Brokerage	15.90%		
General Expense	6.82%		
Other Acquisition Expense	6.24%		
Taxes, Licenses and Fees	3.10%		
2. Pro-Forma Underwriting Profit	8.00%		
3. Installment Fee Income	0.70%		
4. Regular tax		3.05%	
5. Additional tax due to TRA		0.20%	
6. Return from Underwriting (post-tax)			5.46%
7. Investment Gain on Insurance Transaction	3.41%		
Less Investment Income on Agents Balances	0.70%		
Net Investment Gain on Insurance Transaction	2.70%	0.71%	2.00%
8. Investment Gain on Surplus (Including Prepaid Expense Adjustment)	4.87%	1.27%	3.59%
9. Total Return as a % of Premium (post-tax)			11.05%
10. Premium-to-Net Worth Ratio			1.019
11. Total Return as a % of Net Worth (post-tax)			11.26%

Note: Lines (1) to (9) are all expressed as a % of premium.

Assumptions

(a) UW Tax Rate =	35.00%
(b) Inv. Income Tax Rate =	26.15%
(c) Inv. Yield =	5.08%
(d) P/S Ratio =	1.18
(e) NW/S Ratio =	1.16
(f) Installment Fee Income=	0.70%
(g) Additional TRA tax=	0.20%

NOTES TO EXHIBIT RB-16, Page 1A

1. The expense provisions are those used on page C-1 of Exhibit RB-1.
2. Selected by Rate Bureau.
3. See assumption (f) below.
4. $[(2)+(3)] \times (a)$.
5. See assumption (g) below.
6. $(2) + (3) - [(4) + (5)]$.
7. Pages 7-10. Investment income on agents' balances equals $.139 \times 1.031 \times (c)$, where $.139$ is agents' balances for premiums due less than 90 days and 1.031 is the factor to include the effect of agents' balances or uncollected premiums overdue for more than 90 days.
8. $(c) \times [1/(d) + (0.2501 \times 0.4546)]$, where 0.2501 is the prepaid expense ratio from page 7 and 0.4546 is the unearned premium reserve to premium ratio from page 7.
9. $(6) + (7) + (8)$.
10. $(d) / (e)$.
11. $(9) \times (10)$.

ASSUMPTIONS

- (a) Internal Revenue Code.
- (b) See RB-16, pp. 11-13; $1 - \text{avg post-tax yield} / \text{avg pre-tax yield}$.
- (c) See RB-16, pp. 11-13; average of current and embedded yields.
- (d) See RB-16, p. 14
- (e) See RB-16, p. 15.
- (f) See RB-16, p. 3.
- (g) See RB-16, pp. 4-6

NORTH CAROLINA
DWELLING FIRE/EC INSTALLMENT PAYMENT INCOME
(in thousands)

Year	Post Tax Inst. Charges	Written Premium	Inst. Charges as a % of Prem.
1999	562,698	73,680,882	0.76%
2000	437,171	79,524,048	0.55%
2001	586,146	90,560,886	0.65%
2002	899,359	106,409,406	0.85%
2003	856,650	125,202,003	0.68%
Totals	3,342,024	475,377,225	0.70%
Selected Value			0.70%

Source: From ISO.

**NORTH CAROLINA
DWELLING FIRE**

ESTIMATION OF TRA TAXABLE INCOME

1 Earned Premium (current year)	100.00%
2 UEPR (previous year)	44.17%
3 UEPR (current year)	45.24%
4 Increase = (3)-(2)	1.07%
5 20% of Increase = Taxable Income	0.21%
6 Tax Liability = (5)x.35	0.08%
7 Unpaid Losses (current year)	11.79%
8 Discounted unpaid losses (current year)	11.10%
9 Unpaid Losses (previous year)	5.82%
10 Discounted unpaid losses (previous year)	5.48%
11 Additional Income	0.35%
12 Tax Liability	0.12%
Other Tax Liabilities	
13 UEP	0.08%
14 Discounting of Loss Reserves	0.12%
15 Total	0.20%

NORTH CAROLINA
DWELLING FIRE
CALCULATION OF TAXABLE INCOME

(1)	(2)	(3)	(4)	(5)
AY Avg Acc Date	AY Pay Pattern	Percent Unpaid	Total Losses	Unpaid Losses
0.5	80.90%	19.10%	59.938	11.4
1.5	98.90%	1.10%	29.610	0.3
2.5	99.90%	0.10%	14.627	0.0
3.5	100.00%	0.00%	7.226	0.0
4.5	100.00%	0.00%	3.570	0.0
5.5	100.00%	0.00%	1.763	0.0
6.5	100.00%	0.00%	0.871	0.0
7.5	100.00%	0.00%	0.430	0.0
8.5	100.00%	0.00%	0.213	0.0
9.5	100.00%	0.00%	0.105	0.0
10.5	100.00%	0.00%	0.052	0.0
11.5	100.00%	0.00%	0.026	0.0
12.5	100.00%	0.00%	0.013	0.0
13.5	100.00%	0.00%	0.006	0.0
14.5	100.00%	0.00%	0.003	0.0
15.5	100.00%	0.00%	0.002	0.0
16.5	100.00%	0.00%	0.001	0.0
17.5	100.00%	0.00%	0.000	0.0
18.5	100.00%	0.00%	0.000	0.0
19.5	100.00%	0.00%	0.000	0.0
20.5	100.00%	0.00%	0.000	0.0
21.5	100.00%	0.00%	0.000	0.0
22.5	100.00%	0.00%	0.000	0.0
23.5	100.00%	0.00%	0.000	0.0
24.5	100.00%	0.00%	0.000	0.0
25.5	100.00%	0.00%	0.000	0.0
26.5	100.00%	0.00%	0.000	0.0
27.5	100.00%	0.00%	0.000	0.0
28.5	100.00%	0.00%	0.000	0.0
29.5	100.00%	0.00%	0.000	0.0
30.5	100.00%	0.00%	0.000	0.0
31.5	100.00%	0.00%	0.000	0.0
32.5	100.00%	0.00%	0.000	0.0
33.5	100.00%	0.00%	0.000	0.0
34.5	100.00%	0.00%	0.000	0.0
35.5	100.00%	0.00%	0.000	0.0
36.5	100.00%	0.00%	0.000	0.0
37.5	100.00%	0.00%	0.000	0.0
38.5	100.00%	0.00%	0.000	0.0
39.5	100.00%	0.00%	0.000	0.0
40.5	100.00%	0.00%	0.000	0.0
41.5	100.00%	0.00%	0.000	0.0
42.5	100.00%	0.00%	0.000	0.0
43.5	100.00%	0.00%	0.000	0.0
44.5	100.00%	0.00%	0.000	0.0
45.5	100.00%	0.00%	0.000	0.0
46.5	100.00%	0.00%	0.000	0.0
47.5	100.00%	0.00%	0.000	0.0
48.5	100.00%	0.00%	0.000	0.0
49.5	100.00%	0.00%	0.000	0.0
50.5	100.00%	0.00%	0.000	0.0
51.5	100.00%	0.00%	0.000	0.0
52.5	100.00%	0.00%	0.000	0.0
53.5	100.00%	0.00%	0.000	0.0
54.5	100.00%	0.00%	0.000	0.0
55.5	100.00%	0.00%	0.000	0.0
56.5	100.00%	0.00%	0.000	0.0
57.5	100.00%	0.00%	0.000	0.0
58.5	100.00%	0.00%	0.000	0.0
59.5	100.00%	0.00%	0.000	0.0
60.5	100.00%	0.00%	0.000	0.0
61.5	100.00%	0.00%	0.000	0.0
62.5	100.00%	0.00%	0.000	0.0
63.5	100.00%	0.00%	0.000	0.0
64.5	100.00%	0.00%	0.000	0.0
65.5	100.00%	0.00%	0.000	0.0
66.5	100.00%	0.00%	0.000	0.0
Sum				11.79

(6)	(7)	(8)
AY at 12/31/2005	Discount Factor	Discounted Weight
2005	0.940942	10.8
2004	0.957713	0.3
2003	0.978513	0.0
2002	0.978513	0.0
2001	0.978513	0.0
2000	0.978513	0.0
1999	0.978513	0.0
1998	0.978513	0.0
1997	0.978513	0.0
1996	0.978513	0.0
1995	0.978513	0.0
1994	0.978513	0.0
1993	0.978513	0.0
1992	0.978513	0.0
1991	0.978513	0.0
1990	0.978513	0.0
1989	0.978513	0.0
1988	0.978513	0.0
1987	0.978513	0.0
1986	0.978513	0.0
1985	0.978513	0.0
1984	0.978513	0.0
1983	0.978513	0.0
1982	0.978513	0.0
1981	0.978513	0.0
1980	0.978513	0.0
1979	0.978513	0.0
1978	0.978513	0.0
1977	0.978513	0.0
1976	0.978513	0.0
1975	0.978513	0.0
1974	0.978513	0.0
1973	0.978513	0.0
1972	0.978513	0.0
1971	0.978513	0.0
1970	0.978513	0.0
1969	0.978513	0.0
1968	0.978513	0.0
1967	0.978513	0.0
1966	0.978513	0.0
1965	0.978513	0.0
1964	0.978513	0.0
1963	0.978513	0.0
1962	0.978513	0.0
1961	0.978513	0.0
1960	0.978513	0.0
1959	0.978513	0.0
1958	0.978513	0.0
1957	0.978513	0.0
1956	0.978513	0.0
1955	0.978513	0.0
1954	0.978513	0.0
1953	0.978513	0.0
1952	0.978513	0.0
1951	0.978513	0.0
1950	0.978513	0.0
1949	0.978513	0.0
1948	0.978513	0.0
1947	0.978513	0.0
1946	0.978513	0.0
1945	0.978513	0.0
1944	0.978513	0.0
1943	0.978513	0.0
1942	0.978513	0.0
1941	0.978513	0.0
1940	0.978513	0.0
1939	0.978513	0.0
Sum		11.10

(9)	(10)	(11)	(12)
AY at 12/31/2004	Weight	Discount Factor	Discounted Weight
2004	5.65544587	0.940942	5.3
2003	0.16090061	0.957713	0.2
2002	0.00722598	0.978513	0.0
2001	0	0.978513	0.0
2000	0	0.978513	0.0
1999	0	0.978513	0.0
1998	0	0.978513	0.0
1997	0	0.978513	0.0
1996	0	0.978513	0.0
1995	0	0.978513	0.0
1994	0	0.978513	0.0
1993	0	0.978513	0.0
1992	0	0.978513	0.0
1991	0	0.978513	0.0
1990	0	0.978513	0.0
1989	0	0.978513	0.0
1988	0	0.978513	0.0
1987	0	0.978513	0.0
1986	0	0.978513	0.0
1985	0	0.978513	0.0
1984	0	0.978513	0.0
1983	0	0.978513	0.0
1982	0	0.978513	0.0
1981	0	0.978513	0.0
1980	0	0.978513	0.0
1979	0	0.978513	0.0
1978	0	0.978513	0.0
1977	0	0.978513	0.0
1976	0	0.978513	0.0
1975	0	0.978513	0.0
1974	0	0.978513	0.0
1973	0	0.978513	0.0
1972	0	0.978513	0.0
1971	0	0.978513	0.0
1970	0	0.978513	0.0
1969	0	0.978513	0.0
1968	0	0.978513	0.0
1967	0	0.978513	0.0
1966	0	0.978513	0.0
1965	0	0.978513	0.0
1964	0	0.978513	0.0
1963	0	0.978513	0.0
1962	0	0.978513	0.0
1961	0	0.978513	0.0
1960	0	0.978513	0.0
1959	0	0.978513	0.0
1958	0	0.978513	0.0
1957	0	0.978513	0.0
1956	0	0.978513	0.0
1955	0	0.978513	0.0
1954	0	0.978513	0.0
1953	0	0.978513	0.0
1952	0	0.978513	0.0
1951	0	0.978513	0.0
1950	0	0.978513	0.0
1949	0	0.978513	0.0
1948	0	0.978513	0.0
1947	0	0.978513	0.0
1946	0	0.978513	0.0
1945	0	0.978513	0.0
1944	0	0.978513	0.0
1943	0	0.978513	0.0
1942	0	0.978513	0.0
1941	0	0.978513	0.0
1940	0	0.978513	0.0
1939	0	0.978513	0.0
Sum			5.48

NOTES TO PAGES 4 AND 5

Page 4

- 1 Current year earned premium
- 2 Estimated prior year UEPR as percent of current year earned premium given assumed premium growth rate
- 3 Annual Statement, page 15, UEPR/Earned Premium for all companies writing this line of insurance in North Carolina.
- 4 Line (3) - line (2)
- 5 Line (4) x .20.
- 6 Line (5) x .35.
- 7 Unpaid current-year losses at year-end as a percent of premium. Sum of Page 5, Column (5).
- 8 Discounted unpaid current-year losses at year-end as a percent of premium. Sum of Page 5, Column (8).
- 9 Unpaid prior-year losses at year-end as a percent of premium. Sum of Page 5, Column (5) divided by (1+ assumed growth rate).
- 10 Discounted unpaid prior-year losses at year-end as a percent of premium. Sum of Page 5, Column (12).
- 11 Line (7) - Line (8) - [Line (9) - Line (10)]
- 12 Line (11) x .35
- 13 Line (6)
- 14 Line (12)
- 15 Line (13) + Line (14)

Page 5

- 1 Midpoint of number of years since end of accident period.
- 2 Accident year payout pattern developed from policy year developed losses.
- 3 1 - Column (2)
- 4 Losses, given assumed historical growth rate.
- 5 Column (3) x Column (4)
- 6 Accident Year at current year end
- 7 Discount factor per IRS Regulations.
- 8 Column (5) x Column (7)
- 9 Accident Year at prior year end
- 10 Column (3), previous period x Column (4), current period
- 11 Discount factor per IRS Regulations.
- 12 Column (10) x Column (11)

NCRB INVESTMENT INCOME CALCULATION**DWELLING FIRE**

Projected Investment Earnings on Loss, Loss
Adjustment Expense and Unearned Premium Reserves

A. UNEARNED PREMIUM RESERVES

1. Direct Earned Premiums		1,000,000
2. Mean UEPR	45.46%	454,600
3. Deductions for prepaid expenses		
Commissions & Brokerage	15.90%	
Taxes, Licenses & Fees	2.58%	
One Half Other Acquisition Expense	3.12%	
One Half General Expense	3.41%	
Total	25.01%	
4. Deduction for Prepaid Expenses: (2) x (3)		113,708
5. Net UEPR		437,325
6. Net UEPR Subject to Inv (5) - (4)		323,617

B. Loss and Loss Expense Reserves

1. Direct Earned Premium		1,000,000
2. Expected Inc L & LAE to Premium Ratio	0.5994	599,380
3. Expected Mean L&LAE Reserve to Inc. L & LAE Ratio	0.579	346,892

C. Net PH Funds Subj to Inv

(A6 + B3) 670,509

D. Average Rate of Return

5.08%

E. Investment Earnings from Net Reserves (D) x (E)

34,062

F. Average Rate of Return as a Percent of

Direct Earned Premium (F) / (A1)

3.41%

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line A-1

All calculations are displayed per \$1,000,000 direct earned premiums.

Line A-2

The mean unearned premium reserve is determined by multiplying the direct earned premiums in line (1) by the ratio of the mean unearned premium reserve to the collected earned premium for calendar year ended 12/31/current year for all companies writing Dwelling insurance in North Carolina. These data are from page 15 of the Annual Statement.

1. Collected Earned Premium for Calendar Year ended 12/31/current year	183,544,047
2. Unearned Premium Reserve as of 12/31/prior year	83,845,604
3. Unearned Premium Reserve as of 12/31/current year	83,032,929
4. Mean Unearned Premium Reserve $1/2 [(2) + (3)]$	83,439,267
5. Ratio (4) \div (1)	0.4546

Line A-3

Deduction for prepaid expenses:

Production costs and a large part of the other company expenses in connection with the writing and handling of Dwelling policies, exclusive of claim adjustment expenses, are incurred when the policy is written and before the premium is paid. The deduction for these expenses is determined from data provided by the NCRB for the year ended 12/31/current year.

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line B-2

The expected loss and loss adjustment expense ratio reflects the expense provisions for the year ended 12/31/current year.

Line B-3

The mean loss reserve is determined by multiplying the incurred losses in line (2) by the North Carolina ratio of the mean loss reserves to the incurred losses for Dwelling insurance. This ratio is based on North Carolina companies' Page 15 annual statement data and has been adjusted to include loss adjustment expense reserves.

1	Incurring Losses for CY	1999	98,048,006
2	Incurring Losses for CY	2000	53,309,276
3	Incurring Losses for CY	2001	68,153,061
4	Incurring Losses for CY	2002	57,628,854
5	Incurring Losses for CY	2003	47,926,168
6	Loss Reserves as of 12/31	1998	35,838,218
7	Loss Reserves as of 12/31	1999	56,759,723
8	Loss Reserves as of 12/31	2000	37,209,132
9	Loss Reserves as of 12/31	2001	34,510,847
10	Loss Reserves as of 12/31	2002	30,860,422
11	Loss Reserves as of 12/31	2003	33,193,930
12	Mean Loss Reserve	1999	46,298,971
13	Mean Loss Reserve	2000	46,984,428
14	Mean Loss Reserve	2001	35,859,990
15	Mean Loss Reserve	2002	32,685,635
16	Mean Loss Reserve	2003	32,027,176
17	Loss Reserve Ratio	1999	0.472
18	Loss Reserve Ratio	2000	0.881
19	Loss Reserve Ratio	2001	0.526
20	Loss Reserve Ratio	2002	0.567
21	Loss Reserve Ratio	2003	0.668
22	Average Loss Reserve Ratio		0.623
23	Ratio of LAE Reserves to Loss Reserves		0.166
24	Ratio of Incurred LAE to Incurred Losses		0.255
25	Loss and LAE Reserve/Incurred Loss&LAE		0.579

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line E

The average rate of return is calculated as the arithmetic mean of the embedded and current yields. The embedded yield is the sum of two ratios: the most recent ratio of investment income to invested assets, plus the ten year average ratio of capital gains to invested assets (see page 12). The current yield is the estimated, currently available rate of return (including income and expected capital gains) on the property/casualty industry investment portfolio (see page 11).

Embedded Yield =	$4.04\% + 1.23\% =$	5.27%
Current Yield =		4.90%
Average =		5.08%

PORTFOLIO YIELD AND TAX RATE - CURRENT YIELD				
(1)	(2)	(3)	(4)	(5)
Investable Asset	Percent of Assets	Estimated Prospective Pre-Tax Return	Tax Rate	Estimated Prospective Post-Tax Return
Bonds				
U.S. Govt	13.17%	3.90%	35.00%	2.54%
States & territories	12.52%	3.46%	5.25%	3.28%
Special revenue	22.22%	3.41%	5.25%	3.23%
Public Utilities	1.66%	4.56%	35.00%	2.96%
Industrial	20.64%	4.44%	35.00%	2.89%
Preferred stock	1.51%	6.21%	14.18%	5.33%
Common stock	18.28%	11.61%	31.92%	7.90%
Mortgage Loans	0.25%	5.70%	35.00%	3.71%
Real estate	0.92%	7.15%	35.00%	4.65%
Cash & short-term invs.	8.83%	3.21%	35.00%	2.09%
Rate of Return Pre-Inv Exp	100.00%	5.28%	26.68%	3.87%
Investment Expenses		0.38%	35.00%	0.25%
Portfolio Rate of Return		4.90%	26.03%	3.62%

Sources:

Various issues of Federal Reserve Statistical Release, H.15(519).

Mergent Bond Record.

Standard & Poor's CreditWeek.

Value Line Investment Survey, Part II.

Ibbotson Associates, SBBI Valuation Edition 2005 Yearbook.

Ibbotson and Siegel, AREUEA Journal, 1984.

A.M. Best's Aggregates & Averages, 2005 edition.

PORTFOLIO YIELD AND TAX RATE EMBEDDED YIELD		
	Income	Tax Rate
Bonds		
Taxable	21,696,435	35.00%
Non-Taxable	11,340,140	5.25%
Stocks		
Taxable	3,285,602	14.18%
Non-Taxable	2,131,399	5.25%
Mortgage Loans	169,603	35.00%
Real Estate	1,646,000	35.00%
Contract Loans	981	35.00%
Cash / Short Term Inv.	1,189,806	35.00%
All Other	3,751,696	35.00%
Total	45,211,662	24.62%
Inv. Expenses	4,064,665	35.00%
Net Inv. Income	41,146,997	23.59%
Mean Invested Assets	1,018,810,319	
Inv. Inc. Yield Rate	4.04%	23.59%
Capital Gains (10 yr. avg) (% Of Inv. Assets)	1.23%	35.00%
Invest. Yield Rate (pre-tax)	5.27%	26.26%
Invest. Yield Rate (post-tax)	3.89%	

Source: Best's Aggregates and Averages, 2005 Edition, p. 12 (Exhibit of Net Investment Income, Col. 2 (Earned During Year)).

Capital Gains: RB-16, page 13

**CAPITAL GAINS OR LOSSES
AS A PERCENT OF MEAN ASSETS**
(All amounts in thousands of dollars)

Calendar Year	Mean Total Invested Assets	Realized Capital Gains	
		Amount	Percent
1995	636,756,797	5,997,029	0.94%
1996	682,407,194	9,243,907	1.35%
1997	733,433,983	10,807,929	1.47%
1998	781,421,247	18,019,189	2.31%
1999	797,920,622	13,016,157	1.63%
2000	794,195,460	16,204,649	2.04%
2001	785,530,275	6,630,679	0.84%
2002	815,037,267	2,770,997	0.34%
2003	908,024,056	6,280,196	0.69%
2004	1,018,810,319	9,113,199	0.89%
Total	7,953,537,218	98,083,931	1.23%

*Mean total invested assets is the average of the current year and prior year values of total invested assets (annual statement page 2, Line 9).

Source: "Best's Aggregates & Averages--Property-Casualty," various editions

**NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE**

PREMIUM-TO-SURPLUS RATIOS

<u>Year</u>	<u>Fire</u>	<u>Extended Coverage</u>
1995	1.256	1.376
1996	1.365	1.381
1997	1.058	1.083
1998	1.042	0.978
1999	1.054	1.013
2000	1.047	1.095
2001	1.153	1.198
2002	1.302	1.330
2003	1.271	1.244
2004	1.297	1.288
Five-Year Average	1.214	1.231
Ten-Year Average	1.185	1.199

Notes:

- 1 Ratios based on net premium written.
- 2 From Best's Data Service and Best's Aggregate and Averages.
- 3 Top 30 groups each year.

**NORTH CAROLINA DWELLING FIRE AND EXTENDED COVERAGE
CALCULATION OF GAAP NET WORTH TO SURPLUS RATIO**

	1999	2000	2001	2002	2003
Policyholder Surplus	334,348,173,079	317,360,616,515	289,605,554,159	285,385,631,797	347,020,052,576
+ Deferred Acquisition Costs	16,075,447,974	16,702,143,897	18,331,855,434	21,228,221,405	23,633,976,782
+ Revenue Offset Provision	7,392,359,287	7,680,547,924	0	0	-
+ Loss Reserve Discounting Provision	16,759,902,155	16,029,012,263	12,395,001,383	20,975,201,995	18,945,643,538
- Deferred Fresh Start Benefit	(110,445,195)	(29,064,525)	0	0	-
- Deferred Taxes on Unrealized Capital Gains	(20,173,111,830)	(19,269,614,804)	0	0	-
+ Non-admitted Assets	13,053,945,756	14,405,827,828	14,452,932,464	15,273,483,824	16,495,566,662
+ Excess of Statutory over Statement Reserves	1,055,252,609	724,549,081	0	0	-
+ Provision for Reinsurance	4,683,667,991	5,198,852,067	5,471,002,096	6,130,614,136	5,802,642,707
+ Provision for FAS 115	(5,886,678,087)	6,508,564,466	5,281,971,040	10,573,599,824	11,598,154,936
- Surplus Notes	(5,245,277,655)	(5,647,941,412)	(6,648,831,578)	(8,050,443,917)	(9,589,168,207)
GAAP-adjusted Net Worth	361,953,236,084	359,663,493,299	338,889,484,998	351,516,309,064	413,906,868,994
Ratio of GAAP Net Worth to Statutory Surplus	1.08	1.13	1.17	1.23	1.19
Five Year Average	1.16				

Source: ISO

NCRB - PRO FORMA STATUTORY RETURN			
EXTENDED COVERAGE			
	Pre-Tax	Tax Liability	Post-Tax
1. Premiums	100.00%		
Loss & Loss Adjustment Expense	47.72%		
Commission & Brokerage	14.90%		
General Expense	3.56%		
Other Acquisition Expense	4.08%		
Taxes, Licenses and Fees	2.60%		
Net Cost of Reinsurance	19.13%		
2. Pro-Forma Underwriting Profit	8.00%		
3. Installment Fee Income	0.70%		
4. Regular tax		3.05%	
5. Additional tax due to TRA		0.24%	
6. Return from Underwriting (post-tax)			5.42%
7. Investment Gain on Insurance Transaction	2.84%		
Less Investment Income on Agents Balances	0.70%		
Net Investment Gain on Insurance Transaction	2.14%	0.56%	1.58%
8. Statutory Return as a % of Premium (post-tax)			6.99%
9. Premium-to-Net Worth Ratio			1.031
10. Statutory Return as a % of Net Worth (post-tax)			7.21%

Note: Lines (1) to (8) are all expressed as a % of premium.

Assumptions

(a) UW Tax Rate =	35.00%
(b) Inv. Income Tax Rate =	26.15%
(c) Inv. Yield =	5.08%
(d) P/S Ratio =	1.20
(e) NW/S Ratio =	1.16
(f) Installment Fee Income=	0.70%
(g) Additional TRA tax=	0.24%
(h) Net Cost of Reinsurance	19.13%

NOTES TO EXHIBIT RB-17, Page 1

1. The expense provisions are those used on page C-3 of Exhibit RB-1.
2. Selected by Rate Bureau.
3. See assumption (f) below.
4. $[(2)+(3)] \times (a)$.
5. See assumption (g) below.
6. $(2) + (3) - [(4) + (5)]$.
7. Pages 7-10. Investment income on agents' balances equals $.134 \times 1.031 \times (c)$, where .134 is agents' balances for premiums due less than 90 days and 1.031 is the factor to include the effect of agents' balances or uncollected premiums overdue for more than 90 days.
8. $(6) + (7)$.
9. $(d)/(e)$.
10. $(8) \times (9)$.

ASSUMPTIONS

- (a) Internal Revenue Code.
- (b) See RB-17, pp. 11-13; $1 - \text{avg post-tax yield} / \text{avg pre-tax yield}$.
- (c) See RB-17, pp. 11-13; average of current and embedded yields.
- (d) See RB-17, p. 14
- (e) See RB-17, p. 15.
- (f) See RB-16, p. 3.
- (g) See RB-17, pp. 4-6
- (h) See prefiled testimony.

**NCRB - PRO FORMA STATUTORY RETURN
ADJUSTED TO INCLUDE INVESTMENT INCOME ON SURPLUS
EXTENDED COVERAGE**

	Pre-Tax	Tax Liability	Post-Tax
1. Premiums	100.00%		
Loss & Loss Adjustment Expense	47.72%		
Commission & Brokerage	14.90%		
General Expense	3.56%		
Other Acquisition Expense	4.08%		
Taxes, Licenses and Fees	2.60%		
Net Cost of Reinsurance	19.13%		
2. Pro-Forma Underwriting Profit	8.00%		
3. Installment Fee Income	0.70%		
4. Regular tax		3.05%	
5. Additional tax due to TRA		0.24%	
6. Return from Underwriting (post-tax)			5.42%
7. Investment Gain on Insurance Transaction	2.84%		
Less Investment Income on Agents Balances	0.70%		
Net Investment Gain on Insurance Transaction	2.14%	0.56%	1.58%
8. Investment Gain on Surplus (Including Prepaid Expense Adjustment)	5.35%	1.40%	3.95%
9. Total Return as a % of Premium (post-tax)			10.94%
10. Premium-to-Net Worth Ratio			1.031
11. Total Return as a % of Net Worth (post-tax)			11.28%

Note: Lines (1) to (9) are all expressed as a % of premium.

Assumptions

(a) UW Tax Rate =	35.00%
(b) Inv. Income Tax Rate =	26.15%
(c) Inv. Yield =	5.08%
(d) P/S Ratio =	1.20
(e) NW/S Ratio =	1.16
(f) Installment Fee Income=	0.70%
(g) Additional TRA tax=	0.24%
(h) Net Cost of Reinsurance	19.13%

NOTES TO EXHIBIT RB-17, Page 1A

1. The expense provisions are those used on page C-3 of Exhibit RB-1.
2. Selected by Rate Bureau.
3. See assumption (f) below.
4. $[(2)+(3)] \times (a)$.
5. See assumption (g) below.
6. $(2) + (3) - [(4) + (5)]$.
7. Pages 7-10. Investment income on agents' balances equals $.134 \times 1.031 \times (c)$, where .134 is agents' balances for premiums due less than 90 days and 1.031 is the factor to include the effect of agents' balances or uncollected premiums overdue for more than 90 days.
8. $(c) \times [1/(d) + (0.5525 \times 0.3954)]$, where 0.5525 is the prepaid expense ratio from page 7 and 0.3954 is the unearned premium reserve to premium ratio from page 7.
9. $(6) + (7) + (8)$.
10. $(d) / (e)$.
11. $(9) \times (10)$.

ASSUMPTIONS

- (a) Internal Revenue Code.
- (b) See RB-17, pp. 11-13; 1-avg post-tax yield/avg pre-tax yield.
- (c) See RB-17, pp. 11-13; average of current and embedded yields.
- (d) See RB-17, p. 14
- (e) See RB-17, p. 15.
- (f) See RB-16, p. 3.
- (g) See RB-17, pp. 4-6
- (h) See prefiled testimony.

NORTH CAROLINA
 DWELLING FIRE/EC INSTALLMENT PAYMENT INCOME
 (in thousands)

Year	Post Tax Inst. Charges	Written Premium	Inst. Charges as a % of Prem.
1999	562,698	73,680,882	0.76%
2000	437,171	79,524,048	0.55%
2001	586,146	90,560,886	0.65%
2002	899,359	106,409,406	0.85%
2003	856,650	125,202,003	0.68%
Totals	3,342,024	475,377,225	0.70%
Selected Value			0.70%

Source: From ISO.

**NORTH CAROLINA
EXTENDED COVERAGE**

ESTIMATION OF TRA TAXABLE INCOME

1 Earned Premium (current year)	100.00%
2 UEPR (previous year)	37.54%
3 UEPR (current year)	40.36%
4 Increase = (3)-(2)	2.83%
5 20% of Increase = Taxable Income	0.57%
6 Tax Liability = (5)x.35	0.20%
7 Unpaid Losses (current year)	4.03%
8 Discounted unpaid losses (current year)	3.79%
9 Unpaid Losses (previous year)	1.94%
10 Discounted unpaid losses (previous year)	1.83%
11 Additional Income	0.12%
12 Tax Liability	0.04%
Other Tax Liabilities	
13 UEP	0.20%
14 Discounting of Loss Reserves	0.04%
15 Total	0.24%

NORTH CAROLINA
EXTENDED COVERAGE
CALCULATION OF TAXABLE INCOME

(1) AY Avg Acc Date	(2) AY Pay Pattern	(3) Percent Unpaid	(4) Total Losses	(5) Unpaid Losses
0.5	91.70%	8.30%	47.724	4.0
1.5	99.70%	0.30%	22.996	0.1
2.5	100.00%	0.00%	11.080	0.0
3.5	100.00%	0.00%	5.339	0.0
4.5	100.00%	0.00%	2.573	0.0
5.5	100.00%	0.00%	1.240	0.0
6.5	100.00%	0.00%	0.597	0.0
7.5	100.00%	0.00%	0.288	0.0
8.5	100.00%	0.00%	0.139	0.0
9.5	100.00%	0.00%	0.067	0.0
10.5	100.00%	0.00%	0.032	0.0
11.5	100.00%	0.00%	0.016	0.0
12.5	100.00%	0.00%	0.007	0.0
13.5	100.00%	0.00%	0.004	0.0
14.5	100.00%	0.00%	0.002	0.0
15.5	100.00%	0.00%	0.001	0.0
16.5	100.00%	0.00%	0.000	0.0
17.5	100.00%	0.00%	0.000	0.0
18.5	100.00%	0.00%	0.000	0.0
19.5	100.00%	0.00%	0.000	0.0
20.5	100.00%	0.00%	0.000	0.0
21.5	100.00%	0.00%	0.000	0.0
22.5	100.00%	0.00%	0.000	0.0
23.5	100.00%	0.00%	0.000	0.0
24.5	100.00%	0.00%	0.000	0.0
25.5	100.00%	0.00%	0.000	0.0
26.5	100.00%	0.00%	0.000	0.0
27.5	100.00%	0.00%	0.000	0.0
28.5	100.00%	0.00%	0.000	0.0
29.5	100.00%	0.00%	0.000	0.0
30.5	100.00%	0.00%	0.000	0.0
31.5	100.00%	0.00%	0.000	0.0
32.5	100.00%	0.00%	0.000	0.0
33.5	100.00%	0.00%	0.000	0.0
34.5	100.00%	0.00%	0.000	0.0
35.5	100.00%	0.00%	0.000	0.0
36.5	100.00%	0.00%	0.000	0.0
37.5	100.00%	0.00%	0.000	0.0
38.5	100.00%	0.00%	0.000	0.0
39.5	100.00%	0.00%	0.000	0.0
40.5	100.00%	0.00%	0.000	0.0
41.5	100.00%	0.00%	0.000	0.0
42.5	100.00%	0.00%	0.000	0.0
43.5	100.00%	0.00%	0.000	0.0
44.5	100.00%	0.00%	0.000	0.0
45.5	100.00%	0.00%	0.000	0.0
46.5	100.00%	0.00%	0.000	0.0
47.5	100.00%	0.00%	0.000	0.0
48.5	100.00%	0.00%	0.000	0.0
49.5	100.00%	0.00%	0.000	0.0
50.5	100.00%	0.00%	0.000	0.0
51.5	100.00%	0.00%	0.000	0.0
52.5	100.00%	0.00%	0.000	0.0
53.5	100.00%	0.00%	0.000	0.0
54.5	100.00%	0.00%	0.000	0.0
55.5	100.00%	0.00%	0.000	0.0
56.5	100.00%	0.00%	0.000	0.0
57.5	100.00%	0.00%	0.000	0.0
58.5	100.00%	0.00%	0.000	0.0
59.5	100.00%	0.00%	0.000	0.0
60.5	100.00%	0.00%	0.000	0.0
61.5	100.00%	0.00%	0.000	0.0
62.5	100.00%	0.00%	0.000	0.0
63.5	100.00%	0.00%	0.000	0.0
64.5	100.00%	0.00%	0.000	0.0
65.5	100.00%	0.00%	0.000	0.0
66.5	100.00%	0.00%	0.000	0.0
Sum				4.03

(6) AY at 12/31/2005	(7) Discount Factor	(8) Discounted Weight
2005	0.940942	3.7
2004	0.957713	0.1
2003	0.978513	0.0
2002	0.978513	0.0
2001	0.978513	0.0
2000	0.978513	0.0
1999	0.978513	0.0
1998	0.978513	0.0
1997	0.978513	0.0
1996	0.978513	0.0
1995	0.978513	0.0
1994	0.978513	0.0
1993	0.978513	0.0
1992	0.978513	0.0
1991	0.978513	0.0
1990	0.978513	0.0
1989	0.978513	0.0
1988	0.978513	0.0
1987	0.978513	0.0
1986	0.978513	0.0
1985	0.978513	0.0
1984	0.978513	0.0
1983	0.978513	0.0
1982	0.978513	0.0
1981	0.978513	0.0
1980	0.978513	0.0
1979	0.978513	0.0
1978	0.978513	0.0
1977	0.978513	0.0
1976	0.978513	0.0
1975	0.978513	0.0
1974	0.978513	0.0
1973	0.978513	0.0
1972	0.978513	0.0
1971	0.978513	0.0
1970	0.978513	0.0
1969	0.978513	0.0
1968	0.978513	0.0
1967	0.978513	0.0
1966	0.978513	0.0
1965	0.978513	0.0
1964	0.978513	0.0
1963	0.978513	0.0
1962	0.978513	0.0
1961	0.978513	0.0
1960	0.978513	0.0
1959	0.978513	0.0
1958	0.978513	0.0
1957	0.978513	0.0
1956	0.978513	0.0
1955	0.978513	0.0
1954	0.978513	0.0
1953	0.978513	0.0
1952	0.978513	0.0
1951	0.978513	0.0
1950	0.978513	0.0
1949	0.978513	0.0
1948	0.978513	0.0
1947	0.978513	0.0
1946	0.978513	0.0
1945	0.978513	0.0
1944	0.978513	0.0
1943	0.978513	0.0
1942	0.978513	0.0
1941	0.978513	0.0
1940	0.978513	0.0
1939	0.978513	0.0
Sum		3.79

(9) AY at 12/31/2004	(10) Weight	(11) Discount Factor	(12) Discounted Weight
2004	1.90864705	0.940942	1.8
2003	0.03324135	0.957713	0.0
2002	0	0.978513	0.0
2001	0	0.978513	0.0
2000	0	0.978513	0.0
1999	0	0.978513	0.0
1998	0	0.978513	0.0
1997	0	0.978513	0.0
1996	0	0.978513	0.0
1995	0	0.978513	0.0
1994	0	0.978513	0.0
1993	0	0.978513	0.0
1992	0	0.978513	0.0
1991	0	0.978513	0.0
1990	0	0.978513	0.0
1989	0	0.978513	0.0
1988	0	0.978513	0.0
1987	0	0.978513	0.0
1986	0	0.978513	0.0
1985	0	0.978513	0.0
1984	0	0.978513	0.0
1983	0	0.978513	0.0
1982	0	0.978513	0.0
1981	0	0.978513	0.0
1980	0	0.978513	0.0
1979	0	0.978513	0.0
1978	0	0.978513	0.0
1977	0	0.978513	0.0
1976	0	0.978513	0.0
1975	0	0.978513	0.0
1974	0	0.978513	0.0
1973	0	0.978513	0.0
1972	0	0.978513	0.0
1971	0	0.978513	0.0
1970	0	0.978513	0.0
1969	0	0.978513	0.0
1968	0	0.978513	0.0
1967	0	0.978513	0.0
1966	0	0.978513	0.0
1965	0	0.978513	0.0
1964	0	0.978513	0.0
1963	0	0.978513	0.0
1962	0	0.978513	0.0
1961	0	0.978513	0.0
1960	0	0.978513	0.0
1959	0	0.978513	0.0
1958	0	0.978513	0.0
1957	0	0.978513	0.0
1956	0	0.978513	0.0
1955	0	0.978513	0.0
1954	0	0.978513	0.0
1953	0	0.978513	0.0
1952	0	0.978513	0.0
1951	0	0.978513	0.0
1950	0	0.978513	0.0
1949	0	0.978513	0.0
1948	0	0.978513	0.0
1947	0	0.978513	0.0
1946	0	0.978513	0.0
1945	0	0.978513	0.0
1944	0	0.978513	0.0
1943	0	0.978513	0.0
1942	0	0.978513	0.0
1941	0	0.978513	0.0
1940	0	0.978513	0.0
1939	0	0.978513	0.0
Sum			1.83

NOTES TO PAGES 4 AND 5

Page 4

- 1 Current year earned premium
- 2 Estimated prior year UEPR as percent of current year earned premium given assumed premium growth rate
- 3 Annual Statement, page 15, UEPR/Earned Premium for all companies writing this line of insurance in North Carolina.
- 4 Line (3) - line (2)
- 5 Line (4) x .20.
- 6 Line (5) x .35.
- 7 Unpaid current-year losses at year-end as a percent of premium. Sum of Page 5, Column (5).
- 8 Discounted unpaid current-year losses at year-end as a percent of premium. Sum of Page 5, Column (8).
- 9 Unpaid prior-year losses at year-end as a percent of premium. Sum of Page 5, Column (5) divided by (1+ assumed growth rate).
- 10 Discounted unpaid prior-year losses at year-end as a percent of premium. Sum of Page 5, Column (12).
- 11 Line (7) - Line (8) - [Line (9) - Line (10)]
- 12 Line (11) x .35
- 13 Line (6)
- 14 Line (12)
- 15 Line (13) + Line (14)

Page 5

- 1 Midpoint of number of years since end of accident period.
- 2 Accident year payout pattern developed from policy year developed losses.
- 3 1 - Column (2)
- 4 Losses, given assumed historical growth rate.
- 5 Column (3) x Column (4)
- 6 Accident Year at current year end
- 7 Discount factor per IRS Regulations.
- 8 Column (5) x Column (7)
- 9 Accident Year at prior year end
- 10 Column (3), previous period x Column (4), current period
- 11 Discount factor per IRS Regulations.
- 12 Column (10) x Column (11)

**NCRB INVESTMENT INCOME CALCULATION
EXTENDED COVERAGE**

Projected Investment Earnings on Loss, Loss
Adjustment Expense and Unearned Premium Reserves

A. UNEARNED PREMIUM RESERVES		
1. Direct Earned Premiums		1,000,000
2. Mean UEPR	39.54%	395,400
3. Deductions for prepaid expenses		
Commissions & Brokerage	14.90%	
Taxes, Licenses & Fees	2.17%	
One Half Other Acquisition Expense	2.04%	
One Half General Expense	1.78%	
Cost of Reinsurance	34.36%	
Total	55.25%	
4. Deduction for Prepaid Expenses: (2) x (3)		218,448
5. Net UEPR		385,120
6. Net UEPR Subject to Inv (5) - (4)		166,672
B. Loss and Loss Expense Reserves		
1. Direct Earned Premium		1,000,000
2. Expected Inc L & LAE to Premium Ratio	0.4772	477,241
3. Expected Mean L&LAE Reserve to Inc. L & LAE Ratio	0.822	392,161
C. Net PH Funds Subj to Inv (A6 + B3)		
		558,833
D. Average Rate of Return		
		5.08%
E. Investment Earnings from Net Reserves (D) x (E)		
		28,389
F. Average Rate of Return as a Percent of Direct Earned Premium (F) / (A1)		
		2.84%

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line A-1

All calculations are displayed per \$1,000,000 direct earned premiums.

Line A-2

The mean unearned premium reserve is determined by multiplying the direct earned premiums in line (1) by the ratio of the mean unearned premium reserve to the collected earned premium for calendar year ended 12/31/current year for all companies writing Dwelling insurance in North Carolina. These data are from page 15 of the Annual Statement.

1. Collected Earned Premium for Calendar Year ended 12/31/current year	156,729,285
2. Unearned Premium Reserve as of 12/31/prior year	60,695,380
3. Unearned Premium Reserve as of 12/31/current year	63,261,713
4. Mean Unearned Premium Reserve $1/2 [(2) + (3)]$	61,978,547
5. Ratio (4) \div (1)	0.3954

Line A-3

Deduction for prepaid expenses:

Production costs and a large part of the other company expenses in connection with the writing and handling of Dwelling policies, exclusive of claim adjustment expenses, are incurred when the policy is written and before the premium is paid. The deduction for these expenses is determined from data provided by the NCRB for the year ended 12/31/current year.

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line B-2

The expected loss and loss adjustment expense ratio reflects the expense provisions for the year ended 12/31/current year.

Line B-3

The mean loss reserve is determined by multiplying the incurred losses in line (2) by the North Carolina ratio of the mean loss reserves to the incurred losses for Dwelling insurance. This ratio is based on North Carolina companies' Page 15 annual statement data and has been adjusted to include loss adjustment expense reserves.

1	Incurring Losses for CY	1999	275,969,678
2	Incurring Losses for CY	2000	68,179,308
3	Incurring Losses for CY	2001	25,207,960
4	Incurring Losses for CY	2002	64,812,574
5	Incurring Losses for CY	2003	79,674,595
6	Loss Reserves as of 12/31	1998	41,481,308
7	Loss Reserves as of 12/31	1999	128,076,459
8	Loss Reserves as of 12/31	2000	56,313,782
9	Loss Reserves as of 12/31	2001	38,411,135
10	Loss Reserves as of 12/31	2002	27,203,722
11	Loss Reserves as of 12/31	2003	33,107,270
12	Mean Loss Reserve	1999	84,778,884
13	Mean Loss Reserve	2000	92,195,121
14	Mean Loss Reserve	2001	47,362,459
15	Mean Loss Reserve	2002	32,807,429
16	Mean Loss Reserve	2003	30,155,496
17	Loss Reserve Ratio	1999	0.307
18	Loss Reserve Ratio	2000	1.352
19	Loss Reserve Ratio	2001	1.879
20	Loss Reserve Ratio	2002	0.506
21	Loss Reserve Ratio	2003	0.378
22	Average Loss Reserve Ratio		0.885
23	Ratio of LAE Reserves to Loss Reserves		0.166
24	Ratio of Incurred LAE to Incurred Losses		0.255
25	Loss and LAE Reserve/Incurred Loss&LAE		0.822

ESTIMATED INVESTMENT EARNINGS ON UNEARNED
PREMIUM RESERVES AND ON LOSS RESERVES

EXPLANATORY NOTES

Line E

The average rate of return is calculated as the arithmetic mean of the embedded and current yields. The embedded yield is the sum of two ratios: the most recent ratio of investment income to invested assets, plus the ten year average ratio of capital gains to invested assets (see page 12). The current yield is the estimated, currently available rate of return (including income and expected capital gains) on the property/casualty industry investment portfolio (see page 11).

Embedded Yield =	4.04% + 1.23% =	5.27%
Current Yield =		4.90%
Average =		5.08%

PORTFOLIO YIELD AND TAX RATE - CURRENT YIELD				
(1)	(2)	(3)	(4)	(5)
Investable Asset	Percent of Assets	Estimated Prospective Pre-Tax Return	Tax Rate	Estimated Prospective Post-Tax Return
Bonds				
U.S. Govt	13.17%	3.90%	35.00%	2.54%
States & territories	12.52%	3.46%	5.25%	3.28%
Special revenue	22.22%	3.41%	5.25%	3.23%
Public Utilities	1.66%	4.56%	35.00%	2.96%
Industrial	20.64%	4.44%	35.00%	2.89%
Preferred stock	1.51%	6.21%	14.18%	5.33%
Common stock	18.28%	11.61%	31.92%	7.90%
Mortgage Loans	0.25%	5.70%	35.00%	3.71%
Real estate	0.92%	7.15%	35.00%	4.65%
Cash & short-term invs.	8.83%	3.21%	35.00%	2.09%
Rate of Return Pre-Inv Exp	100.00%	5.28%	26.68%	3.87%
Investment Expenses		0.38%	35.00%	0.25%
Portfolio Rate of Return		4.90%	26.03%	3.62%

Sources:

Various issues of Federal Reserve Statistical Release, H.15(519).

Mergent Bond Record.

Standard & Poor's CreditWeek.

Value Line Investment Survey, Part II.

Ibbotson Associates, SBBi Valuation Edition 2005 Yearbook.

Ibbotson and Siegel, AREUEA Journal, 1984.

A.M. Best's Aggregates & Averages, 2005 edition.

PORTFOLIO YIELD AND TAX RATE EMBEDDED YIELD		
	Income	Tax Rate
Bonds		
Taxable	21,696,435	35.00%
Non-Taxable	11,340,140	5.25%
Stocks		
Taxable	3,285,602	14.18%
Non-Taxable	2,131,399	5.25%
Mortgage Loans	169,603	35.00%
Real Estate	1,646,000	35.00%
Contract Loans	981	35.00%
Cash / Short Term Inv.	1,189,806	35.00%
All Other	3,751,696	35.00%
Total	45,211,662	24.62%
Inv. Expenses	4,064,665	35.00%
Net Inv. Income	41,146,997	23.59%
Mean Invested Assets	1,018,810,319	
Inv. Inc. Yield Rate	4.04%	23.59%
Capital Gains (10 yr. avg) (% Of Inv. Assets)	1.23%	35.00%
Invest. Yield Rate (pre-tax)	5.27%	26.26%
Invest. Yield Rate (post-tax)	3.89%	

Source: Best's Aggregates and Averages, 2005 Edition, p. 12 (Exhibit of Net Investment Income, Col. 2 (Earned During Year)).

Capital Gains: RB-17, page 13

**CAPITAL GAINS OR LOSSES
AS A PERCENT OF MEAN ASSETS**
(All amounts in thousands of dollars)

Calendar Year	Mean Total Invested Assets	Realized Capital Gains	
		Amount	Percent
1995	636,756,797	5,997,029	0.94%
1996	682,407,194	9,243,907	1.35%
1997	733,433,983	10,807,929	1.47%
1998	781,421,247	18,019,189	2.31%
1999	797,920,622	13,016,157	1.63%
2000	794,195,460	16,204,649	2.04%
2001	785,530,275	6,630,679	0.84%
2002	815,037,267	2,770,997	0.34%
2003	908,024,056	6,280,196	0.69%
2004	1,018,810,319	9,113,199	0.89%
Total	7,953,537,218	98,083,931	1.23%

*Mean total invested assets is the average of the current year and prior year values of total invested assets (annual statement page 2, Line 9).

Source: "Best's Aggregates & Averages--Property-Casualty,"
various editions

**NORTH CAROLINA
DWELLING FIRE AND EXTENDED COVERAGE**

PREMIUM-TO-SURPLUS RATIOS

<u>Year</u>	<u>Fire</u>	<u>Extended Coverage</u>
1995	1.256	1.376
1996	1.365	1.381
1997	1.058	1.083
1998	1.042	0.978
1999	1.054	1.013
2000	1.047	1.095
2001	1.153	1.198
2002	1.302	1.330
2003	1.271	1.244
2004	1.297	1.288
Five-Year Average	1.214	1.231
Ten-Year Average	1.185	1.199

Notes:

- 1 Ratios based on net premium written.
- 2 From Best's Data Service and Best's Aggregate and Averages.
- 3 Top 30 groups each year.

**NORTH CAROLINA DWELLING FIRE AND EXTENDED COVERAGE
CALCULATION OF GAAP NET WORTH TO SURPLUS RATIO**

	1999	2000	2001	2002	2003
Policyholder Surplus	334,348,173,079	317,360,616,515	289,605,554,159	285,385,631,797	347,020,052,576
+ Deferred Acquisition Costs	16,075,447,974	16,702,143,897	18,331,855,434	21,228,221,405	23,633,976,782
+ Revenue Offset Provision	7,392,359,287	7,680,547,924	0	0	-
+ Loss Reserve Discounting Provision	16,759,902,155	16,029,012,263	12,395,001,383	20,975,201,995	18,945,643,538
- Deferred Fresh Start Benefit	(110,445,195)	(29,064,525)	0	0	-
- Deferred Taxes on Unrealized Capital Gains	(20,173,111,830)	(19,269,614,804)	0	0	-
+ Non-admitted Assets	13,053,945,756	14,405,827,828	14,452,932,464	15,273,483,824	16,495,566,662
+ Excess of Statutory over Statement Reserves	1,055,252,609	724,549,081	0	0	-
+ Provision for Reinsurance	4,683,667,991	5,198,852,067	5,471,002,096	6,130,614,136	5,802,642,707
+ Provision for FAS 115	(5,886,678,087)	6,508,564,466	5,281,971,040	10,573,599,824	11,598,154,936
- Surplus Notes	(5,245,277,655)	(5,647,941,412)	(6,648,831,578)	(8,050,443,917)	(9,589,168,207)
GAAP-adjusted Net Worth	361,953,236,084	359,663,493,299	338,889,484,998	351,516,309,064	413,906,868,994
Ratio of GAAP Net Worth to Statutory Surplus	1.08	1.13	1.17	1.23	1.19
Five Year Average	1.16				

Source: ISO