# NORTH CAROLINA RATE BUREAU

# **2022 RATE FILING**

MOBILE HOME (C)



October 31, 2022

Honorable Mike Causey Commissioner of Insurance North Carolina Department of Insurance Raleigh, NC 27699

Re: Revision of Mobile Homeowners MH(C) Insurance Rates

Dear Commissioner Causey:

Enclosed herewith for filing on behalf of all member companies of the North Carolina Rate Bureau are revised premium rates and relativities for Mobile Homeowners MH(C) insurance subject to the jurisdiction of the North Carolina Rate Bureau.

The enclosed memoranda and exhibits set forth and explain the calculations for needed rate level changes totaling an overall indicated statewide average rate level change of 53.4% for Mobile Homeowners MH(C) insurance. For filing purposes, these changes are proposed to be implemented over a two year period with an overall statewide average rate level change of +23.2% for Mobile Homeowners MH(C) insurance to be effective 7/1/2023 (28.2% change for Mobile Home Structures coverages, 15.1% change for Adjacent Structures coverages, and a 1.4% change for Liability coverages), and an overall statewide average rate level change of +24.5% for Mobile Homeowners MH(C) insurance to be effective 7/1/2024 (28.7% change for Mobile Home Structures coverages, 15.9% change for Adjacent Structures coverages, and a 2.4% change for Liability coverages). The two-year phased implementation approach seeks to mitigate the impact of rate increases on policyholders, while striving for the Bureau's goal of rate adequacy. The filing shows revised rate levels varying by territory and revised windstorm and hail exclusion credits.

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. In preparing this filing, due consideration has been given to the factors specified in G.S. 58-36-10(2) and G.S. 58-36-10(7).

Information and 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) Joanna Biliouris, General Manager; b) Paul Anderson, Milliman; (c) Minchong Mao, Aon; and (d) Dr. George Zanjani, University of Alabama are submitted herewith.

We propose that the revised rates and territory definitions become effective according to the following rule of application:

The Year 1 changes are applicable to all new and renewal policies becoming effective on or after July 1, 2023. The Year 2 changes are applicable to all new and renewal policies becoming effective on or after July 1, 2024.

Your approval of these changes is respectfully requested. Sincerely,

Doanna Biliourus

Joanna Biliouris General Manager

# North Carolina Mobile Homeowners MH(C) Program

### **Explanatory Memorandum**

This memorandum has been prepared in support of the North Carolina Rate Bureau's ("NCRB") proposed revision to the North Carolina Mobile Homeowners MH(C) program. The rate indications developed in this analysis are based on an assumed effective date of July 1, 2023 and the assumption that rates will be in effect for one year.

Note that Mobile Homeowners MH(C) policies provide flood coverage, including coverage for both inland flood and storm surge. Accordingly, the analysis underlying this rate filing includes both types of flood losses.

In this filing, the term "hurricane losses" refers to losses identified as being caused by a hurricane and is intended to include hurricane wind losses and storm surge flood losses. The term "catastrophe" generally refers to all losses identified as being caused by a catastrophe, including but not limited to hurricane, inland flood, and non-hurricane windstorm losses.

### Premium, Loss, and Expense Experience

This proposed revision is based on the combined premium and loss experience of all licensed companies writing Mobile Homeowners MH(C) insurance in North Carolina, except as noted in Section E, Supplemental Information.

The rate indication and rating plan analysis included in this filing were performed using data for calendar/accident years 2017 through 2021 provided by all member companies writing Mobile Homeowners MH(C) insurance in North Carolina. The data provided by member companies was collected and combined by Milliman, Inc. (Milliman) at the direction of the North Carolina Rate Bureau. The data was reviewed by Milliman for reasonability and consistency. In this filing, the above-mentioned data will be referred to as the "data provided by member companies." More information regarding the data editing procedures used by Milliman can be found in *Section E, Supplemental Information*.

The data provided by member companies included both loss and allocated loss adjustment expenses (ALAE), and these items were combined for the purpose of this analysis. The terms "loss" and "losses", as used in this memorandum, represent losses and ALAE combined. Underwriting expenses, unallocated loss adjustment expenses, and deviations data used in the analysis were provided and reviewed by the North Carolina Rate Bureau.

### Statewide Indicated Rate Changes

The overall statewide indicated rate changes were calculated separately for Mobile Home Structures, Adjacent Structures, Personal Effects, and Liability. The following describes the key elements of the statewide indications:

 Loss Experience - The Mobile Homeowners insurance experience for the MH(C) program was compiled on a calendar/accident year basis for the five-year period beginning with the year ending December 31, 2017 and continuing through the year ending December 31, 2021, the most recent period for which such experience is available. For each twelve-month period, the accident year experience reflects losses from accidents occurring during that period with the premiums and number of mobile home exposures "earned" during the same period. Since this filing utilizes modeled hurricane losses, the actual hurricane losses (which include wind losses and storm surge losses) have been removed from the loss experience used for the rate indications.

The losses compiled for each accident year are incurred losses (i.e., paid losses plus outstanding case loss reserves).

• Excess Wind Losses and Excess Wind Loss Factor – Because hurricane and other large-scale wind loss events are highly volatile in nature, both hurricane models and an excess wind procedure were used to achieve stability and adequacy in the indicated rates. As a result, extreme shifts in the rates (either upward or downward) due to the occurrence or non-occurrence of hurricanes or other large wind losses will be avoided. The excess wind procedure used for non-hurricane wind losses is described below. Modeled hurricane losses are discussed in more detail later in this memorandum.

Statewide excess wind losses are calculated for each accident year by first removing actual hurricane wind and storm surge losses and then determining an expected long-term ratio of wind losses relative to total non-hurricane losses excluding wind and flood losses. In determining the expected long-term ratio of wind losses to total non-hurricane losses excluding wind and flood losses, the historical ratios for accident years in which unusually large wind losses were incurred are capped at five times the median statewide wind-to-total-minus-wind-and-flood ratio.

All losses in excess of this expected wind ratio are defined as excess wind losses. The ratio of wind losses to total non-hurricane losses excluding wind and flood losses for a given year is composed of two parts:

- (1) The capped excess wind loss ratio; and
- (2) The excess wind loss ratio above the cap.

The resulting actual excess wind losses identified using the methodology above are then removed from the loss experience used in developing rates. The long-term impact of excess losses (i.e., losses not related to hurricanes and, therefore, not accounted for in the hurricane model) is accounted for in the rates through the use of an excess wind factor, which is calculated using the following formula:

Excess Wind Loss Factor =

1.0 + [(Average Capped Excess Wind Ratio + Average Excess Wind Ratio above the Cap) / (1.0 + Average Capped Wind Ratio - Average Capped Excess Wind Ratio)]

The excess wind methodology for all MH(C) Property coverages combined can be found on Section C, Page 43.

To determine excess wind losses for each MH(C) Property coverage, the total non-hurricane excess wind losses for each accident year were allocated based on the distribution of incurred wind losses by coverage (see *Section C, Page 44*). Note: the excess wind method is not applicable to the development of the rate indication for the MH(C) Liability coverage.

 Excess Flood Losses and Excess Flood Loss Factor – Because flood loss events are also highly volatile in nature, an excess flood procedure was used to achieve stability and adequacy in the indicated rates. The excess flood procedure used was analogous to the excess wind procedure described above. Statewide excess flood losses are calculated for each accident year by first removing actual hurricane flood (i.e., storm surge) losses and then determining an expected long-term ratio of flood losses relative to total non-hurricane losses excluding wind and flood losses. In determining the expected long-term ratio of flood losses to total non-hurricane losses excluding wind and flood losses, the historical ratios for accident years in which unusually large flood losses were incurred are capped at five times the median statewide flood-to-total-minus-wind-and-flood ratio.

All losses in excess of this expected flood ratio are defined as excess flood losses. The ratio of flood losses to total non-hurricane losses excluding wind and flood losses for a given year is composed of two parts:

- (1) The capped excess flood loss ratio; and
- (2) The excess flood loss ratio above the cap.

The resulting actual excess flood losses identified using the methodology above are then removed from the loss experience used in developing rates. The long-term impact of excess losses (i.e., losses not related to hurricanes and, therefore, not accounted for in the hurricane model) is accounted for in the rates through the use of an excess flood factor, which is calculated using the following formula:

Excess Flood Loss Factor =

1.0 + [(Average Capped Excess Flood Ratio + Average Excess Flood Ratio above the Cap) / (1.0 + Average Capped Flood Ratio - Average Capped Excess Flood Ratio)]

The excess flood methodology for all MH(C) Property coverages combined can be found on Section C, Page 45.

To determine excess flood losses for each MH(C) Property coverage, the total non-hurricane excess flood losses for each accident year were allocated based on the distribution of incurred flood losses by coverage (see *Section C, Page 46*). Note: the excess flood method is not applicable to the development of the rate indication for the MH(C) Liability coverage.

- Loss and Claim Development To develop the incurred Mobile Homeowners losses and reported claims to ultimate, cumulative loss development factors (LDFs) and cumulative claim development factors (CDFs) are applied to incurred losses and reported claims, respectively. To derive these factors, Mobile Homeowners loss and claim triangles were constructed using data provided by member companies. These triangles were aggregated separately by coverage. Using these aggregate triangles, age-to-age LDFs and CDFs were selected and age-to-ultimate LDFs and CDFs were calculated (see Section C, Pages 47 through 54).
- Unallocated Loss Adjustment Expenses (ULAE) The incurred losses used in the rate indication do not include ULAE. To account for these expenses, the incurred losses were multiplied by a ULAE factor selected based on five years of historical incurred ULAE-to-incurred loss & ALAE ratios provided by the North Carolina Rate Bureau. A separate selected catastrophe LAE factor was applied to the modeled hurricane losses (see Section C, Page 72). See the pre-filed testimony of M. Mao for support of the catastrophe LAE factor.
- **Loss Trend** To trend losses, frequency and severity trends were selected by coverage based on six years of quarterly claims data provided by member companies.

So as not to distort the indicated trends, historical catastrophe losses were removed from the loss and claim count data. Because catastrophe losses other than hurricane and flood were not explicitly identified in the data provided by member companies, weekly claim data was reviewed by peril (water and wind) in order to identify catastrophe events. For each peril, weeks during the experience period which had reported claim counts that were greater than two times the standard deviation of weekly reported claims were identified as having catastrophe events. The claims and losses for each peril that occurred during those weeks were excluded from the loss trend analysis.

In order to evaluate trends, both claims and losses were developed to ultimate based on the cumulative claim and loss development factors discussed above. In order to apply these annual development factors to quarterly claims and losses, the factors were interpolated exponentially to derive quarterly development factors.

In trending losses, a two-step trending procedure was used. Frequency and severity trend rates were selected by coverage separately for the experience trend period and the projection trend period. The experience trend period is defined as the first calendar-accident day associated with the data provided by member companies, or January 1, 2017, up to and including the last calendar-accident day provided in the data provided by member companies, or December 31, 2021. The projection trend period is defined as the end date of the experience period, or December 31, 2021, up to the average accident date of the one-year policy period during which the rates are projected to be in effect, or July 1, 2024. Loss trend rates were then calculated for each coverage using the following formula:

Loss Trend Rate = (1 + Frequency Trend Rate) x (1 + Severity Trend Rate) – 1.

Loss trend factors were calculated by coverage for each accident year based on the selected loss trend rates and trend periods. For each accident year, the experience period is calculated as the amount of time from the average accident date within the accident year to the end of the experience period, or December 31, 2021. The projection period is calculated for all accident years as the amount of time from the end date of the experience period, or December 31, 2021, up to the average accident date of the one-year policy period during which the rates are projected to be in effect, or July 1, 2024.

The selected frequency, severity, and loss trend rates, as well as the resulting loss trend factors for each MH(C) coverage are shown in *Section C, Pages 57 through 60*. The calculation of the loss trend factors for each of the MH(C) coverages is shown in *Section C, Pages 55 and 56*. *Section C, Page 61* shows the interpolation of the cumulative development factors.

- Exposure Trend Exposure trends were selected by coverage to account for changes in the
  amounts of insurance purchased by policyholders over time. The indicated exposure trend rates
  were calculated based on the average amount of insurance per policy (see Section C, Page 62).
  The selected exposure trends were provided to Aon to be applied during the process of determining
  modeled hurricane losses.
- Premium Trend Premium trends were selected by coverage to account for changes in the
  average premium per policy over time. The indicated premium trend rates were calculated based
  on the average rating factors for each accident year and for each coverage.

The historical average rating factors were used to calculate various estimates of the average annual change in premium. Similar to the loss trends, premium trend rates were selected separately for the experience period and the projection period (see *Section C, Page 64*). The experience trend

period is defined as the first calendar accident day associated with the data provided by member companies, or January 1, 2017, up to and including the last calendar accident day in the data provided by member companies, or December 31, 2021. The projection trend period is defined as the end date of the experience period, or December 31, 2021, up to the average written date of the period during which the rates are projected to be in effect, or January 1, 2024.

Following the selection of premium trend rates by coverage, premium trend factors were calculated for each accident year based on the selected premium trend rates and trend periods. For each calendar year, the experience period is calculated as the amount of time from the average written date within the calendar year to the end of the experience period, or December 31, 2021. The projection period is calculated for all calendar years as the amount of time from the end date of the experience period, or December 31, 2021, up to the average written date of the period during which the rates are projected to be in effect, or January 1, 2024 (see Section C, Page 63).

• Average Rating Factors – The rate indications included within this filing are calculated at a base class level. In order to convert the historical experience to a consistent base class level, average rating factors are used. The average rating factors represent the ratio of the average premium (earned premium at current manual rate level divided by the number of earned house years) and the average base class premium. Earned premiums at current manual rates are calculated using the extension of exposures method, which multiplies the rates in effect at the time of the review by the number of earned house years for each risk in the data provided by member companies. The current base class rate used in the rate indication is defined by the following policy characteristics for each MH(C) coverage:

**Current MH(C) Base Class Definitions** 

	Amount of				Tie-Down
Coverage	Insurance	Deductible	Policy Form	Occupancy	Credit
Mobile Home Structures	\$20,000	\$250	Named Perils	Owner- Occupied	No
Adjacent Structures	\$2,000	\$250	Named Perils	Owner- Occupied	No
Personal Effects	\$5,000	\$250	All Perils	N/A	No
Liability	\$25,000	N/A	N/A	N/A	N/A

The policy characteristics of the current base class, which are used to convert the historical experience to a consistent level for the purposes of calculating indicated rate changes, are not necessarily the same as the base policy characteristics presented in the current MH(C) rate manual from which policyholder premiums are calculated.

Credibility – Credibility of the historical experience was considered in several places throughout
this filing, including in the determination of the total base class loss cost calculated for each
coverage and each territory as well as in the selection of loss trends.

To determine the credibility of the non-hurricane mobile homeowners loss costs for each coverage, a limited fluctuation credibility methodology was used, as explained in a CAS Proceedings Paper "Credibility of the Pure Premium" by Mayerson, Jones, and Bowers. This methodology assumes that loss costs are normally distributed and the standard for full credibility is based on a 90% probability that the observed loss cost is within 10% of the expected loss cost. The methodology is intended to limit the effect that random fluctuations in the data can have on the indicated loss cost.

Based on the limited fluctuation credibility model framework, the formula for the full credibility standard  $(N_c)$  is equal to:

$$N_C = (z/k)^2 = 271$$

where:  $N_C = \#$  of claims required for full credibility (rounded to nearest integer)

z = 1.645 (from the standard normal table corresponding to a 90% confidence interval)

k = 10% (tolerance for error)

For each coverage, the number of claims,  $N_c$ , required for full credibility from the formula above was converted from a claims basis into an earned house years basis using a frequency and severity modification. This conversion was performed using the five-year historical frequency, average severity, and variance of the severity distribution for each coverage in the following formula:

$$N_E = (N_C/f) \times (1 + \sigma^2/s^2) = 30,000$$

where:  $N_E = \#$  of earned house years required for full credibility (rounded up to nearest 10,000)

f = Five-Year Claim Frequency

 $\sigma^2$  = Variance of the Severity Distribution

s = Average Claim Severity

Using  $N_E$  as the standard for full credibility, the credibility (Z) for each statewide coverage and each territory or territory group was calculated using the standard Square Root Rule or:

$$Z = (E/N_E)^{0.5}$$

where: Z = Credibility of Segment (limited to a maximum of 1.00)

E = Five-Year Earned House Years

The table below displays the standard for full credibility for each coverage, the statewide total house years during the experience period, and the calculated credibility:

Coverage	Standard (N <sub>E</sub> )	Earned House Years (E)	Credibility (Z)
Mobile Home Structures	30,000	408,031	100.0%
Adjacent Structures	80,000	359,899	100.0%
Personal Effects	100,000	404,663	100.0%
Liability	1,970,000	402,215	45.2%

The credibility-weighted loss cost from the NCRB's 2021 mobile homeowners MH(C) rate filing (trended to the proposed policy period) was used as the complement of credibility (CC) such that the credibility-weighted loss cost (LCcw) is calculated as:

$$LC_{CW} = LC \times Z + CC \times (1.0 - Z)$$

where: LC<sub>CW</sub> = Credibility-Weighted Loss Cost

LC = Indicated Base Class Loss Cost

CC = Complement of Credibility

To calculate the credibility of the indicated loss trends, limited fluctuation credibility was also used. A claims standard of 1,082 was used, which represents the number of claims needed to be within 5% of the expected trends with 90% probability. As the credibility was only used for informational purposes when making trend selections, no complement of credibility was used.

- Modeled Hurricane Loss Costs Statewide average annual hurricane losses for each MH(C) property coverage were provided by Aon evaluated as of December 31, 2021. The losses provided are based on an average of the AIR Touchstone v9 hurricane model and the RMS RiskLink v21 hurricane model. The losses were determined based on exposures that were trended to the proposed policy period and loaded for LAE using the selected 6.0% catastrophe LAE factor. On Section C, Page 68, the modeled hurricane losses are divided by the product of the 2021 earned house years, the 2021 average rating factor, and the 2021 premium trend factor to derive the modeled hurricane base class loss cost for each coverage.
- Underwriting Expenses Section C, Page 71 shows five years of aggregate premium and aggregate underwriting expenses for all companies writing MH(C) policies in North Carolina. The expense ratios shown for Commission & Brokerage and for Taxes, Licenses, & Fees use written premium as the denominator because these expenses are typically incurred when policies are written. The ratios for Other Acquisition and General Expenses use earned premium as the denominator because these expenses are typically incurred over the entire length of the policy. The selected expense ratios reflect an average of the historical ratios over the last three years for each expense item. The sum of the expense ratios for Commission & Brokerage expenses and Taxes, Licenses, and Fees comprise the prospective policy's variable expense load whereas the sum of the expense ratios for Other Acquisition and General Expense comprise the fixed expense load.
- Expense Trend Trend rates for fixed expenses, similar to loss trend rates, were selected separately for the experience period and the projection period. Indicated expense trend rates were derived from several different expense indices the Consumer Price Index (including all items), the Consumer Price Index (all items excluding Energy), and the Compensation Cost Index. Additionally, a blended indication was derived by using a weighted average of the three indices with weights of 25%, 25%, and 50%, respectively.

The selected expense trend rates are used to calculate expense trend factors by coverage, which are used in the calculation of the fixed expense per policy. Section C, Page 69 shows the derivation of the expense trend factors, which are calculated in a manner similar to the loss trend factors. The experience trend period spans from the average date of incurred expense over the most recent three years, or July 1, 2020, to the end date of the experience period, or December 31, 2021. The projection trend period spans from the end date of the experience period, or December 31, 2021, to the average written date of the prospective policy period, or January 1, 2024.

- **Fixed Expense Per Policy** To calculate the fixed expense per policy, trended fixed expense ratios were calculated by multiplying the selected fixed expense ratios from *Section C, Page 71* by the expense trend factor and dividing by the 2020 premium trend factor (since the average date of expenses underlying the fixed expense ratios is 7/1/2020). The fixed expense per policy was then calculated on *Section C, Page 70* by multiplying the trended fixed expense ratios by the average current base premiums.
- **Profit** See the pre-filed testimony of G. Zanjani.
- **Contingencies** See the pre-filed testimony of P. Anderson.

- **Policyholder Dividends** *Section C, Page 73* contains support for the selected policyholder dividends, which was selected using five years of historical homeowners dividend and written premium data. See also the pre-filed testimony of P. Anderson.
- Compensation for Assessment Risk The provisions for compensation for assessment risk are calculated by coverage as (0.016 x Current Average Base Rate) / (1.0 Commission & Brokerage Taxes, Licenses, & Fees), as shown in Section C, Page 74. The 1.6% compensation for assessment risk provision is based on an analysis completed by Milliman. See also the pre-filed testimony of P. Anderson.
- **Net Cost of Reinsurance** The provisions for the net cost of reinsurance are based on an analysis performed by Aon. *Section C, Pages 75-77* show the average net cost of reinsurance by territory group as well as the statewide total as determined based on 2021 earned house years. The base class net cost of reinsurance is then determined by adjusting the average net cost of reinsurance by the 2021 average rating factor, 2021 premium trend factor, and variable expenses at both the statewide and territory group level.
- Net Deviations Section C, Page 78 compares actual written premium (including net deviations) to manual written premium (excluding net deviations) by calendar year to calculate the average net deviation from manual premiums. A provision of 5.0% was selected for net deviations. See also the pre-filed testimony of P. Anderson.

### **Indicated Rate Changes by Territory Group**

In addition to the statewide rate indications, rate changes by territory group were also calculated for each coverage except Liability. The methodology for calculating the indicated rate changes at the territory group level is generally the same as the methodology used to produce the statewide indications. To calculate the indications by territory group, indicated base class loss costs (Section C, Pages 10-20, 21-31, and 32-42), trended fixed expenses, the compensation for assessment risk, and the net cost of reinsurance (Section C, Pages 75 through 77) are calculated for each territory group and each coverage. The statewide excess wind and excess flood losses by coverage were allocated to each territory group using the distribution of wind and flood losses by accident year (see Section C, Pages 19, 20, 30, 31, 41, and 42). The indicated base rate excluding deviations was then calculated for each territory group for each coverage. The deviation per exposure was then added to the indicated base rates by territory group to derive the indicated required base class rate by territory group. Indicated rate changes were subsequently calculated by comparing the indicated required base class rate to the current base rate. See Section C, Pages 10, 21, and 32 for more details.

# North Carolina Mobile Homeowners MH(C) Program

**Section A** 

**Summary of Overall Rate Change** 

### North Carolina Mobile Homeowners MH(C)

Summary of Indicated and Proposed Rate Changes

	2021 Earned Premium at Current	2021 Earned	Indicated Rate	Proposed Ra	te Change <sup>2</sup>
Coverage	Manual Level	House Years <sup>1</sup>	Change	Year 1	Year 2
Mobile Home Structures	\$64,510,959	82,585	65.0%	28.2%	28.7%
Adjacent Structures	5,337,948	72,369	33.4%	15.1%	15.9%
Personal Effects	11,872,318	82,313	3.8%	1.4%	2.4%
Sub-Total: Property Coverages	\$81,721,225	82,585	54.1%	23.4%	24.8%
Liability	2,467,108	81,935	30.1%	14.1%	14.1%
Total: All Coverages	\$84,188,333	82,914	53.4%	23.2%	24.5%

<sup>&</sup>lt;sup>1</sup> The 2021 earned house years in Sub-Total: Property Coverages is equal to the maximum across all property coverages; The 2021 earned house years in Total: All Coverages is equal to the Statewide Total from Section A, Page 2

The proposed rate changes by coverage were selected by the North Carolina Rate Bureau and reflect the implementation of the proposed rates over a two-year period in order to reduce the impact of the rate increases on policyholders, with proposed effective dates of July 1, 2023 for Year 1 and July 1, 2024 for Year 2.

### North Carolina Mobile Homeowners MH(C)

Summary of Indicated and Proposed Rate Changes by Territory Group

	2021 Earned Premium at Current Manual Level					2021 Earned House Years				
Territory Group	Mobile Home Structures	Adjacent Structures	Personal Effects	Liability	Total	Mobile Home Structures	Adjacent Structures	Personal Effects	Liability	Total 1
1	\$2,752,109	\$179,986	\$463,938	\$55,518	\$3,451,552	1,972	1,489	1,905	1,844	1,972
2	3,478,215	299,046	570,202	81,388	4,428,851	2,749	2,318	2,704	2,703	2,749
3	10,591,276	838,950	1,903,362	387,945	13,721,533	13,320	10,886	13,054	12,884	13,320
4	9,261,992	841,130	1,586,980	293,252	11,983,353	9,888	8,731	9,826	9,739	9,888
5	9,093,374	786,106	1,536,256	322,785	11,738,521	10,891	9,266	10,729	10,720	10,891
6	29,333,993	2,392,729	5,811,580	1,326,219	38,864,522	43,762	39,679	44,093	44,045	44,093
Statewide	\$64.510.959	\$5.337.948	\$11.872.318	\$2.467.108	\$84.188.333	82.583	72.368	82.312	81.935	82.914

<sup>&</sup>lt;sup>1</sup> Total column is equal to the maximum earned house years across all coverages within each Territory Group

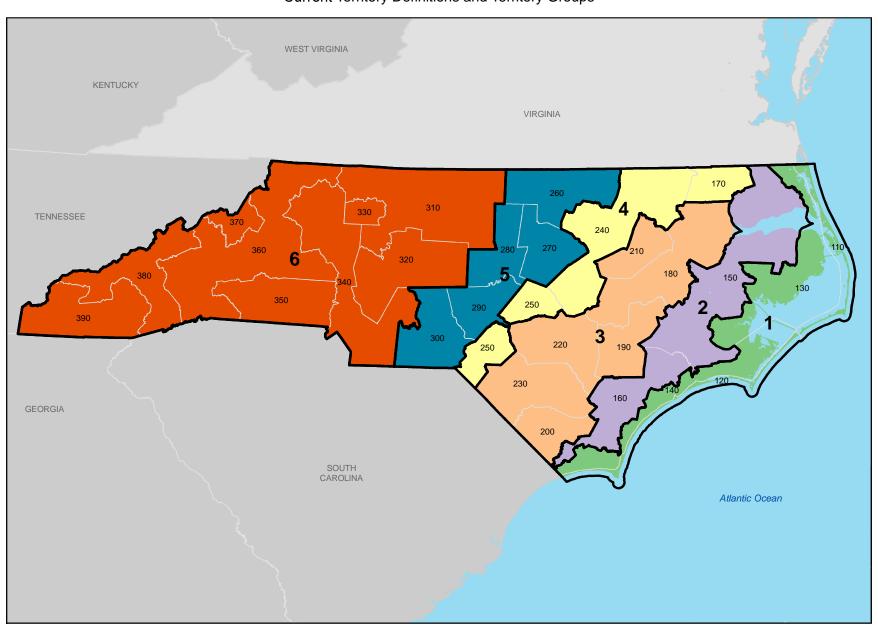
		Ind	Indicated Rate Change Proposed Rate Change - Year 1					Year 1		
Territory Group	Mobile Home Structures	Adjacent Structures	Personal Effects	Liability	Total	Mobile Home Structures	Adjacent Structures	Personal Effects	Liability	Total
1	96.9%	80.2%	80.9%	30.1%	92.8%	40.3%	34.2%	34.5%	14.1%	38.8%
2	56.1%	25.2%	37.8%	30.1%	51.2%	24.9%	11.9%	17.4%	14.1%	22.9%
3	106.3%	80.5%	26.4%	30.1%	91.5%	43.6%	34.4%	12.4%	14.1%	37.9%
4	75.4%	29.2%	3.6%	30.1%	61.5%	32.4%	13.7%	1.8%	14.1%	26.6%
5	56.9%	18.5%	-6.6%	30.1%	45.3%	25.3%	8.8%	-3.4%	14.1%	20.1%
6	47.5%	20.8%	-10.3%	30.1%	36.6%	21.4%	9.9%	-5.3%	14.1%	16.5%
Statewide	65.0%	33.4%	3.8%	30.1%	53.4%	28.2%	15.1%	1.4%	14.1%	23.2%

	2021 Earned Premium at Proposed Year 1 Rate Level					Proposed Rate Change - Year 2				
Territory Group	Mobile Home Structures	Adjacent Structures	Personal Effects	Liability	Total	Mobile Home Structures	Adjacent Structures	Personal Effects	Liability	Total
1	\$3,862,149	\$241,609	\$623,972	\$63,336	\$4,791,067	40.3%	34.2%	34.5%	14.1%	38.9%
2	4,345,559	334,593	669,412	92,849	5,442,413	24.9%	11.9%	17.4%	14.1%	23.0%
3	15,211,846	1,127,161	2,140,247	442,576	18,921,830	43.6%	34.4%	12.4%	14.1%	38.9%
4	12,266,456	956,203	1,615,554	334,547	15,172,761	32.4%	13.7%	1.8%	14.1%	27.6%
5	11,390,561	855,580	1,484,579	368,239	14,098,959	25.3%	8.8%	-3.4%	14.1%	21.0%
6	35,623,306	2,629,588	5,503,171	1,512,977	45,269,042	21.4%	9.9%	-5.3%	14.1%	17.3%
Statewide	\$82,699,878	\$6,144,734	\$12,036,935	\$2,814,525	\$103,696,071	28.7%	15.9%	2.4%	14.1%	24.5%

Note: The proposed rate changes by territory group were selected by the North Carolina Rate Bureau and reflect the implementation of the proposed rates over a two-year period in order to reduce the impact of the rate increases on policyholders.

### North Carolina Mobile Homeowners MH(C)

MH(C)
Current Territory Definitions and Territory Groups



# North Carolina Mobile Homeowners MH(C) Program

## **Section B**

**Changes to Base Rates and Rating Plan Relativities** 

# North Carolina Mobile Homeowners MH(C) Program

## Changes to Base Rates and Rating Plan Relativities

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Derivation of Proposed Year 1 Territory Relativities

	Average Rates & Relativites by Territory Group						
	Terr Grp 1	Terr Grp 2	Terr Grp 3	Terr Grp 4	Terr Grp 5	Terr Grp 6	
(1) Current Average Rate	\$924.55	\$946.51	\$916.27	\$1,113.25	\$1,103.95	\$1,097.04	
(2) Average Tie Down Factor	0.903	0.901	0.902	0.902	0.902	0.902	
(3) Current Territory Relativity	1.720	1.526	1.000	0.964	0.867	0.701	
(4) Current Average Deductible Credit	(35.15)	(33.47)	(30.61)	(29.33)	(26.29)	(21.62)	
(5) Current Average Premium	\$1,401.24	\$1,268.43	\$796.10	\$938.23	\$836.68	\$671.72	
(6) Earned House Years	1,964.06	2,742.14	13,303.91	9,871.77	10,868.38	43,669.89	
(7) 2021 Earned Prem at Current Rate Level	\$2,752,111	\$3,478,219	\$10,591,302	\$9,261,988	\$9,093,364	\$29,334,074	
(8) Proposed Year 1 Rate Change	40.3%	24.9%	43.6%	32.4%	25.3%	21.4%	
(9) 2021 Earned Prem at Proposed Yr 1 Rate Level	\$3,863,153	\$4,344,137	\$15,211,889	\$12,267,722	\$11,388,284	\$35,640,956	
(10) Proposed Year 1 Average Premium	\$1,966.92	\$1,584.21	\$1,143.42	\$1,242.71	\$1,047.84	\$816.14	
(11) Proposed Year 1 Average Deductible Credit	(49.33)	(41.82)	(43.97)	(38.84)	(32.94)	(26.25)	
(12) Average Tie Down Factor	0.903	0.901	0.902	0.902	0.902	0.902	
(13) Proposed Year 1 Average Rate	\$1,327.90	\$1,359.44	\$1,316.01	\$1,598.92	\$1,585.57	\$1,575.63	
(14) Proposed Year 1 Territory Relativity	1.681	1.327	1.000	0.889	0.756	0.593	

- (1), (2), (4), (6), (12) Based on data provided by member companies
- (3) From current MH(C) Rate Manual
- $(5) = (1) \times (2) \times (3) + (4)$
- (6) Excludes earned exposure with no Coverage A
- $(7) = (5) \times (6)$
- (8) From Section A, Page 2
- (9) Based on (8) and the extension of exposures method
- (10) = (9) / (6)
- $(11) = (4) \times [1 + (8)]$
- (13) Based on the extension of exposures method
- (14) = [(10) (11)] / (12) / (13)

### North Carolina Mobile Homeowners MH(C) - Adjacent Structures

Derivation of Proposed Year 1 Territory Relativities

	Average Rates & Relativites by Territory Group						
	Terr Grp 1	Terr Grp 2	Terr Grp 3	Terr Grp 4	Terr Grp 5	Terr Grp 6	
(1) Current Average Rate	\$76.34	\$87.69	\$92.66	\$118.14	\$116.00	\$110.24	
(2) Average Tie Down Factor	0.903	0.901	0.902	0.901	0.901	0.901	
(3) Current Territory Relativity	1.872	1.722	1.000	0.966	0.868	0.652	
(4) Current Average Deductible Credit	(7.73)	(7.01)	(6.49)	(6.44)	(5.87)	(4.46)	
(5) Current Average Premium	\$121.31	\$129.04	\$77.09	\$96.42	\$84.90	\$60.33	
(6) Earned House Years	1,483.69	2,317.36	10,882.90	8,723.39	9,259.57	39,662.03	
(7) 2021 Earned Prem at Current Rate Level	\$179,985	\$299,044	\$838,937	\$841,119	\$786,110	\$2,392,675	
(8) Proposed Year 1 Rate Change	34.2%	11.9%	34.4%	13.7%	8.8%	9.9%	
(9) 2021 Earned Prem at Proposed Yr 1 Rate Level	\$241,593	\$334,684	\$1,126,644	\$956,465	\$856,198	\$2,631,775	
(10) Proposed Year 1 Average Premium	\$162.83	\$144.42	\$103.52	\$109.64	\$92.47	\$66.36	
(11) Proposed Year 1 Average Deductible Credit	(10.38)	(7.85)	(8.72)	(7.32)	(6.39)	(4.90)	
(12) Average Tie Down Factor	0.903	0.901	0.902	0.901	0.901	0.901	
(13) Proposed Year 1 Average Rate	\$102.53	\$117.76	\$124.44	\$158.64	\$155.88	\$148.04	
(14) Proposed Year 1 Territory Relativity	1.871	1.435	1.000	0.818	0.703	0.534	

- (1), (2), (4), (6), (12) Based on data provided by member companies
- (3) From current MH(C) Rate Manual
- $(5) = (1) \times (2) \times (3) + (4)$
- (6) Excludes earned exposure with no Coverage B
- $(7) = (5) \times (6)$
- (8) From Section A, Page 2
- (9) Based on (8) and the extension of exposures method
- (10) = (9) / (6)
- $(11) = (4) \times [1 + (8)]$
- (13) Based on the extension of exposures method
- (14) = [(10) (11)]/(12)/(13)

### North Carolina Mobile Homeowners MH(C) - Personal Effects

Derivation of Proposed Year 1 Territory Relativities

	Average Rates & Relativites by Territory Group						
	Terr Grp 1	Terr Grp 2	Terr Grp 3	Terr Grp 4	Terr Grp 5	Terr Grp 6	
(1) Current Average Rate	\$143.10	\$158.19	\$169.93	\$214.16	\$203.65	\$205.91	
(2) Average Tie Down Factor	0.903	0.901	0.902	0.901	0.902	0.902	
(3) Current Territory Relativity	1.970	1.547	1.000	0.870	0.812	0.739	
(4) Current Average Deductible Credit	(10.06)	(9.23)	(7.40)	(6.32)	(5.78)	(5.25)	
(5) Current Average Premium	\$244.51	\$211.33	\$145.90	\$161.64	\$143.31	\$131.94	
(6) Earned House Years	1,897.43	2,698.17	13,045.90	9,818.19	10,719.91	44,047.24	
(7) 2021 Earned Prem at Current Rate Level	\$463,937	\$570,204	\$1,903,342	\$1,586,968	\$1,536,261	\$5,811,452	
(8) Proposed Year 1 Rate Change	34.5%	17.4%	12.4%	1.8%	-3.4%	-5.3%	
(9) 2021 Earned Prem at Proposed Yr 1 Rate Level	\$623,989	\$669,237	\$2,142,760	\$1,616,335	\$1,484,673	\$5,507,243	
(10) Proposed Year 1 Average Premium	\$328.86	\$248.03	\$164.25	\$164.63	\$138.50	\$125.03	
(11) Proposed Year 1 Average Deductible Credit	(13.52)	(10.83)	(8.32)	(6.43)	(5.58)	(4.97)	
(12) Average Tie Down Factor	0.903	0.901	0.902	0.901	0.902	0.902	
(13) Proposed Year 1 Average Rate	\$161.07	\$178.07	\$191.30	\$241.12	\$229.28	\$231.83	
(14) Proposed Year 1 Territory Relativity	2.354	1.613	1.000	0.787	0.697	0.622	

- (1), (2), (4), (6), (12) Based on data provided by member companies
- (3) From current MH(C) Rate Manual
- $(5) = (1) \times (2) \times (3) + (4)$
- (6) Excludes earned exposure with no Coverage C
- $(7) = (5) \times (6)$
- (8) From Section A, Page 2
- (9) Based on (8) and the extension of exposures method
- (10) = (9) / (6)
- $(11) = (4) \times [1 + (8)]$
- (13) Based on the extension of exposures method
- (14) = [(10) (11)]/(12)/(13)

## Derivation of Proposed Year 1 Base Rates Territory Group 3

Primary Residence

		- (2) \ [1 + (1)]		- (+) x [1 + (1)]		
		Compre	hensive	Named	d Perils	
Amount of	Proposed Year 1	Current	Proposed Year 1	Current	Proposed Year 1	
Insurance	Rate Change	Rate	Rate	Rate	Rate	
1 - 3,999	43.6%	\$266.25	\$382.40	\$237.31	\$340.84	
4,000 - 4,999	43.6%	284.07	408.00	253.19	363.65	
5,000 - 5,999	43.6%	298.75	429.08	266.27	382.43	
6,000 - 6,999	43.6%	314.30	451.42	280.14	402.35	
7,000 - 7,999	43.6%	330.06	474.05	294.18	422.52	
8,000 - 8,999	43.6%	345.88	496.77	308.28	442.77	
9,000 - 9,999	43.6%	362.56	520.73	323.15	464.13	
10,000 - 10,999 11,000 - 11,999	43.6% 43.6%	378.35 391.70	543.41 562.58	337.23 349.12	484.35 501.43	
12,000 - 12,999	43.6%	405.05	581.76	361.02	518.52	
13,000 - 13,999	43.6%	417.98	600.33	372.55	535.08	
14,000 - 14,999	43.6%	430.91	618.90	384.07	551.63	
15,000 - 15,999	43.6%	445.56	639.94	397.13	570.38	
16,000 - 16,999	43.6%	461.37	662.65	411.22	590.62	
17,000 - 17,999	43.6%	476.83	684.85	425.00	610.41	
18,000 - 18,999 19,000 - 19,999	43.6% 43.6%	492.20 509.04	706.93 731.11	438.70 453.70	630.09 651.63	
20,000 - 19,999	43.6%	524.87	753.85	467.82	671.91	
21,000 - 21,999	43.6%	537.52	772.02	479.09	688.10	
22,000 - 22,999	43.6%	550.17	790.19	490.37	704.30	
23,000 - 23,999	43.6%	563.54	809.39	502.29	721.42	
24,000 - 24,999	43.6%	577.10	828.87	514.37	738.77	
25,000 - 25,999	43.6%	591.70	849.84	527.38	757.46	
26,000 - 26,999	43.6%	607.10	871.95	541.11	777.18	
27,000 - 27,999 28,000 - 28,999	43.6% 43.6%	622.26 637.32	893.73 915.36	554.62 568.04	796.58 815.85	
29,000 - 29,999	43.6%	654.23	939.65	583.11	837.50	
30,000 - 30,999	43.6%	671.75	964.81	598.73	859.93	
31,000 - 31,999	43.6%	684.90	983.70	610.45	876.77	
32,000 - 32,999	43.6%	697.69	1,002.07	621.85	893.14	
33,000 - 33,999	43.6%	710.47	1,020.42	633.24	909.50	
34,000 - 34,999	43.6%	724.94	1,041.20	646.14	928.03	
35,000 - 35,999 36,000 - 36,999	43.6% 43.6%	739.62 754.29	1,062.29 1,083.36	659.22 672.30	946.81 965.60	
37,000 - 37,999	43.6%	768.97	1,104.44	685.38	984.39	
38,000 - 38,999	43.6%	783.64	1,125.51	698.46	1,003.17	
39,000 - 39,999	43.6%	798.31	1,146.58	711.54	1,021.96	
40,000 - 40,999	43.6%	812.99	1,167.67	724.62	1,040.74	
41,000 - 41,999	43.6%	827.66	1,188.74	737.70	1,059.53	
42,000 - 42,999	43.6%	842.34	1,209.82	750.78	1,078.32	
43,000 - 43,999 44,000 - 44,999	43.6% 43.6%	857.01 871.69	1,230.89 1,251.98	763.86 776.94	1,097.10 1,115.89	
45,000 - 45,999	43.6%	886.36	1,273.05	790.02	1,134.68	
46,000 - 46,999	43.6%	901.04	1,294.13	803.10	1,153.46	
47,000 - 47,999	43.6%	915.71	1,315.20	816.18	1,172.25	
48,000 - 48,999	43.6%	930.39	1,336.28	829.25	1,191.02	
49,000 - 49,999	43.6%	945.06	1,357.35	842.33	1,209.81	
50,000 - 50,999 51,000 - 51,999	43.6% 43.6%	959.74 974.41	1,378.44 1,399.51	855.41 868.49	1,228.59 1,247.38	
52,000 - 52,999	43.6%	989.09	1,420.59	881.57	1,266.17	
53,000 - 53,999	43.6%	1,003.76	1,441.66	894.65	1,284.95	
54,000 - 54,999	43.6%	1,018.43	1,462.73	907.73	1,303.74	
55,000 - 55,999	43.6%	1,033.11	1,483.82	920.81	1,322.52	
56,000 - 56,999	43.6%	1,047.78	1,504.89	933.89	1,341.31	
57,000 - 57,999	43.6%	1,062.46	1,525.97	946.97	1,360.10	
58,000 - 58,999 59,000 - 59,999	43.6% 43.6%	1,077.13 1,091.81	1,547.04 1,568.13	960.05 973.13	1,378.88 1,397.67	
60,000 - 60,999	43.6%	1,106.48	1,589.20	986.21	1,416.46	
61,000 - 61,999	43.6%	1,121.16	1,610.28	999.29	1,435.24	
62,000 - 62,999	43.6%	1,135.83	1,631.35	1,012.37	1,454.03	
63,000 - 63,999	43.6%	1,150.51	1,652.43	1,025.45	1,472.81	
64,000 - 64,999	43.6%	1,165.18	1,673.50	1,038.53	1,491.60	
65,000 - 65,999	43.6%	1,179.86	1,694.59	1,051.61	1,510.39	
66,000 - 66,999 67,000 - 67,999	43.6% 43.6%	1,194.53	1,715.66 1,736.74	1,064.69 1,077.77	1,529.17 1,547.96	
68,000 - 68,999	43.6%	1,209.21 1,223.88	1,757.81	1,090.85	1,566.75	
69,000 - 69,999	43.6%	1,238.55	1,778.88	1,103.93	1,585.53	
70,000 - 70,999	43.6%	1,253.23	1,799.97	1,117.00	1,604.30	
71,000 - 71,999	43.6%	1,267.90	1,821.04	1,130.08	1,623.09	
72,000 - 72,999	43.6%	1,282.58	1,842.12	1,143.16	1,641.88	
73,000 - 73,999	43.6%	1,297.25	1,863.19	1,156.24	1,660.66	
74,000 - 74,999 75,000 - 75,999	43.6% 43.6%	1,311.93	1,884.28	1,169.32	1,679.45	
75,000 - 75,999 76,000 - 76,999	43.6% 43.6%	1,326.60 1,341.28	1,905.35 1,926.43	1,182.40 1,195.48	1,698.24 1,717.02	
77,000 - 77,999	43.6%	1,355.95	1,947.50	1,208.56	1,735.81	
78,000 - 78,999	43.6%	1,370.63	1,968.58	1,221.64	1,754.60	
79,000 - 79,999	43.6%	1,385.30	1,989.65	1,234.72	1,773.38	
80,000+	43.6%	1,662.02	2,387.09	1,401.70	2,013.21	
Eoob Add 64 000	40.00/	14.07	24.07	10.00	40.70	
Each Addl \$1,000	43.6%	14.67	21.07	13.08	18.79	

<sup>(1)</sup> From Section A, Page 2 (2), (4) Based on current MH(C) rate manual.

## Derivation of Proposed Year 1 Base Rates Territory Group 3

Rental

		Comprehensive		Named	l Perils
	Proposed		Proposed		Proposed
Amount of	Year 1	Current	Year 1	Current	Year 1
Insurance	Rate Change	Rate	Rate	Rate	Rate
1 - 3,999	43.6%	\$456.10	\$655.08	\$427.16	\$613.51
4,000 - 4,999	43.6%	486.62	698.91	455.75	654.58
5,000 - 5,999	43.6%	511.76	735.02	479.29	688.39
6,000 - 6,999	43.6%	538.40 565.40	773.28 812.06	504.25	724.24
7,000 - 7,999 8,000 - 8,999	43.6% 43.6%	592.50	850.99	529.53 554.91	760.54 797.00
9,000 - 9,999	43.6%	621.06	892.00	581.66	835.42
10,000 - 10,999	43.6%	648.12	930.87	607.01	871.83
11,000 - 11,999	43.6%	670.99	963.72	628.42	902.58
12,000 - 12,999	43.6%	693.86	996.56	649.84	933.34
13,000 - 13,999	43.6%	716.01	1,028.38	670.59	963.14
14,000 - 14,999	43.6%	738.15	1,060.18	691.33	992.93
15,000 - 15,999 16,000 - 16,999	43.6% 43.6%	763.25 790.34	1,096.23 1,135.14	714.83 740.20	1,026.68 1,063.12
17,000 - 17,999	43.6%	816.83	1,173.18	765.01	1,098.75
18,000 - 18,999	43.6%	843.15	1,210.98	789.66	1,134.16
19,000 - 19,999	43.6%	871.99	1,252.41	816.67	1,172.95
20,000 - 20,999	43.6%	899.11	1,291.36	842.07	1,209.43
21,000 - 21,999	43.6%	920.78	1,322.48	862.37	1,238.59
22,000 - 22,999	43.6%	942.45	1,353.61	882.66	1,267.73
23,000 - 23,999	43.6%	965.36	1,386.51	904.12	1,298.55
24,000 - 24,999 25,000 - 25,999	43.6% 43.6%	988.58 1,013.59	1,419.86 1,455.78	925.87 949.28	1,329.79 1,363.41
26,000 - 26,999	43.6%	1,039.97	1,493.67	974.00	1,398.92
27,000 - 27,999	43.6%	1,065.95	1,530.98	998.32	1,433.85
28,000 - 28,999	43.6%	1,091.74	1,568.02	1,022.48	1,468.55
29,000 - 29,999	43.6%	1,120.70	1,609.62	1,049.60	1,507.50
30,000 - 30,999	43.6%	1,150.72	1,652.74	1,077.72	1,547.89
31,000 - 31,999	43.6%	1,173.25	1,685.09	1,098.81	1,578.18
32,000 - 32,999	43.6%	1,195.15	1,716.55	1,119.33	1,607.65
33,000 - 33,999 34,000 - 34,999	43.6% 43.6%	1,217.05 1,241.84	1,748.00 1,783.61	1,139.84 1,163.05	1,637.11 1,670.44
35,000 - 35,999	43.6%	1,266.98	1,819.72	1,186.60	1,704.27
36,000 - 36,999	43.6%	1,292.11	1,855.81	1,210.14	1,738.08
37,000 - 37,999	43.6%	1,317.25	1,891.92	1,233.68	1,771.89
38,000 - 38,999	43.6%	1,342.39	1,928.02	1,257.23	1,805.71
39,000 - 39,999	43.6%	1,367.53	1,964.13	1,280.77	1,839.52
40,000 - 40,999	43.6%	1,392.67	2,000.24	1,304.31	1,873.33
41,000 - 41,999 42,000 - 42,999	43.6% 43.6%	1,417.80 1,442.94	2,036.33 2,072.44	1,327.86 1,351.40	1,907.15 1,940.96
43,000 - 43,999	43.6%	1,468.08	2,108.55	1,374.94	1,974.77
44,000 - 44,999	43.6%	1,493.22	2,144.66	1,398.49	2,008.60
45,000 - 45,999	43.6%	1,518.36	2,180.76	1,422.03	2,042.41
46,000 - 46,999	43.6%	1,543.49	2,216.86	1,445.57	2,076.22
47,000 - 47,999	43.6%	1,568.63	2,252.96	1,469.12	2,110.04
48,000 - 48,999	43.6%	1,593.77	2,289.07	1,492.66	2,143.85
49,000 - 49,999 50,000 - 50,999	43.6% 43.6%	1,618.91 1,644.05	2,325.18 2,361.29	1,516.20 1,539.74	2,177.66 2,211.47
51,000 - 51,999	43.6%	1,669.18	2,397.38	1,563.29	2,245.29
52,000 - 52,999	43.6%	1,694.32	2,433.49	1,586.83	2,279.10
53,000 - 53,999	43.6%	1,719.46	2,469.59	1,610.37	2,312.91
54,000 - 54,999	43.6%	1,744.60	2,505.70	1,633.92	2,346.74
55,000 - 55,999	43.6%	1,769.73	2,541.80	1,657.46	2,380.55
56,000 - 56,999	43.6%	1,794.87	2,577.90	1,681.00	2,414.36
57,000 - 57,999 58,000 - 58,999	43.6% 43.6%	1,820.01 1,845.15	2,614.01 2,650.12	1,704.55 1,728.09	2,448.18 2,481.99
59,000 - 59,999	43.6%	1,870.29	2,686.23	1,751.63	2,515.80
60,000 - 60,999	43.6%	1,895.42	2,722.32	1,775.18	2,549.62
61,000 - 61,999	43.6%	1,920.56	2,758.43	1,798.72	2,583.43
62,000 - 62,999	43.6%	1,945.70	2,794.53	1,822.26	2,617.24
63,000 - 63,999	43.6%	1,970.84	2,830.64	1,845.81	2,651.07
64,000 - 64,999	43.6%	1,995.98	2,866.75	1,869.35	2,684.88
65,000 - 65,999	43.6% 43.6%	2,021.11	2,902.84	1,892.89	2,718.69
66,000 - 66,999 67,000 - 67,999	43.6%	2,046.25 2,071.39	2,938.95 2,975.06	1,916.44 1,939.98	2,752.51 2,786.32
68,000 - 68,999	43.6%	2,096.53	3,011.17	1,963.52	2,820.13
69,000 - 69,999	43.6%	2,121.67	3,047.27	1,987.07	2,853.95
70,000 - 70,999	43.6%	2,146.80	3,083.37	2,010.61	2,887.76
71,000 - 71,999	43.6%	2,171.94	3,119.47	2,034.15	2,921.57
72,000 - 72,999	43.6%	2,197.08	3,155.58	2,057.69	2,955.38
73,000 - 73,999 74,000 - 74,999	43.6% 43.6%	2,222.22 2,247.36	3,191.69 3,227.80	2,081.24 2,104.78	2,989.21 3,023.02
75,000 - 75,999	43.6%	2,247.36	3,263.89	2,128.32	3,056.82
76,000 - 76,999	43.6%	2,297.63	3,300.00	2,151.87	3,090.65
77,000 - 77,999	43.6%	2,322.77	3,336.11	2,175.41	3,124.46
78,000 - 78,999	43.6%	2,347.91	3,372.21	2,198.95	3,158.27
79,000 - 79,999	43.6%	2,373.05	3,408.32	2,222.50	3,192.09
80,000+	43.6%	2,908.42	4,177.26	2,246.05	3,225.92
Each Addl \$1,000	43.6%	25.14	36.11	23.55	33.82
_au ∩au φ1,000	<del>-</del> 3.0 /0	23.14	30.11	23.33	33.02

<sup>(1)</sup> From Section A, Page 2 (2), (4) Based on current MH(C) rate manual.

## Derivation of Proposed Year 1 Base Rates Territory Group 3

Seasonal/Vacation

			- (2) X [1 + (1)]		- (4) x [1 + (1)]
		Compre	hensive	Named	
Amount of	Proposed Year 1	Current	Proposed Year 1	Current	Proposed Year 1
Insurance	Rate Change	Rate	Rate	Rate	Rate
1 - 3,999	43.6%	\$266.25	\$382.40	\$237.31	\$340.84
4,000 - 4,999	43.6%	284.07	408.00	253.19	363.65
5,000 - 5,999	43.6%	298.75	429.08	266.27	382.43
6,000 - 6,999	43.6%	314.30	451.42	280.14	402.35
7,000 - 7,999	43.6%	330.06	474.05	294.18	422.52
8,000 - 8,999	43.6%	345.88	496.77	308.28	442.77
9,000 - 9,999	43.6%	362.56	520.73	323.15	464.13
10,000 - 10,999 11,000 - 11,999	43.6% 43.6%	378.35 391.70	543.41 562.58	337.23 349.12	484.35 501.43
12,000 - 12,999	43.6%	405.05	581.76	361.02	518.52
13,000 - 13,999	43.6%	417.98	600.33	372.55	535.08
14,000 - 14,999	43.6%	430.91	618.90	384.07	551.63
15,000 - 15,999	43.6%	445.56	639.94	397.13	570.38
16,000 - 16,999	43.6%	461.37	662.65	411.22	590.62
17,000 - 17,999	43.6%	476.83	684.85	425.00	610.41
18,000 - 18,999	43.6% 43.6%	492.20 509.04	706.93 731.11	438.70 453.70	630.09 651.63
19,000 - 19,999 20,000 - 20,999	43.6%	524.87	753.85	467.82	671.91
21,000 - 21,999	43.6%	537.52	772.02	479.09	688.10
22,000 - 22,999	43.6%	550.17	790.19	490.37	704.30
23,000 - 23,999	43.6%	563.54	809.39	502.29	721.42
24,000 - 24,999	43.6%	577.10	828.87	514.37	738.77
25,000 - 25,999	43.6%	591.70	849.84	527.38	757.46
26,000 - 26,999	43.6%	607.10	871.95	541.11	777.18
27,000 - 27,999 28,000 - 28,999	43.6% 43.6%	622.26 637.32	893.73 915.36	554.62 568.04	796.58 815.85
29,000 - 29,999	43.6%	654.23	939.65	583.11	837.50
30,000 - 30,999	43.6%	671.75	964.81	598.73	859.93
31,000 - 31,999	43.6%	684.90	983.70	610.45	876.77
32,000 - 32,999	43.6%	697.69	1,002.07	621.85	893.14
33,000 - 33,999	43.6%	710.47	1,020.42	633.24	909.50
34,000 - 34,999 35,000 - 35,999	43.6%	724.94	1,041.20	646.14	928.03
36,000 - 36,999	43.6% 43.6%	739.62 754.29	1,062.29 1,083.36	659.22 672.30	946.81 965.60
37,000 - 37,999	43.6%	768.97	1,104.44	685.38	984.39
38,000 - 38,999	43.6%	783.64	1,125.51	698.46	1,003.17
39,000 - 39,999	43.6%	798.31	1,146.58	711.54	1,021.96
40,000 - 40,999	43.6%	812.99	1,167.67	724.62	1,040.74
41,000 - 41,999	43.6%	827.66	1,188.74	737.70	1,059.53
42,000 - 42,999	43.6%	842.34	1,209.82	750.78	1,078.32
43,000 - 43,999 44,000 - 44,999	43.6% 43.6%	857.01 871.69	1,230.89 1,251.98	763.86 776.94	1,097.10 1,115.89
45,000 - 45,999	43.6%	886.36	1,273.05	790.02	1,134.68
46,000 - 46,999	43.6%	901.04	1,294.13	803.10	1,153.46
47,000 - 47,999	43.6%	915.71	1,315.20	816.18	1,172.25
48,000 - 48,999	43.6%	930.39	1,336.28	829.25	1,191.02
49,000 - 49,999	43.6%	945.06	1,357.35	842.33	1,209.81
50,000 - 50,999 51,000 - 51,999	43.6% 43.6%	959.74 974.41	1,378.44 1,399.51	855.41 868.49	1,228.59 1,247.38
52,000 - 52,999	43.6%	989.09	1,420.59	881.57	1,266.17
53,000 - 53,999	43.6%	1,003.76	1,441.66	894.65	1,284.95
54,000 - 54,999	43.6%	1,018.43	1,462.73	907.73	1,303.74
55,000 - 55,999	43.6%	1,033.11	1,483.82	920.81	1,322.52
56,000 - 56,999	43.6%	1,047.78	1,504.89	933.89	1,341.31
57,000 - 57,999	43.6%	1,062.46	1,525.97	946.97	1,360.10
58,000 - 58,999 59,000 - 59,999	43.6% 43.6%	1,077.13 1,091.81	1,547.04 1,568.13	960.05 973.13	1,378.88 1,397.67
60,000 - 60,999	43.6%	1,106.48	1,589.20	986.21	1,416.46
61,000 - 61,999	43.6%	1,121.16	1,610.28	999.29	1,435.24
62,000 - 62,999	43.6%	1,135.83	1,631.35	1,012.37	1,454.03
63,000 - 63,999	43.6%	1,150.51	1,652.43	1,025.45	1,472.81
64,000 - 64,999	43.6%	1,165.18	1,673.50	1,038.53	1,491.60
65,000 - 65,999	43.6%	1,179.86	1,694.59	1,051.61	1,510.39
66,000 - 66,999 67,000 - 67,999	43.6% 43.6%	1,194.53 1,209.21	1,715.66 1,736.74	1,064.69 1,077.77	1,529.17 1,547.96
68,000 - 68,999	43.6%	1,223.88	1,757.81	1,090.85	1,566.75
69,000 - 69,999	43.6%	1,238.55	1,778.88	1,103.93	1,585.53
70,000 - 70,999	43.6%	1,253.23	1,799.97	1,117.00	1,604.30
71,000 - 71,999	43.6%	1,267.90	1,821.04	1,130.08	1,623.09
72,000 - 72,999	43.6%	1,282.58	1,842.12	1,143.16	1,641.88
73,000 - 73,999	43.6%	1,297.25	1,863.19	1,156.24	1,660.66
74,000 - 74,999 75,000 - 75,999	43.6% 43.6%	1,311.93 1,326.60	1,884.28 1,905.35	1,169.32 1,182.40	1,679.45 1,698.24
76,000 - 76,999	43.6%	1,341.28	1,926.43	1,195.48	1,717.02
77,000 - 77,999	43.6%	1,355.95	1,947.50	1,208.56	1,735.81
78,000 - 78,999	43.6%	1,370.63	1,968.58	1,221.64	1,754.60
79,000 - 79,999	43.6%	1,385.30	1,989.65	1,234.72	1,773.38
80,000+	43.6%	1,771.68	2,544.59	1,247.80	1,792.17
Each Addl \$1,000	12 60/	14.67	21.07	13.08	10 70
Lacii ∧uul ⊅1,000	43.6%	14.07	∠1.07	13.00	18.79

<sup>(1)</sup> From Section A, Page 2 (2), (4) Based on current MH(C) rate manual.

# North Carolina Mobile Homeowners MH(C) - Adjacent Structures

## Derivation of Proposed Year 1 Base Rates Territory Group 3

		Compret	hensive	Named	l Perils
	Proposed	_	Proposed	_	Proposed
Amount of Insurance	Year 1 Rate Change	Current Rate	Year 1 Rate	Current Rate	Year 1 Rate
		- Itale			
100 - 199	34.4%	-	-	\$2.48	\$3.33
200 - 299 300 - 399	34.4% 34.4%	\$6.21	\$8.34	3.92 5.36	5.27 7.20
400 - 499	34.4%	7.88	10.59	6.80	9.14
500 - 599	34.4%	9.55	12.83	8.24	11.07
600 - 699	34.4%	11.22	15.07	9.68	13.01
700 - 799	34.4%	12.89	17.32	11.12	14.94
800 - 899	34.4%	14.56	19.56	12.56	16.87
900 - 999	34.4%	16.23	21.81	14.00	18.81
1,000 - 1,099	34.4%	17.90	24.05	15.44	20.74
1,100 - 1,199	34.4%	19.57	26.29	16.88	22.68
1,200 - 1,299	34.4%	21.24	28.54	18.32	24.61
1,300 - 1,399	34.4%	22.91	30.78	19.76	26.55
1,400 - 1,499	34.4%	24.58	33.02	21.20	28.48
1,500 - 1,599	34.4%	26.25	35.27	22.64	30.42
1,600 - 1,699	34.4%	27.92	37.51	24.08	32.35
1,700 - 1,799	34.4%	29.59	39.76	25.52	34.29
1,800 - 1,899	34.4%	31.26	42.00	26.96	36.22
1,900 - 1,999	34.4%	32.93	44.24	28.40	38.16
2,000 - 2,099	34.4%	34.60	46.49	29.84	40.09
2,100 - 2,199	34.4%	36.27	48.73	31.28	42.03
2,200 - 2,299	34.4%	37.94	50.97	32.72	43.96
2,300 - 2,399	34.4%	39.61	53.22	34.16	45.90
2,400 - 2,499	34.4%	41.28	55.46	35.60	47.83
2,500 - 2,599	34.4%	42.95	57.70	37.04	49.76
2,600 - 2,699	34.4%	44.62	59.95	38.48	51.70
2,700 - 2,799	34.4%	46.29	62.19	39.92	53.63
2,800 - 2,899	34.4%	47.96	64.44	41.36	55.57
2,900 - 2,999	34.4%	49.63	66.68	42.80	57.50
3,000 - 3,099	34.4%	51.30	68.92	44.24	59.44
3,100 - 3,199	34.4%	52.97	71.17	45.68	61.37
3,200 - 3,299	34.4%	54.64	73.41	47.12	63.31
3,300 - 3,399	34.4%	56.31	75.65	48.56	65.24
3,400 - 3,499 3,500 - 3,599	34.4% 34.4%	57.98 59.65	77.90 80.14	50.00 51.44	67.18 69.11
	34.4%	61.32	82.39	52.88	71.05
3,600 - 3,699 3,700 - 3,799	34.4%	62.99	84.63	54.32	72.98
3,800 - 3,899	34.4%	64.66	86.87	55.76	74.92
3,900 - 3,999	34.4%	66.33	89.12	57.20	76.85
4,000 - 4,099	34.4%	68.00	91.36	58.64	78.79
4,100 - 4,199	34.4%	69.67	93.60	60.08	80.72
4,200 - 4,299	34.4%	71.34	95.85	61.52	82.65
4,300 - 4,399	34.4%	73.01	98.09	62.96	84.59
4,400 - 4,499	34.4%	74.68	100.34	64.40	86.52
4,500 - 4,599	34.4%	76.35	102.58	65.84	88.46
4,600 - 4,699	34.4%	78.02	104.82	67.28	90.39
4,700 - 4,799	34.4%	79.69	107.07	68.72	92.33
4,800 - 4,899	34.4%	81.36	109.31	70.16	94.26
4,900 - 4,999	34.4%	83.03	111.55	71.60	96.20
5,000 - 5,099	34.4%	84.70	113.80	73.04	98.13
5,100 - 5,199	34.4%	86.37	116.04	74.48	100.07
5,200 - 5,299	34.4%	88.04	118.29	75.92	102.00
5,300 - 5,399	34.4%	89.71	120.53	77.36	103.94
5,400 - 5,499	34.4%	91.38	122.77	78.80	105.87
5,500 - 5,599	34.4%	93.05	125.02	80.24	107.81
5,600 - 5,699	34.4%	94.72	127.26	81.68	109.74
5,700 - 5,799	34.4%	96.39	129.50	83.12	111.67
5,800 - 5,899	34.4%	98.06	131.75	84.56	113.61
5,900 - 5,999	34.4%	99.73	133.99	86.00	115.54
6,000 - 6,099	34.4%	101.40	136.23	87.44	117.48
6,100 - 6,199	34.4%	103.07	138.48	88.88	119.41
6,200 - 6,299	34.4%	104.74	140.72	90.32	121.35
6,300 - 6,399	34.4%	106.41	142.97	91.76	123.28
6,400 - 6,499	34.4%	108.08	145.21	93.20	125.22
6,500 - 6,599	34.4%	109.75	147.45	94.64	127.15
6,600 - 6,699	34.4%	111.42	149.70	96.08	129.09
6,700 - 6,799	34.4%	113.09	151.94	97.52	131.02
6,800 - 6,899	34.4%	114.76	154.18	98.96	132.96
6,900 - 6,999	34.4%	116.43	156.43	100.40	134.89
7,000+	34.4%	204.26	274.43	183.87	247.03
Each Add \$1 000	3/1 //0/	1 67	2 24	1 11	1 02
Each Addl \$1,000	34.4%	1.67	2.24	1.44	1.93

<sup>(1)</sup> From Section A, Page 2 (2), (4) Based on current MH(C) rate manual.

# North Carolina Mobile Homeowners MH(C) - Personal Effects

## Derivation of Proposed Year 1 Base Rates Territory Group 3

(3) = (2) x [1 + (1)]

Amount of Insurance   Proposed   Year 1   Rate   Change   Rate   Rate   Rate				( ) [ ( )]
Amount of   Near 1   Current   Rate   Rate   Rate   Sou - 599   12.4%   \$20.00   \$22.49   \$60 - 699   12.4%   20.79   23.38   700 - 799   12.4%   22.37   25.15   \$900 - 899   12.4%   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   23.16   26.04   24.74   27.82   23.16   26.03   23.95   26.93   1.100 - 1.199   12.4%   24.74   27.82   29.60   1.400 - 1.499   12.4%   25.53   28.71   1.300 - 1.599   12.4%   26.32   29.60   1.400 - 1.499   12.4%   27.90   31.37   1.600 - 1.699   12.4%   27.90   31.37   1.600 - 1.699   12.4%   22.69   32.26   1.700 - 1.799   12.4%   23.04   33.15   1.700 - 1.899   12.4%   30.27   34.04   1.900 - 1.999   12.4%   31.85   35.81   1.800 - 1.899   12.4%   31.85   35.81   2.000 - 2.099   12.4%   33.43   37.59   2.200 - 2.999   12.4%   33.43   37.59   2.200 - 2.299   12.4%   33.43   37.59   2.300 - 2.399   12.4%   33.43   37.59   2.300 - 2.599   12.4%   35.80   40.26   2.600 - 2.699   12.4%   35.80   40.26   2.600 - 2.699   12.4%   35.80   40.26   2.600 - 2.699   12.4%   35.80   40.26   2.600 - 2.699   12.4%   33.59   41.14   2.700 - 2.799   12.4%   33.59   41.14   33.00 - 3.199   12.4%   43.59   44.70   33.00 - 3.999   12.4%   43.59   44.70   33.00 - 3.999   12.4%   43.59   44.70   33.00 - 3.999   12.4%   43.59   44.70   33.00 - 3.999   12.4%   44.99   33.00 - 3.999   12.4%   44.99   33.00 - 3.999   12.4%   44.99   44.90		Proposed		Proposed
Insurance	Amount of		Current	
500 - 599				
600 - 899	insurance	Kale Change	Rate	Rate
600 - 899	500 - 599	12.4%	\$20.00	\$22.49
700 - 799				
800 - 899				
900 - 999				
1,000 - 1,099				
1,100 - 1,199				
1,200 - 1,299				
1,300 - 1,399				
1,400 - 1,499				
1,500 - 1,599				29.60
1,600 - 1,699	1,400 - 1,499	12.4%	27.11	30.48
1,700 - 1,799	1,500 - 1,599	12.4%	27.90	31.37
1,700 - 1,799	1,600 - 1,699	12.4%	28.69	32.26
1,800 - 1,899	1.700 - 1.799	12.4%	29.48	33.15
1,900 - 1,999				
2,000 - 2,099				
2,100 - 2,199				
2,200 - 2,299       12,4%       33,43       37,59         2,300 - 2,399       12,4%       34,22       38,48         2,400 - 2,699       12,4%       35,01       39,37         2,500 - 2,699       12,4%       36,59       41,14         2,700 - 2,799       12,4%       36,59       41,14         2,700 - 2,899       12,4%       38,17       42,92         2,900 - 2,999       12,4%       39,75       44,70         3,100 - 3,099       12,4%       39,75       44,70         3,200 - 3,299       12,4%       40,54       45,59         3,200 - 3,299       12,4%       41,33       46,47         3,300 - 3,399       12,4%       42,12       47,36         3,500 - 3,599       12,4%       42,91       48,25         3,500 - 3,699       12,4%       44,49       50,03         3,600 - 3,699       12,4%       44,49       50,03         3,800 - 3,899       12,4%       44,49       50,03         3,800 - 3,899       12,4%       46,07       51,80         3,900 - 3,999       12,4%       46,86       52,69         4,000 - 4,099       12,4%       46,86       52,69         4,000 - 4,999 <td></td> <td></td> <td></td> <td></td>				
2,300 - 2,399       12.4%       35.01       39.37         2,500 - 2,699       12.4%       35.80       40.26         2,600 - 2,699       12.4%       36.59       41.14         2,700 - 2,799       12.4%       37.38       42.03         2,800 - 2,899       12.4%       38.17       42.92         2,900 - 2,999       12.4%       38.96       43.81         3,000 - 3,099       12.4%       39.75       44.70         3,100 - 3,199       12.4%       40.54       45.59         3,200 - 3,299       12.4%       41.33       46.47         3,300 - 3,399       12.4%       42.12       47.36         3,400 - 3,499       12.4%       42.91       48.25         3,500 - 3,599       12.4%       43.70       49.14         3,600 - 3,699       12.4%       42.91       48.25         3,500 - 3,799       12.4%       44.49       50.03         3,600 - 3,899       12.4%       44.49       50.03         3,600 - 3,899       12.4%       45.28       50.92         3,800 - 3,899       12.4%       45.28       50.92         3,800 - 3,899       12.4%       46.86       52.69         4,000 - 4,099 <td></td> <td></td> <td></td> <td></td>				
2,400 - 2,489       12.4%       35.80       40.26         2,500 - 2,599       12.4%       36.59       41.14         2,700 - 2,799       12.4%       37.38       42.03         2,800 - 2,899       12.4%       38.17       42.92         2,900 - 2,999       12.4%       38.96       43.81         3,000 - 3,099       12.4%       39.75       44.70         3,100 - 3,199       12.4%       40.54       45.59         3,200 - 3,299       12.4%       41.33       46.47         3,300 - 3,499       12.4%       42.12       47.36         3,500 - 3,599       12.4%       42.91       48.25         3,500 - 3,699       12.4%       44.49       50.03         3,700 - 3,799       12.4%       44.49       50.03         3,800 - 3,899       12.4%       45.28       50.92         3,800 - 3,899       12.4%       46.07       51.80         3,900 - 3,999       12.4%       46.86       52.69         4,000 - 4,199       12.4%       48.44       54.76         4,000 - 4,199       12.4%       48.44       54.47         4,200 - 4,299       12.4%       50.02       56.25         4,400 - 4,499 <td></td> <td></td> <td></td> <td></td>				
2,500 - 2,599         12.4%         35.80         40.26           2,600 - 2,699         12.4%         36.59         41.14           2,700 - 2,799         12.4%         37.38         42.03           2,800 - 2,899         12.4%         38.17         42.92           2,900 - 2,999         12.4%         38.96         43.81           3,000 - 3,099         12.4%         40.54         45.59           3,200 - 3,299         12.4%         40.54         45.59           3,200 - 3,299         12.4%         41.33         46.47           3,300 - 3,399         12.4%         42.12         47.36           3,400 - 3,499         12.4%         42.91         48.25           3,500 - 3,599         12.4%         43.70         49.14           3,600 - 3,699         12.4%         44.49         50.03           3,700 - 3,799         12.4%         45.28         50.92           3,800 - 3,899         12.4%         46.07         51.80           3,900 - 3,999         12.4%         46.07         51.80           3,900 - 4,099         12.4%         46.86         52.69           4,000 - 4,099         12.4%         49.23         55.36				
2,600 - 2,699       12.4%       36.59       41.14         2,700 - 2,799       12.4%       37.38       42.03         2,800 - 2,899       12.4%       38.96       43.81         3,000 - 3,099       12.4%       39.75       44.70         3,100 - 3,199       12.4%       40.54       45.59         3,200 - 3,299       12.4%       41.33       46.47         3,300 - 3,399       12.4%       42.12       47.36         3,400 - 3,499       12.4%       42.91       48.25         3,500 - 3,599       12.4%       43.70       49.14         3,600 - 3,699       12.4%       44.49       50.03         3,700 - 3,799       12.4%       45.28       50.92         3,800 - 3,899       12.4%       46.07       51.80         3,900 - 3,899       12.4%       46.07       51.80         3,900 - 3,899       12.4%       46.07       51.80         3,900 - 3,899       12.4%       45.28       50.92         3,800 - 3,899       12.4%       46.07       51.80         4,000 - 4,099       12.4%       47.65       53.58         4,100 - 4,199       12.4%       49.23       55.36         4,500 - 4,599 <td>2,400 - 2,499</td> <td>12.4%</td> <td>35.01</td> <td>39.37</td>	2,400 - 2,499	12.4%	35.01	39.37
2,700 - 2,799         12.4%         37.38         42.03           2,800 - 2,899         12.4%         38.17         42.92           2,900 - 2,999         12.4%         38.96         43.81           3,000 - 3,099         12.4%         39.75         44.70           3,100 - 3,199         12.4%         40.54         45.59           3,200 - 3,299         12.4%         41.33         46.47           3,300 - 3,399         12.4%         42.12         47.36           3,400 - 3,499         12.4%         42.91         48.25           3,500 - 3,599         12.4%         43.70         49.14           3,600 - 3,699         12.4%         44.49         50.03           3,700 - 3,799         12.4%         45.28         50.92           3,800 - 3,899         12.4%         46.07         51.80           3,900 - 3,999         12.4%         46.86         52.69           4,000 - 4,099         12.4%         47.65         53.58           4,100 - 4,199         12.4%         48.44         54.47           4,200 - 4,299         12.4%         49.23         55.36           4,300 - 4,399         12.4%         50.81         57.13	2,500 - 2,599	12.4%	35.80	40.26
2,800 - 2,899         12.4%         38.17         42.92           2,900 - 2,999         12.4%         38.96         43.81           3,000 - 3,099         12.4%         39.75         44.70           3,100 - 3,199         12.4%         40.54         45.59           3,200 - 3,299         12.4%         41.33         46.47           3,300 - 3,499         12.4%         42.12         47.36           3,500 - 3,599         12.4%         42.91         48.25           3,500 - 3,599         12.4%         43.70         49.14           3,600 - 3,699         12.4%         44.49         50.03           3,700 - 3,799         12.4%         45.28         50.92           3,800 - 3,899         12.4%         46.07         51.80           3,900 - 3,999         12.4%         46.86         52.69           4,000 - 4,099         12.4%         48.44         54.47           4,200 - 4,299         12.4%         49.23         55.36           4,100 - 4,499         12.4%         50.81         57.13           4,500 - 4,599         12.4%         50.81         57.13           4,500 - 4,699         12.4%         50.81         57.13	2,600 - 2,699	12.4%	36.59	41.14
2,800 - 2,899       12.4%       38.17       42.92         2,900 - 2,999       12.4%       38.96       43.81         3,000 - 3,099       12.4%       39.75       44.70         3,100 - 3,199       12.4%       40.54       45.59         3,200 - 3,299       12.4%       41.33       46.47         3,300 - 3,399       12.4%       42.91       48.25         3,500 - 3,599       12.4%       43.70       49.14         3,600 - 3,699       12.4%       44.49       50.03         3,700 - 3,799       12.4%       45.28       50.92         3,800 - 3,899       12.4%       46.07       51.80         3,900 - 3,999       12.4%       46.86       52.69         4,000 - 4,099       12.4%       47.65       53.58         4,100 - 4,199       12.4%       49.23       55.36         4,300 - 4,399       12.4%       49.23       55.36         4,400 - 4,499       12.4%       50.81       57.13         4,500 - 4,699       12.4%       50.81       57.13         4,500 - 4,699       12.4%       50.81       57.13         4,500 - 4,699       12.4%       53.18       59.80         4,900 - 4,999 <td>2,700 - 2,799</td> <td>12.4%</td> <td>37.38</td> <td>42.03</td>	2,700 - 2,799	12.4%	37.38	42.03
2,900 - 2,999         12.4%         38.96         43.81           3,000 - 3,099         12.4%         39.75         44.70           3,100 - 3,199         12.4%         40.54         45.59           3,200 - 3,299         12.4%         41.33         46.47           3,300 - 3,399         12.4%         42.12         47.36           3,400 - 3,699         12.4%         43.70         49.14           3,600 - 3,699         12.4%         44.49         50.03           3,700 - 3,799         12.4%         45.28         50.92           3,800 - 3,899         12.4%         46.07         51.80           3,900 - 3,999         12.4%         46.86         52.69           4,000 - 4,099         12.4%         47.65         53.58           4,100 - 4,199         12.4%         49.23         55.36           4,300 - 4,299         12.4%         49.23         55.36           4,300 - 4,999         12.4%         50.02         56.25           4,400 - 4,499         12.4%         50.01         56.25           4,400 - 4,499         12.4%         50.81         57.13           4,500 - 4,599         12.4%         50.81         57.13		12.4%	38.17	42.92
3,000 - 3,099				
3,100 - 3,199         12.4%         40.54         45.59           3,200 - 3,299         12.4%         41.33         46.47           3,300 - 3,399         12.4%         42.12         47.36           3,400 - 3,499         12.4%         42.91         48.25           3,500 - 3,599         12.4%         43.70         49.14           3,600 - 3,699         12.4%         44.49         50.03           3,700 - 3,799         12.4%         46.07         51.80           3,900 - 3,899         12.4%         46.07         51.80           3,900 - 3,999         12.4%         46.86         52.69           4,000 - 4,199         12.4%         47.65         53.58           4,100 - 4,299         12.4%         48.44         54.7           4,200 - 4,299         12.4%         49.23         55.36           4,300 - 4,399         12.4%         50.02         56.25           4,400 - 4,499         12.4%         50.81         57.13           4,500 - 4,699         12.4%         53.18         59.80           4,700 - 4,799         12.4%         53.18         59.80           4,900 - 4,999         12.4%         53.18         59.80           4				
3,200 - 3,299       12.4%       41.33       46.47         3,300 - 3,399       12.4%       42.12       47.36         3,400 - 3,499       12.4%       42.91       48.25         3,500 - 3,599       12.4%       43.70       49.14         3,600 - 3,699       12.4%       44.49       50.03         3,700 - 3,799       12.4%       46.07       51.80         3,800 - 3,899       12.4%       46.86       52.69         4,000 - 4,099       12.4%       47.65       53.58         4,100 - 4,199       12.4%       48.44       54.47         4,200 - 4,299       12.4%       49.23       55.36         4,300 - 4,399       12.4%       50.81       57.13         4,500 - 4,599       12.4%       50.81       57.13         4,500 - 4,699       12.4%       50.81       57.13         4,500 - 4,699       12.4%       50.81       57.13         4,500 - 4,699       12.4%       50.81       57.13         4,800 - 4,899       12.4%       53.18       59.80         4,900 - 4,999       12.4%       53.18       59.80         4,900 - 4,999       12.4%       55.55       62.46         5,100 - 5,199 <td></td> <td></td> <td></td> <td></td>				
3,300 - 3,399       12.4%       42.12       47.36         3,400 - 3,499       12.4%       42.91       48.25         3,500 - 3,699       12.4%       43.70       49.14         3,600 - 3,699       12.4%       44.49       50.03         3,700 - 3,799       12.4%       45.28       50.92         3,800 - 3,899       12.4%       46.86       52.69         4,000 - 4,099       12.4%       47.65       53.58         4,100 - 4,199       12.4%       48.44       54.47         4,200 - 4,299       12.4%       49.23       55.36         4,300 - 4,399       12.4%       50.02       56.25         4,400 - 4,499       12.4%       50.81       57.13         4,500 - 4,599       12.4%       50.81       57.13         4,500 - 4,699       12.4%       50.81       57.13         4,500 - 4,699       12.4%       50.81       57.13         4,500 - 4,699       12.4%       53.18       59.80         4,800 - 4,899       12.4%       53.18       59.80         4,800 - 4,899       12.4%       53.78       60.69         4,900 - 4,999       12.4%       54.76       61.58         5,000 - 5,199 <td></td> <td></td> <td></td> <td></td>				
3,400 - 3,499       12.4%       42.91       48.25         3,500 - 3,699       12.4%       43.70       49.14         3,600 - 3,699       12.4%       44.49       50.03         3,700 - 3,799       12.4%       45.28       50.92         3,800 - 3,899       12.4%       46.07       51.80         3,900 - 3,999       12.4%       46.86       52.69         4,000 - 4,099       12.4%       47.65       53.58         4,100 - 4,199       12.4%       49.23       55.36         4,300 - 4,399       12.4%       50.02       56.25         4,400 - 4,499       12.4%       50.81       57.13         4,500 - 4,599       12.4%       50.81       57.13         4,500 - 4,699       12.4%       53.88       59.80         4,800 - 4,699       12.4%       53.81       59.80         4,800 - 4,899       12.4%       53.77       60.69         4,900 - 4,999       12.4%       53.77       60.69         4,900 - 4,999       12.4%       53.77       60.69         4,900 - 4,999       12.4%       53.77       60.69         5,000 - 5,099       12.4%       55.55       62.46         5,100 - 5,199 <td></td> <td></td> <td></td> <td></td>				
3,500 - 3,599         12.4%         43.70         49.14           3,600 - 3,699         12.4%         44.49         50.03           3,700 - 3,799         12.4%         45.28         50.92           3,800 - 3,899         12.4%         46.07         51.80           3,900 - 3,999         12.4%         46.86         52.69           4,000 - 4,199         12.4%         47.65         53.58           4,100 - 4,199         12.4%         48.44         54.47           4,200 - 4,299         12.4%         49.23         55.36           4,300 - 4,399         12.4%         50.02         56.25           4,400 - 4,499         12.4%         50.81         57.13           4,500 - 4,699         12.4%         51.60         58.02           4,600 - 4,699         12.4%         53.18         59.80           4,700 - 4,799         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.18         59.80           4,800 - 4,999         12.4%         53.77         60.69           4,900 - 4,999         12.4%         53.77         60.69           5,000 - 5,099         12.4%         55.55         62.46				
3,600 - 3,699       12.4%       44.49       50.03         3,700 - 3,799       12.4%       45.28       50.92         3,800 - 3,899       12.4%       46.07       51.80         3,900 - 3,999       12.4%       46.86       52.69         4,000 - 4,099       12.4%       47.65       53.58         4,100 - 4,199       12.4%       48.44       54.47         4,200 - 4,299       12.4%       49.23       55.36         4,300 - 4,399       12.4%       50.02       56.25         4,400 - 4,499       12.4%       50.81       57.13         4,500 - 4,599       12.4%       51.60       58.02         4,600 - 4,699       12.4%       52.39       58.91         4,700 - 4,799       12.4%       53.18       59.80         4,800 - 4,899       12.4%       53.18       59.80         4,900 - 4,999       12.4%       53.59       60.69         4,900 - 5,999       12.4%       55.55       62.46         5,100 - 5,199       12.4%       56.34       63.35         5,200 - 5,299       12.4%       57.92       65.13         5,300 - 5,499       12.4%       59.50       66.91         5,500 - 5,699 <td></td> <td></td> <td></td> <td></td>				
3,700 - 3,799         12.4%         45.28         50.92           3,800 - 3,899         12.4%         46.07         51.80           3,900 - 3,999         12.4%         46.86         52.69           4,000 - 4,099         12.4%         47.65         53.58           4,100 - 4,199         12.4%         48.44         54.47           4,200 - 4,299         12.4%         49.23         55.36           4,300 - 4,399         12.4%         50.02         56.25           4,400 - 4,499         12.4%         50.81         57.13           4,500 - 4,699         12.4%         51.60         58.02           4,600 - 4,699         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.97         60.69           4,900 - 5,199         12.4%         53.76         61.58           5,000 - 5,199         12.4%         55.55         62.46           5,100 - 5,199         12.4%         56.34         63.35           5,200 - 5,299         12.4%         57.92         65.13           5,400 - 5,499         12.4%         58.71         66.02				
3,800 - 3,899         12.4%         46.07         51.80           3,900 - 3,999         12.4%         46.86         52.69           4,000 - 4,099         12.4%         47.65         53.58           4,100 - 4,199         12.4%         48.44         54.47           4,200 - 4,299         12.4%         49.23         55.36           4,300 - 4,399         12.4%         50.02         56.25           4,400 - 4,499         12.4%         50.81         57.13           4,500 - 4,699         12.4%         51.60         58.02           4,600 - 4,699         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.97         60.69           4,900 - 4,999         12.4%         54.76         61.58           5,000 - 5,099         12.4%         55.55         62.46           5,100 - 5,199         12.4%         57.13         64.24           5,300 - 5,299         12.4%         57.13         64.24           5,300 - 5,399         12.4%         58.71         66.02           5,500 - 5,699         12.4%         58.71         66.02           5,500 - 5,699         12.4%         59.50         66.91	3,600 - 3,699	12.4%	44.49	50.03
3,900 - 3,999         12.4%         46.86         52.69           4,000 - 4,099         12.4%         47.65         53.58           4,100 - 4,199         12.4%         48.44         54.47           4,200 - 4,299         12.4%         49.23         55.36           4,300 - 4,399         12.4%         50.02         56.25           4,400 - 4,499         12.4%         50.81         57.13           4,500 - 4,699         12.4%         51.60         58.02           4,600 - 4,699         12.4%         52.39         58.91           4,700 - 4,799         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.97         60.69           4,900 - 4,999         12.4%         55.55         62.46           5,000 - 5,099         12.4%         55.55         62.46           5,100 - 5,199         12.4%         56.34         63.35           5,200 - 5,299         12.4%         57.92         65.13           5,300 - 5,399         12.4%         57.92         65.13           5,400 - 5,499         12.4%         58.71         66.02           5,500 - 5,699         12.4%         59.50         66.91	3,700 - 3,799	12.4%	45.28	50.92
4,000 - 4,099         12.4%         47.65         53.58           4,100 - 4,199         12.4%         48.44         54.47           4,200 - 4,299         12.4%         49.23         55.36           4,300 - 4,399         12.4%         50.02         56.25           4,400 - 4,499         12.4%         50.81         57.13           4,500 - 4,599         12.4%         51.60         58.02           4,600 - 4,699         12.4%         52.39         58.91           4,700 - 4,799         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.97         60.69           4,900 - 4,999         12.4%         55.55         62.46           5,100 - 5,199         12.4%         55.55         62.46           5,100 - 5,199         12.4%         57.13         64.24           5,200 - 5,299         12.4%         57.92         65.13           5,300 - 5,499         12.4%         57.92         65.13           5,500 - 5,599         12.4%         59.50         66.91           5,700 - 5,699         12.4%         59.50         66.91           5,700 - 5,799         12.4%         60.29         67.79	3,800 - 3,899	12.4%	46.07	51.80
4,000 - 4,099         12.4%         47.65         53.58           4,100 - 4,199         12.4%         48.44         54.47           4,200 - 4,299         12.4%         49.23         55.36           4,300 - 4,399         12.4%         50.02         56.25           4,400 - 4,499         12.4%         50.81         57.13           4,500 - 4,599         12.4%         51.60         58.02           4,600 - 4,699         12.4%         52.39         58.91           4,700 - 4,799         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.97         60.69           4,900 - 4,999         12.4%         55.55         62.46           5,100 - 5,199         12.4%         55.55         62.46           5,100 - 5,199         12.4%         57.13         64.24           5,200 - 5,299         12.4%         57.92         65.13           5,300 - 5,499         12.4%         57.92         65.13           5,500 - 5,599         12.4%         59.50         66.91           5,700 - 5,699         12.4%         59.50         66.91           5,700 - 5,799         12.4%         60.29         67.79	3,900 - 3,999	12.4%	46.86	52.69
4,100 - 4,199       12.4%       48.44       54.47         4,200 - 4,299       12.4%       49.23       55.36         4,300 - 4,399       12.4%       50.02       56.25         4,400 - 4,499       12.4%       50.81       57.13         4,500 - 4,599       12.4%       51.60       58.02         4,600 - 4,699       12.4%       52.39       58.91         4,700 - 4,799       12.4%       53.18       59.80         4,800 - 4,899       12.4%       53.97       60.69         4,900 - 4,999       12.4%       55.55       62.46         5,100 - 5,199       12.4%       56.34       63.3         5,200 - 5,299       12.4%       57.13       64.24         5,300 - 5,399       12.4%       57.92       65.13         5,400 - 5,499       12.4%       58.71       66.02         5,500 - 5,599       12.4%       59.50       66.91         5,600 - 5,699       12.4%       59.50       66.91         5,600 - 5,699       12.4%       60.29       67.79         5,700 - 5,799       12.4%       61.08       68.68         5,800 - 5,899       12.4%       61.08       68.68         5,800 - 5,899		12.4%		
4,200 - 4,299       12.4%       49.23       55.36         4,300 - 4,399       12.4%       50.02       56.25         4,400 - 4,499       12.4%       50.81       57.13         4,500 - 4,599       12.4%       51.60       58.02         4,600 - 4,699       12.4%       52.39       58.91         4,700 - 4,799       12.4%       53.18       59.80         4,800 - 4,899       12.4%       53.97       60.69         4,900 - 4,999       12.4%       54.76       61.58         5,000 - 5,099       12.4%       55.55       62.46         5,100 - 5,199       12.4%       56.34       63.35         5,200 - 5,299       12.4%       57.13       64.24         5,300 - 5,399       12.4%       57.92       65.13         5,400 - 5,499       12.4%       58.71       66.02         5,500 - 5,599       12.4%       59.50       66.91         5,600 - 5,699       12.4%       60.29       67.79         5,700 - 5,799       12.4%       60.29       67.79         5,800 - 5,899       12.4%       61.08       68.68         5,800 - 5,899       12.4%       61.87       69.57         5,900 - 6,199 <td></td> <td></td> <td></td> <td></td>				
4,300 - 4,399         12.4%         50.02         56.25           4,400 - 4,499         12.4%         50.81         57.13           4,500 - 4,599         12.4%         51.60         58.02           4,600 - 4,699         12.4%         52.39         58.91           4,700 - 4,799         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.97         60.69           4,900 - 4,999         12.4%         54.76         61.58           5,000 - 5,099         12.4%         55.55         62.46           5,100 - 5,199         12.4%         56.34         63.35           5,200 - 5,299         12.4%         57.13         64.24           5,300 - 5,399         12.4%         57.92         65.13           5,400 - 5,499         12.4%         58.71         66.02           5,500 - 5,699         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         63.45         71.35				
4,400 - 4,499       12.4%       50.81       57.13         4,500 - 4,599       12.4%       51.60       58.02         4,600 - 4,699       12.4%       52.39       58.91         4,700 - 4,799       12.4%       53.18       59.80         4,800 - 4,899       12.4%       53.97       60.69         4,900 - 4,999       12.4%       54.76       61.58         5,000 - 5,099       12.4%       55.55       62.46         5,100 - 5,199       12.4%       56.34       63.35         5,200 - 5,299       12.4%       57.92       65.13         5,400 - 5,499       12.4%       58.71       66.02         5,500 - 5,599       12.4%       58.71       66.02         5,500 - 5,599       12.4%       59.50       66.91         5,700 - 5,799       12.4%       60.29       67.79         5,700 - 5,899       12.4%       61.08       68.68         5,800 - 5,899       12.4%       61.87       69.57         5,900 - 5,999       12.4%       63.45       71.35         6,100 - 6,199       12.4%       65.03       73.12         6,200 - 6,299       12.4%       65.03       73.12         6,300 - 6,399 <td></td> <td></td> <td></td> <td></td>				
4,500 - 4,599         12.4%         51.60         58.02           4,600 - 4,699         12.4%         52.39         58.91           4,700 - 4,799         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.97         60.69           4,900 - 4,999         12.4%         54.76         61.58           5,000 - 5,199         12.4%         55.55         62.46           5,100 - 5,199         12.4%         56.34         63.35           5,200 - 5,299         12.4%         57.13         64.24           5,300 - 5,399         12.4%         57.92         65.13           5,400 - 5,499         12.4%         58.71         66.02           5,500 - 5,599         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         65.03         73.12           6,100 - 6,199         12.4%         65.82         74.01				
4,600 - 4,699       12.4%       52.39       58.91         4,700 - 4,799       12.4%       53.18       59.80         4,800 - 4,899       12.4%       53.97       60.69         4,900 - 4,999       12.4%       54.76       61.58         5,000 - 5,099       12.4%       55.55       62.46         5,100 - 5,199       12.4%       56.34       63.35         5,200 - 5,299       12.4%       57.13       64.24         5,300 - 5,399       12.4%       57.92       65.13         5,400 - 5,499       12.4%       58.71       66.02         5,500 - 5,699       12.4%       59.50       66.91         5,600 - 5,699       12.4%       60.29       67.79         5,700 - 5,799       12.4%       61.08       68.68         5,800 - 5,899       12.4%       61.87       69.57         5,900 - 5,999       12.4%       63.45       71.35         6,000 - 6,099       12.4%       63.45       71.35         6,000 - 6,199       12.4%       63.45       71.35         6,100 - 6,199       12.4%       65.82       74.01         6,200 - 6,299       12.4%       66.61       74.90         6,500 - 6,599 <td></td> <td></td> <td></td> <td></td>				
4,700 - 4,799         12.4%         53.18         59.80           4,800 - 4,899         12.4%         53.97         60.69           4,900 - 4,999         12.4%         54.76         61.58           5,000 - 5,099         12.4%         55.55         62.46           5,100 - 5,199         12.4%         56.34         63.35           5,200 - 5,299         12.4%         57.13         64.24           5,300 - 5,399         12.4%         57.92         65.13           5,400 - 5,499         12.4%         59.50         66.91           5,500 - 5,699         12.4%         69.50         66.91           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         64.24         72.24           6,200 - 6,299         12.4%         65.03         73.12           6,300 - 6,399         12.4%         66.61         74.90           6,600 - 6,699         12.4%         68.19         76.68				
4,800 - 4,899       12.4%       53.97       60.69         4,900 - 4,999       12.4%       54.76       61.58         5,000 - 5,099       12.4%       55.55       62.46         5,100 - 5,199       12.4%       56.34       63.35         5,200 - 5,299       12.4%       57.13       64.24         5,300 - 5,399       12.4%       57.92       65.13         5,400 - 5,499       12.4%       58.71       66.02         5,500 - 5,599       12.4%       59.50       66.91         5,600 - 5,699       12.4%       60.29       67.79         5,700 - 5,799       12.4%       61.08       68.68         5,800 - 5,899       12.4%       61.87       69.57         5,900 - 5,999       12.4%       63.45       71.35         6,100 - 6,099       12.4%       63.45       71.35         6,100 - 6,199       12.4%       65.03       73.12         6,300 - 6,399       12.4%       65.03       73.12         6,500 - 6,599       12.4%       66.61       74.90         6,500 - 6,699       12.4%       68.19       76.68         6,700 - 6,999       12.4%       68.19       76.68         6,700 - 6,999 <td></td> <td></td> <td></td> <td></td>				
4,900 - 4,999         12.4%         54.76         61.58           5,000 - 5,099         12.4%         55.55         62.46           5,100 - 5,199         12.4%         56.34         63.35           5,200 - 5,299         12.4%         57.13         64.24           5,300 - 5,399         12.4%         57.92         65.13           5,400 - 5,499         12.4%         58.71         66.02           5,500 - 5,599         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         63.45         71.35           6,100 - 6,199         12.4%         65.03         73.12           6,300 - 6,399         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         68.19         76.68           6,700 - 6,799         12.4%         69.77         78.45				
5,000 - 5,099         12.4%         55.55         62.46           5,100 - 5,199         12.4%         56.34         63.35           5,200 - 5,299         12.4%         57.13         64.24           5,300 - 5,399         12.4%         57.92         65.13           5,400 - 5,499         12.4%         58.71         66.02           5,500 - 5,699         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.87         69.57           5,900 - 5,899         12.4%         61.87         69.57           5,900 - 6,099         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         64.24         72.24           6,200 - 6,299         12.4%         65.03         73.12           6,300 - 6,399         12.4%         66.61         74.90           6,500 - 6,599         12.4%         66.61         74.90           6,500 - 6,599         12.4%         68.19         76.68           6,700 - 6,799         12.4%         68.98         77.56				
5,100 - 5,199         12.4%         56.34         63.35           5,200 - 5,299         12.4%         57.13         64.24           5,300 - 5,399         12.4%         57.92         65.13           5,400 - 5,499         12.4%         58.71         66.02           5,500 - 5,599         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         63.45         71.35           6,100 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         64.24         72.24           6,200 - 6,299         12.4%         65.03         73.12           6,300 - 6,399         12.4%         66.61         74.90           6,500 - 6,599         12.4%         66.61         74.90           6,600 - 6,699         12.4%         68.19         76.68           6,700 - 6,799         12.4%         69.77         78.45           6,900 - 6,999         12.4%         69.77         78.45	4,900 - 4,999	12.4%	54.76	61.58
5,200 - 5,299         12.4%         57.13         64.24           5,300 - 5,399         12.4%         57.92         65.13           5,400 - 5,499         12.4%         58.71         66.02           5,500 - 5,599         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         65.03         73.12           6,300 - 6,399         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         68.19         76.68           6,700 - 6,799         12.4%         68.98         77.56           6,800 - 6,899         12.4%         69.77         78.45           6,900 - 6,999         12.4%         69.77         78.45           6,900 - 6,999         12.4%         69.77         78.45	5,000 - 5,099	12.4%	55.55	62.46
5,300 - 5,399         12.4%         57.92         65.13           5,400 - 5,499         12.4%         58.71         66.02           5,500 - 5,599         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         63.45         71.35           6,200 - 6,299         12.4%         65.03         73.12           6,300 - 6,399         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         68.19         76.68           6,700 - 6,799         12.4%         68.98         77.56           6,800 - 6,899         12.4%         69.77         78.45           6,900 - 6,999         12.4%         69.77         78.45           6,900 - 6,999         12.4%         70.56         79.34	5,100 - 5,199	12.4%	56.34	63.35
5,400 - 5,499         12.4%         58.71         66.02           5,500 - 5,599         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         64.24         72.24           6,200 - 6,299         12.4%         65.03         73.12           6,300 - 6,399         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         67.40         75.79           6,600 - 6,699         12.4%         68.19         76.68           6,700 - 6,799         12.4%         69.77         78.45           6,900 - 6,999         12.4%         69.77         78.45           6,900 - 6,999         12.4%         70.56         79.34	5,200 - 5,299	12.4%	57.13	64.24
5,500 - 5,599         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         65.03         73.12           6,300 - 6,299         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         67.40         75.79           6,600 - 6,699         12.4%         68.19         76.68           6,700 - 6,799         12.4%         69.77         78.45           6,900 - 6,899         12.4%         69.77         78.45           6,900 - 6,999         12.4%         70.56         79.34	5,300 - 5,399	12.4%	57.92	65.13
5,500 - 5,599         12.4%         59.50         66.91           5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         65.03         73.12           6,300 - 6,299         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         67.40         75.79           6,600 - 6,699         12.4%         68.19         76.68           6,700 - 6,799         12.4%         69.77         78.45           6,900 - 6,899         12.4%         69.77         78.45           6,900 - 6,999         12.4%         70.56         79.34	5.400 - 5.499	12.4%	58.71	66.02
5,600 - 5,699         12.4%         60.29         67.79           5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         64.24         72.24           6,200 - 6,299         12.4%         65.03         73.12           6,300 - 6,399         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         67.40         75.79           6,600 - 6,699         12.4%         68.19         76.68           6,700 - 6,799         12.4%         69.77         78.45           6,900 - 6,899         12.4%         69.77         78.45           6,900 - 6,999         12.4%         70.56         79.34		12 4%		
5,700 - 5,799         12.4%         61.08         68.68           5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         64.24         72.24           6,200 - 6,299         12.4%         65.03         73.12           6,300 - 6,399         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         68.19         76.68           6,700 - 6,799         12.4%         68.98         77.56           6,800 - 6,899         12.4%         69.77         78.45           6,900 - 6,999         12.4%         70.56         79.34				
5,800 - 5,899         12.4%         61.87         69.57           5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         64.24         72.24           6,200 - 6,299         12.4%         65.03         73.12           6,300 - 6,399         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         67.40         75.79           6,600 - 6,699         12.4%         68.19         76.68           6,700 - 6,799         12.4%         68.98         77.56           6,800 - 6,899         12.4%         69.77         78.45           6,900 - 6,999         12.4%         70.56         79.34				
5,900 - 5,999         12.4%         62.66         70.46           6,000 - 6,099         12.4%         63.45         71.35           6,100 - 6,199         12.4%         64.24         72.24           6,200 - 6,299         12.4%         65.03         73.12           6,300 - 6,399         12.4%         65.82         74.01           6,400 - 6,499         12.4%         66.61         74.90           6,500 - 6,599         12.4%         67.40         75.79           6,600 - 6,699         12.4%         68.19         76.68           6,700 - 6,799         12.4%         69.77         78.45           6,900 - 6,999         12.4%         70.56         79.34				
6,000 - 6,099     12.4%     63.45     71.35       6,100 - 6,199     12.4%     64.24     72.24       6,200 - 6,299     12.4%     65.03     73.12       6,300 - 6,399     12.4%     65.82     74.01       6,400 - 6,499     12.4%     66.61     74.90       6,500 - 6,599     12.4%     67.40     75.79       6,600 - 6,699     12.4%     68.19     76.68       6,700 - 6,799     12.4%     68.98     77.56       6,800 - 6,899     12.4%     69.77     78.45       6,900 - 6,999     12.4%     70.56     79.34				
6,100 - 6,199     12.4%     64.24     72.24       6,200 - 6,299     12.4%     65.03     73.12       6,300 - 6,399     12.4%     65.82     74.01       6,400 - 6,499     12.4%     66.61     74.90       6,500 - 6,599     12.4%     67.40     75.79       6,600 - 6,699     12.4%     68.19     76.68       6,700 - 6,799     12.4%     68.98     77.56       6,800 - 6,899     12.4%     69.77     78.45       6,900 - 6,999     12.4%     70.56     79.34	-,			
6,200 - 6,299     12.4%     65.03     73.12       6,300 - 6,399     12.4%     65.82     74.01       6,400 - 6,499     12.4%     66.61     74.90       6,500 - 6,599     12.4%     67.40     75.79       6,600 - 6,699     12.4%     68.19     76.68       6,700 - 6,799     12.4%     68.98     77.56       6,800 - 6,899     12.4%     69.77     78.45       6,900 - 6,999     12.4%     70.56     79.34				
6,300 - 6,399     12.4%     65.82     74.01       6,400 - 6,499     12.4%     66.61     74.90       6,500 - 6,599     12.4%     67.40     75.79       6,600 - 6,699     12.4%     68.19     76.68       6,700 - 6,799     12.4%     68.98     77.56       6,800 - 6,899     12.4%     69.77     78.45       6,900 - 6,999     12.4%     70.56     79.34				
6,400 - 6,499     12.4%     66.61     74.90       6,500 - 6,599     12.4%     67.40     75.79       6,600 - 6,699     12.4%     68.19     76.68       6,700 - 6,799     12.4%     68.98     77.56       6,800 - 6,899     12.4%     69.77     78.45       6,900 - 6,999     12.4%     70.56     79.34				
6,500 - 6,599     12.4%     67.40     75.79       6,600 - 6,699     12.4%     68.19     76.68       6,700 - 6,799     12.4%     68.98     77.56       6,800 - 6,899     12.4%     69.77     78.45       6,900 - 6,999     12.4%     70.56     79.34			65.82	
6,600 - 6,699       12.4%       68.19       76.68         6,700 - 6,799       12.4%       68.98       77.56         6,800 - 6,899       12.4%       69.77       78.45         6,900 - 6,999       12.4%       70.56       79.34		12.4%	66.61	74.90
6,600 - 6,699       12.4%       68.19       76.68         6,700 - 6,799       12.4%       68.98       77.56         6,800 - 6,899       12.4%       69.77       78.45         6,900 - 6,999       12.4%       70.56       79.34	6,500 - 6,599	12.4%	67.40	75.79
6,700 - 6,799       12.4%       68.98       77.56         6,800 - 6,899       12.4%       69.77       78.45         6,900 - 6,999       12.4%       70.56       79.34	6,600 - 6,699			
6,800 - 6,899     12.4%     69.77     78.45       6,900 - 6,999     12.4%     70.56     79.34				
6,900 - 6,999 12.4% 70.56 79.34				
· · · ·				
7,000T 12.470 103.03 213.32				
	1,000T	12.470	103.03	£ 13.3£
Each Addl \$1,000 12.4% 0.79 0.89	Fach Add \$1 000	10.40/	0.70	0.80
Lαστιτίασι ψ1,000 12.770 0.79 0.09	Each Add \$1,000	12.4/0	0.13	0.03

<sup>(1)</sup> From Section A, Page 2 (2) Based on current MH(C) rate manual.

### North Carolina Mobile Homeowners MH(C) - Liability

Derivation of Proposed Year 1 Rates by Limit

(1) (2) (3)  $= (1) \times [1 + (2)]$ 

Liability Limit	Current Rate	Proposed Year 1 Rate Change	Proposed Year 1 Rate
25,000	\$22.12	14.1%	\$25.23
50,000	25.22	14.1%	28.77
100,000	29.20	14.1%	33.31
200,000	34.06	14.1%	38.86
250,000	36.06	14.1%	41.14
300,000	37.83	14.1%	43.16
Average	\$30.15		\$34.40

<sup>(1)</sup> Based on current MH(C) rate manual.

<sup>(2)</sup> From Section A, Page 2

Derivation of Proposed Year 1 Deductible Debit / (Credit) Comprehensive Coverage (Primary Residence)

(1)	(2)	(3)	(4)	(5)	(6)	(7)		
		C	Current Deductib	le Debit / (Credit	t)			
All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
0	\$29.73	\$26.33	\$19.02	\$18.12	\$16.31	\$13.21		
50	13.52	11.98	8.67	8.26	7.42	6.01		
100	0.00	0.00	0.00	0.00	0.00	0.00		
250	(24.33)	(21.55)	(15.57)	(14.84)	(13.35)	(10.81)		
500	(62.18)	(55.06)	(39.80)	(37.91)	(34.11)	(27.63)		
750	(95.02)	(84.13)	(60.84)	(57.94)	(52.14)	(42.23)		
1,000	(121.47)	(107.55)	(77.77)	(74.07)	(66.66)	(53.99)		
2,000	(204.55)	(181.09)	(130.99)	(124.74)	(112.28)	(90.93)		
5,000	(408.40)	(361.54)	(261.56)	(249.08)	(224.21)	(181.58)		
	(8)	(9)	(10)	(11)	(12)	(13)		
	Proposed Year 1 Rate Change							
	Territory	Territory	Territory	Territory	Territory	Territory		
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
	40.3%	24.9%	43.6%	32.4%	25.3%	21.4%		
(14)	(15)	(16)	(17)	(18)	(19)	(20)		
	= (2) x [1+(8)]	$= (3) \times [1+(9)]$	$= (4) \times [1+(10)]$	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]		
		Propo	sed Year 1 Ded	uctible Debit / (C	Credit)			
All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
0	\$41.72	\$32.90	\$27.32	\$24.00	\$20.43	\$16.04		
50	18.97	14.97	12.45	10.94	9.29	7.30		
100	0.00	0.00	0.00	0.00	0.00	0.00		
250	(34.14)	(26.92)	(22.36)	(19.65)	(16.72)	(13.13)		
500	(87.26)	(68.79)	(57.16)	(50.21)	(42.73)	(33.55)		
750	(133.35)	(105.11)	(87.38)	(76.73)	(65.31)	(51.28)		
1,000	(170.46)	(134.37)	(111.70)	(98.10)	(83.50)	(65.57)		
2,000	(287.05)	(226.25)	(188.14)	(165.20)	(140.64)	(110.43)		
5,000	(573.12)	(451.70)	(375.67)	(329.88)	(280.85)	(220.51)		

<sup>(2)</sup> through (7) from current MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 1 Deductible Debit / (Credit) Comprehensive Coverage (Seasonal / Vacation)

(1)	(2)	(3)	(4)	(5)	(6)	(7)			
		C	Current Deductib	le Debit / (Credit	t)				
All Peril	Territory	Territory	Territory	Territory	Territory	Territory			
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6			
0	N/A	N/A	N/A	N/A	N/A	N/A			
50	N/A	N/A	N/A	N/A	N/A	N/A			
100	N/A	N/A	N/A	N/A	N/A	N/A			
250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
500	(37.86)	(33.53)	(24.22)	(23.06)	(20.75)	(16.81)			
750	(70.69)	(62.58)	(45.26)	(43.10)	(38.80)	(31.42)			
1,000	(97.14)	(86.00)	(62.20)	(59.23)	(53.32)	(43.18)			
2,000	(180.22)	(159.54)	(115.41)	(109.90)	(98.93)	(80.12)			
5,000	(384.07)	(340.00)	(245.99)	(234.24)	(210.86)	(170.77)			
	(8)	(9)	(10)	(11)	(12)	(13)			
	Proposed Year 1 Rate Change								
	Territory	Territory	Territory	Territory	Territory	Territory			
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6			
	40.3%	24.9%	43.6%	32.4%	25.3%	21.4%			
(14)	(15) = (2) × [1+(8)]	(16) = (3) x [1+(9)]	(17) = (4) x [1+(10)]	(18) = (5) x [1+(11)]	(19) = (6) x [1+(12)]	(20) = (7) x [1+(13)]			
		Propo	sed Year 1 Ded	uctible Debit / (C	Credit)				
All Peril	Territory	Territory	Territory	Territory	Territory	Territory			
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6			
0	N/A	N/A	N/A	N/A	N/A	N/A			
50	N/A	N/A	N/A	N/A	N/A	N/A			
100	N/A	N/A	N/A	N/A	N/A	N/A			
250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
500	(53.13)	(41.89)	(34.79)	(30.54)	(25.99)	(20.41)			
750	(99.20)	(78.19)	(65.01)	(57.08)	(48.60)	(38.16)			
1,000	(136.32)	(107.45)	(89.34)	(78.44)	(66.79)	(52.44)			
2,000	(252.91)	(199.32)	(165.76)	(145.55)	(123.92)	(97.30)			
5,000	(538.98)	(424.78)	(353.31)	(310.22)	(264.13)	(207.38)			

<sup>(2)</sup> through (7) from current MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

#### North Carolina Mobile Homeowners MH(C) - Adjacent Structures

Derivation of Proposed Year 1 Deductible Debit / (Credit) Comprehensive Coverage (Primary Residence)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)		
			C	Current Deductibl	e Debit / (Credit	:)			
	All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
	0	\$1.99	\$1.82	\$1.16	\$1.13	\$1.01	\$0.76		
	50	0.99	0.92	0.58	0.55	0.50	0.37		
	100	0.00	0.00	0.00	0.00	0.00	0.00		
	250	(1.99)	(1.82)	(1.16)	(1.13)	(1.01)	(0.76)		
	500	(15.88)	(14.57)	(9.28)	(8.96)	(8.04)	(6.05)		
	750	(26.80)	(24.59)	(15.66)	(15.11)	(13.56)	(10.21)		
	1,000	(33.94)	(31.14)	(19.84)	(19.14)	(17.16)	(12.94)		
	2,000	(56.26)	(51.61)	(32.88)	(31.72)	(28.44)	(21.46)		
	5,000	(110.91)	(101.72)	(64.80)	(62.51)	(56.03)	(42.33)		
		(8)	(9)	(10)	(11)	(12)	(13)		
		Proposed Year 1 Rate Change							
		Territory	Territory	Territory	Territory	Territory	Territory		
		Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
		34.2%	11.9%	34.4%	13.7%	8.8%	9.9%		
	(14)	(15)	(16)	(17)	(18)	(19)	(20)		
	(14)	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]		
			Propo	sed Year 1 Dedu	uctible Debit / (C	redit)			
	All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
_	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
	0	\$2.67	\$2.04	\$1.56	\$1.28	\$1.10	\$0.84		
	50	1.33	1.03	0.78	0.63	0.54	0.41		
	100	0.00	0.00	0.00	0.00	0.00	0.00		
	250	(2.67)	(2.04)	(1.56)	(1.28)	(1.10)	(0.84)		
	500	(21.32)	(16.30)	(12.47)	(10.19)	(8.75)	(6.65)		
	750	(35.98)	(27.51)	(21.04)	(17.18)	(14.76)	(11.22)		
	1,000	(45.56)	(34.84)	(26.66)	(21.76)	(18.68)	(14.22)		
	2,000	(75.52)	(57.74)	(44.18)	(36.06)	(30.95)	(23.58)		
	5,000	(148.88)	(113.81)	(87.06)	(71.06)	(60.98)	(46.52)		

<sup>(2)</sup> through (7) from current MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

#### North Carolina Mobile Homeowners MH(C) - Adjacent Structures

Derivation of Proposed Year 1 Deductible Debit / (Credit) Comprehensive Coverage (Seasonal / Vacation)

Current Deductible   Debit / (Credit)	(1)	(2)	(3)	(4)	(5)	(6)	(7)		
Deductible         Group 1         Group 2         Group 3         Group 4         Group 5         Group 6           0         N/A         N/A         N/A         N/A         N/A         N/A         N/A         N/A           50         N/A         N/A         N/A         N/A         N/A         N/A         N/A         N/A           100         N/A         N/A         N/A         N/A         N/A         N/A         N/A           250         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00           500         (13.89)         (12.74)         (8.13)         (7.84)         (7.05)         (5.29)           750         (24.81)         (22.77)         (14.50)         (13.98)         (12.54)         (9.54)           1,000         (31.95)         (29.32)         (18.68)         (180.1)         (16.15)         (15.18)           2,000         (54.27)         (49.79)         (31.72)         (30.59)         (27.42)         (20.71)           5,000         (108.92)         (99.90)         (63.64)         (61.39)         (55.02)         Territory           Group 1         Group 2         Group 3         Group 4			C	Current Deductib	le Debit / (Credit	i)			
0         N/A         N/A         N/A         N/A         N/A         N/A         N/A           50         N/A         N/A         N/A         N/A         N/A         N/A         N/A         N/A           100         N/A         N/A         N/A         N/A         N/A         N/A         N/A           250         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00           500         (13.89)         (12.74)         (8.13)         (7.84)         (7.05)         (5.29)           750         (24.81)         (22.77)         (14.50)         (13.98)         (12.54)         (9.45)           1,000         (31.95)         (29.32)         (18.68)         (18.01)         (16.15)         (12.18)           2,000         (54.27)         (49.79)         (31.72)         (30.59)         (27.42)         (20.71)           5,000         (108.92)         (99.90)         (63.64)         (61.39)         (55.02)         (41.57)           Proposed Year 1 Rate Change           Territory         Territory         Territory         Territory         Territory         Territory         Territory         Territory         Territory	All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
50         N/A         N/A <td>Deductible</td> <td>Group 1</td> <td>Group 2</td> <td>Group 3</td> <td>Group 4</td> <td>Group 5</td> <td>Group 6</td>	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
50         N/A         S         4.9         4.9         4.9         4.9         4.9         4.9         4.9         4.9         4.9         4.9         4.9         4.9         4.9         4.9         4.9         4.9	0	N/A	N/A	N/A	N/A	N/A	N/A		
250	50	N/A	N/A	N/A		N/A	N/A		
Soo	100	N/A	N/A	N/A	N/A	N/A	N/A		
Territory	250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
1,000 (31.95) (29.32) (18.68) (18.01) (16.15) (12.18) 2,000 (54.27) (49.79) (31.72) (30.59) (27.42) (20.71) 5,000 (108.92) (99.90) (63.64) (61.39) (55.02) (41.57)  (8) (9) (10) (11) (12) (13)  Proposed Year 1 Rate Change  Territory Territory Territory Territory Territory Group 1 Group 2 Group 3 Group 4 Group 5 Group 6  34.2% 11.9% 34.4% 13.7% 8.8% 9.9%  (14) (15) (16) (17) (18) (19) (20) = (2) × [1+(8)] = (3) × [1+(9)] = (4) × [1+(10)] = (5) × [1+(11)] = (6) × [1+(12)] = (7) × [1+(13)]  Proposed Year 1 Deductible Debit / (Credit)  All Peril Territory Territory Territory Territory Territory Group 5 Group 6  0 N/A	500		(12.74)	(8.13)	(7.84)	(7.05)			
2,000 (54.27) (49.79) (31.72) (30.59) (27.42) (20.71) (5,000 (108.92) (99.90) (63.64) (61.39) (55.02) (41.57) (41.57) (8) (9) (10) (11) (12) (13) (41.57) (8) (9) (10) (11) (12) (13) (13) (14) (15) (16) (17) (18) (19) (20) (14) (15) (16) (17) (18) (19) (20) (20) (21.44) (15) (16) (17) (18) (19) (20) (20) (20.44) (10) (10) (10) (10) (10) (10) (10) (10	750	(24.81)	(22.77)	(14.50)	(13.98)	(12.54)	(9.45)		
5,000         (108.92)         (99.90)         (63.64)         (61.39)         (55.02)         (41.57)           (8)         (9)         (10)         (11)         (12)         (13)           Proposed Year 1 Rate Change           Territory         Territory         Territory         Territory         Territory         Territory         Group 5         Group 6         Group 6         Group 4         Group 5         Group 6         Group 6         9.9%           (14)         (15)         (16)         (17)         (18)         (19)         (20)<	1,000	(31.95)	(29.32)	(18.68)	(18.01)	(16.15)	(12.18)		
(8)	2,000	(54.27)	(49.79)	(31.72)	(30.59)	(27.42)	(20.71)		
Proposed Year 1 Rate Change   Territory   Territory   Group 1   Group 2   Group 3   Group 4   Group 5   Group 6	5,000	(108.92)	(99.90)	(63.64)	(61.39)	(55.02)	(41.57)		
Territory   Group 1   Group 2   Group 3   Group 4   Group 5   Group 6		(8)	(9)	(10)	(11)	(12)	(13)		
Group 1         Group 2         Group 3         Group 4         Group 5         Group 6           34.2%         11.9%         34.4%         13.7%         8.8%         9.9%           (14)         (15) = (3) × [1+(9)] = (3) × [1+(9)] = (4) × [1+(10)] = (5) × [1+(11)] = (6) × [1+(12)] = (7) × [1+(13)]         Proposed Year 1 Deductible Debit / (Credit)           All Peril Deductible         Territory Group 1         Territory Territory Territory Territory Territory Group 4         Territory Group 5         Group 6           0         N/A         N/A         N/A         N/A         N/A         N/A           50         N/A         N/A         N/A         N/A         N/A         N/A           100         N/A         N/A         N/A         N/A         N/A         N/A           50         N/A         N/A         N/A         N/A         N/A         N/A           100         N/A         N/A         N/A         N/A         N/A         N/A           250         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00           500         (18.65)         (14.25)         (10.92)         (8.91)         (7.67)         (5.81)           750         (33.30) <t< td=""><td></td><td colspan="8">Proposed Year 1 Rate Change</td></t<>		Proposed Year 1 Rate Change							
Companies   Comp		Territory	Territory	Territory	Territory	Territory	Territory		
(14)		Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
Froposed Year 1 Deductible Debit / (Credit)   Ferritory   Territory   Territory   Group 2   Group 3   Group 4   Group 5   Group 6		34.2%	11.9%	34.4%	13.7%	8.8%	9.9%		
All Peril         Territory         Group 5         Group 6           0         N/A	(14)	, ,	٠,,	` '	. ,		. ,		
All Peril         Territory         Group 5         Group 6         Group 6           0         N/A			Propo	sed Year 1 Ded	uctible Debit / (C	Credit)			
0         N/A	All Peril	Territory	<u>.</u>				Territory		
50         N/A         N/A         N/A         N/A         N/A         N/A         N/A           100         N/A         N/A         N/A         N/A         N/A         N/A         N/A           250         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00           500         (18.65)         (14.25)         (10.92)         (8.91)         (7.67)         (5.81)           750         (33.30)         (25.48)         (19.48)         (15.89)         (13.65)         (10.39)           1,000         (42.89)         (32.81)         (25.10)         (20.47)         (17.58)         (13.39)           2,000         (72.85)         (55.71)         (42.62)         (34.77)         (29.84)         (22.76)	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
50         N/A         N/A         N/A         N/A         N/A         N/A         N/A           100         N/A         N/A         N/A         N/A         N/A         N/A         N/A           250         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00           500         (18.65)         (14.25)         (10.92)         (8.91)         (7.67)         (5.81)           750         (33.30)         (25.48)         (19.48)         (15.89)         (13.65)         (10.39)           1,000         (42.89)         (32.81)         (25.10)         (20.47)         (17.58)         (13.39)           2,000         (72.85)         (55.71)         (42.62)         (34.77)         (29.84)         (22.76)	0	N/A	N/A	N/A	N/A	N/A	N/A		
250         \$0.00         \$	50	N/A	N/A	N/A	N/A	N/A	N/A		
500     (18.65)     (14.25)     (10.92)     (8.91)     (7.67)     (5.81)       750     (33.30)     (25.48)     (19.48)     (15.89)     (13.65)     (10.39)       1,000     (42.89)     (32.81)     (25.10)     (20.47)     (17.58)     (13.39)       2,000     (72.85)     (55.71)     (42.62)     (34.77)     (29.84)     (22.76)	100	N/A	N/A	N/A	N/A	N/A	N/A		
750 (33.30) (25.48) (19.48) (15.89) (13.65) (10.39) 1,000 (42.89) (32.81) (25.10) (20.47) (17.58) (13.39) 2,000 (72.85) (55.71) (42.62) (34.77) (29.84) (22.76)	250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
1,000 (42.89) (32.81) (25.10) (20.47) (17.58) (13.39) 2,000 (72.85) (55.71) (42.62) (34.77) (29.84) (22.76)	500	(18.65)	(14.25)	(10.92)	(8.91)	(7.67)	(5.81)		
2,000 (72.85) (55.71) (42.62) (34.77) (29.84) (22.76)	750	(33.30)	(25.48)	(19.48)	(15.89)	(13.65)	(10.39)		
	1,000	(42.89)	(32.81)	(25.10)	(20.47)	(17.58)	(13.39)		
5 000 (146 21) (111 77) (85 50) (69 79) (59 88) (45 69)	2,000	(72.85)	(55.71)	(42.62)	(34.77)	(29.84)	(22.76)		
(1.5.21)	5,000	(146.21)	(111.77)	(85.50)	(69.79)	(59.88)	(45.69)		

<sup>(2)</sup> through (7) from current MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

#### North Carolina Mobile Homeowners MH(C) - Personal Effects

Derivation of Proposed Year 1 Deductible Debit / (Credit) Comprehensive Coverage (Primary Residence)

(1)	(2)	(3)	(4)	(5)	(6)	(7)		
		C	Current Deductib	le Debit / (Credit	i)			
All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
0	\$10.57	\$8.28	\$5.88	\$5.09	\$4.75	\$4.33		
50	5.29	4.14	2.94	2.54	2.37	2.17		
100	0.00	0.00	0.00	0.00	0.00	0.00		
250	(10.57)	(8.28)	(5.88)	(5.09)	(4.75)	(4.33)		
500	(15.86)	(12.42)	(8.81)	(7.63)	(7.12)	(6.50)		
750	(20.09)	(15.74)	(11.15)	(9.67)	(9.02)	(8.23)		
1,000	(23.10)	(18.10)	(12.82)	(11.12)	(10.38)	(9.46)		
2,000	(33.40)	(26.18)	(18.52)	(16.09)	(15.00)	(13.68)		
5,000	(61.07)	(47.89)	(33.84)	(29.43)	(27.45)	(25.01)		
	(8)	(9)	(10)	(11)	(12)	(13)		
	Proposed Year 1 Rate Change							
	Territory	Territory	Territory	Territory	Territory	Territory		
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
	34.5%	17.4%	12.4%	1.8%	-3.4%	-5.3%		
(14)	(15)	(16)	(17)	(18)	(19)	(20)		
(* ',	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	$= (7) \times [1+(13)]$		
		Propo	sed Year 1 Ded	uctible Debit / (C	Credit)			
All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
0	\$14.22	\$9.72	\$6.61	\$5.18	\$4.59	\$4.10		
50	7.11	4.86	3.31	2.59	2.29	2.05		
100	0.00	0.00	0.00	0.00	0.00	0.00		
250	(14.22)	(9.72)	(6.61)	(5.18)	(4.59)	(4.10)		
500	(21.33)	(14.58)	(9.91)	(7.77)	(6.88)	(6.16)		
750	(27.02)	(18.48)	(12.54)	(9.84)	(8.72)	(7.79)		
1,000	(31.07)	(21.25)	(14.42)	(11.32)	(10.03)	(8.96)		
2,000	(44.92)	(30.74)	(20.82)	(16.38)	(14.50)	(12.95)		
5,000	(82.14)	(56.22)	(38.05)	(29.96)	(26.53)	(23.68)		

<sup>(2)</sup> through (7) from current MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

#### North Carolina Mobile Homeowners MH(C) - Personal Effects

Derivation of Proposed Year 1 Deductible Debit / (Credit) Comprehensive Coverage (Seasonal / Vacation)

(1)	(2)	(3)	(4)	(5)	(6)	(7)		
		C	Current Deductib	le Debit / (Credit	:)			
All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
0	N/A	N/A	N/A	N/A	N/A	N/A		
50	N/A	N/A	N/A	N/A	N/A	N/A		
100	N/A	N/A	N/A	N/A	N/A	N/A		
250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
500	(5.29)	(4.14)	(2.94)	(2.54)	(2.37)	(2.17)		
750	(9.52)	(7.46)	(5.27)	(4.58)	(4.27)	(3.90)		
1,000	(12.54)	(9.83)	(6.94)	(6.04)	(5.63)	(5.13)		
2,000	(22.83)	(17.90)	(12.64)	(11.00)	(10.25)	(9.35)		
5,000	(50.50)	(39.61)	(27.96)	(24.34)	(22.69)	(20.68)		
	(8)	(9)	(10)	(11)	(12)	(13)		
	Proposed Year 1 Rate Change							
	Territory	Territory	Territory	Territory	Territory	Territory		
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
	34.5%	17.4%	12.4%	1.8%	-3.4%	-5.3%		
(14)	(15)	(16)	(17)	(18)	(19)	(20)		
,	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]		
		Propo	sed Year 1 Ded	uctible Debit / (C	`redit\			
All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
0	N/A	N/A	N/A	N/A	N/A	N/A		
50	N/A	N/A	N/A	N/A	N/A	N/A		
100	N/A	N/A	N/A	N/A	N/A	N/A		
250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
500	(7.11)	(4.86)	(3.31)	(2.59)	(2.29)	(2.05)		
750	(12.80)	(8.76)	(5.93)	(4.66)	(4.13)	(3.69)		
1,000	(12.80)	(11.54)	(7.80)	(6.15)	(5.44)	(4.86)		
2,000	(30.71)	(21.01)	(14.21)	(11.20)	(9.91)	(8.85)		
5,000	(67.92)	(46.50)	(31.44)	(24.78)	(21.93)	(19.58)		
5,000	(07.32)	(40.50)	(51.74)	(24.70)	(21.33)	(13.30)		

<sup>(2)</sup> through (7) from current MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 1 Deductible Debit / (Credit)
Named Perils Coverage

(1)	(2)	(3)	(4)	(5)	(6)	(7)		
			Current Dedu	uctible Credit				
All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
50	(13.52)	(11.98)	(8.67)	(8.26)	(7.42)	(6.01)		
100	(25.69)	(22.75)	(16.42)	(15.65)	(14.08)	(11.41)		
250	(45.95)	(40.69)	(29.42)	(28.02)	(25.21)	(20.42)		
500	(75.74)	(67.08)	(48.52)	(46.22)	(41.57)	(33.66)		
750	(100.25)	(88.79)	(64.24)	(61.19)	(55.03)	(44.56)		
1,000	(118.52)	(104.97)	(75.96)	(72.36)	(65.07)	(52.69)		
2,000	(172.45)	(152.75)	(110.55)	(105.35)	(94.70)	(76.69)		
5,000	(300.83)	(266.46)	(192.89)	(183.87)	(165.24)	(133.82)		
	(8)	(9)	(10)	(11)	(12)	(13)		
	Proposed Year 1 Rate Change							
	Territory	Territory	Territory	Territory	Territory	Territory		
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
	40.3%	24.9%	43.6%	32.4%	25.3%	21.4%		
(14)	(15)	(16)	(17)	(18)	(19)	(20)		
,	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]		
		Propo	sed Year 1 Ded	uctible Debit / (C	:redit)			
All Peril	Territory	Territory	Territory	Territory	Territory	Territory		
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6		
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
50	(18.97)	(14.97)	(12.45)	(10.94)	(9.29)	(7.30)		
100	(36.05)	(28.42)	(23.58)	(20.73)	(17.64)	(13.86)		
250	(64.48)	(50.84)	(42.25)	(37.11)	(31.58)	(24.80)		
500	(106.29)	(83.81)	(69.69)	(61.21)	(52.07)	(40.88)		
750	(140.68)	(110.93)	(92.27)	(81.04)	(68.93)	(54.11)		
1,000	(166.32)	(131.15)	(109.10)	(95.83)	(81.51)	(63.99)		
2,000	(242.01)	(190.84)	(158.78)	(139.52)	(118.62)	(93.13)		
5,000	(422.17)	(332.91)	(277.04)	(243.51)	(206.98)	(162.51)		
0,000	( )	(552.51)	(=51)	(2.3.31)	(200.00)	(.52.51)		

<sup>(2)</sup> through (7) from current MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

#### North Carolina Mobile Homeowners MH(C) - Adjacent Structures

## Derivation of Proposed Year 1 Deductible Debit / (Credit) Named Perils Coverage

(1)	(2)	(3)	(4)	(5)	(6)	(7)			
			Current Dedu	uctible Credit					
All Peril	Territory	Territory	Territory	Territory	Territory	Territory			
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6			
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
50	(0.99)	(0.92)	(0.58)	(0.55)	(0.50)	(0.37)			
100	(1.99)	(1.82)	(1.16)	(1.13)	(1.01)	(0.76)			
250	(2.98)	(2.74)	(1.75)	(1.68)	(1.51)	(1.13)			
500	(4.53)	(4.18)	(2.67)	(2.54)	(2.29)	(1.72)			
750	(5.96)	(5.52)	(3.52)	(3.34)	(3.01)	(2.25)			
1,000	(7.23)	(6.72)	(4.28)	(4.05)	(3.65)	(2.73)			
2,000	(12.10)	(11.29)	(7.16)	(6.76)	(6.09)	(4.53)			
5,000	(26.16)	(24.53)	(15.50)	(14.61)	(13.14)	(9.76)			
	(8)	(9)	(10)	(11)	(12)	(13)			
		Proposed Year 1 Rate Change							
	Territory	Territory	Territory	Territory	Territory	Territory			
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6			
	34.2%	11.9%	34.4%	13.7%	8.8%	9.9%			
(4.4)	(45)	(40)	(47)	(40)	(40)	(00)			
(14)	(15) = (2) x [1+(8)]	(16) = (3) x [1+(9)]	(17) = (4) x [1+(10)]	(18) = (5) x [1+(11)]	(19) = (6) x [1+(12)]	$(20)$ = $(7) \times [1+(13)]$			
	= (2) X [1+(6)]	= (3) X [1+(9)]	= (4) X [1+(10)]	= (5) X [1+(11)]	= (0) X [1+(12)]	= (1) X [1+(13)]			
		Propo	sed Year 1 Ded	uctible Debit / (C	Credit)				
All Peril	Territory	Territory	Territory	Territory	Territory	Territory			
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6			
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
50	(1.33)	(1.02)	(0.77)	(0.63)	(0.54)	(0.41)			
100	(2.67)	(2.04)	(1.56)	(1.28)	(1.10)	(0.83)			
250	(4.00)	(3.06)	(2.35)	(1.91)	(1.64)	(1.24)			
500	(6.08)	(4.68)	(3.58)	(2.89)	(2.50)	(1.89)			
750	(8.00)	(6.17)	(4.73)	(3.79)	(3.28)	(2.48)			
1,000	(9.71)	(7.52)	(5.75)	(4.60)	(3.97)	(3.00)			
2,000	(16.24)	(12.64)	(9.63)	(7.69)	(6.63)	(4.98)			
5,000	(35.12)	(27.45)	(20.83)	(16.60)	(14.30)	(10.72)			

<sup>(2)</sup> through (7) from current MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

#### North Carolina Mobile Homeowners MH(C) - Personal Effects

## Derivation of Proposed Year 1 Deductible Debit / (Credit) Named Perils Coverage

(1)	(2)	(3)	(4)	(5)	(6)	(7)				
	Current Deductible Credit									
All Peril	Territory	Territory	Territory	Territory	Territory	Territory				
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6				
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00				
50	(4.40)	(3.46)	(2.45)	(2.12)	(1.98)	(1.81)				
100	(8.81)	(6.90)	(4.90)	(4.25)	(3.96)	(3.62)				
250	(17.62)	(13.80)	(9.80)	(8.48)	(7.92)	(7.22)				
500	(30.68)	(24.04)	(17.05)	(14.76)	(13.79)	(12.56)				
750	(41.56)	(32.56)	(23.09) (19.99)		(18.67)	(17.01)				
1,000	(49.82)	(39.03)	(27.67)	(23.96)	(22.38)	(20.38)				
2,000	(78.71)	(61.65)	(43.68)	(37.84)	(35.34)	(32.18)				
5,000	(157.10)	(123.03)	(87.13)	(87.13) (75.51)		(64.19)				
	(8)	(9)	(10)	(11)	(12)	(13)				
	Proposed Year 1 Rate Change									
	Territory	Territory	Territory	Territory	Territory	Territory				
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6				
	34.5%	17.4%	12.4%	1.8%	-3.4%	-5.3%				
(14)	(15)	(16)	(17)	(18)	(19)	(20)				
(14)	= (2) x [1+(8)]	= (3) x [1+(9)]	$= (4) \times [1+(10)]$	= (5) x [1+(11)]	= (6) x [1+(12)]	$= (7) \times [1+(13)]$				
	Proposed Year 1 Deductible Debit / (Credit)									
All Peril	Territory	Territory	Territory	Territory	Territory	Territory				
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6				
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00				
50	(5.92)	(4.06)	(2.75)	(2.16)	(1.91)	(1.71)				
100	(11.85)	(8.10)	(5.51)	(4.33)	(3.83)	(3.43)				
250	(23.70)	(16.20)	(11.02)	(8.63)	(7.65)	(6.84)				
500	(41.26)	(28.22)	(19.17)	(15.03)	(13.33)	(11.89)				
750	(55.90)	(38.23)	(25.96)	(20.35)	(18.04)	(16.11)				
1,000	(67.01)	(45.82)	(31.11)	(24.39)	(21.63)	(19.30)				
2,000	(105.86)	(72.38)	(49.12)	(38.52)	(34.15)	(30.47)				
5,000	, , , , , , , , , , , , , , , , , , , ,		(97.97)	(76.87)	(68.13)	(60.78)				
-,	, ,,,,	, ,,,	()	( )	()	()				

<sup>(2)</sup> through (7) from current MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 1 Named Storm Deductible Debit / (Credit)
Comprehensive Coverage
Territory Groups 1 and 2

(1) Current Named Storm Deductible Debit / (Credit)

(2) Proposed Year 1 Named Storm Deductible Debit / (Credit) = (1)  $\times$  [ 1 + (3) ]

		Primary Residence		Seasonal / Vacation Residence				Primary Residence		Seasonal / Vacation Residence	
All-Peril	Named Storm	Territory	Territory	Territory	Territory	All-Peril	Named Storm	Territory	Territory	Territory	Territory
Deductible	Deductible	Group 1	Group 2	Group 1	Group 2	Deductible	Deductible	Group 1	Group 2	Group 1	Group 2
0	1%	\$20.88	\$18.50			0	1%	\$29.30	\$23.11		
	2%	12.04	10.66				2%	16.90	13.32		
	5%	(14.49)	(12.84)				5%	(20.33)	(16.04)		
50	1%	\$4.84	\$4.29			50	1%	\$6.79	\$5.36		
	2%	(3.84)	(3.39)				2%	(5.39)	(4.24)		
	5%	(29.89)	(26.45)				5%	(41.95)	(33.05)		
100	1%	(\$8.54)	(\$7.57)			100	1%	(\$11.98)	(\$9.46)		
	2%	(17.09)	(15.14)				2%	(23.98)	(18.92)		
	5%	(42.72)	(37.84)				5%	(59.95)	(47.28)		
	370	(42.12)	(07.04)				370	(00.00)	(47.20)		
250	1%	(\$32.64)	(\$28.91)	(\$8.54)	(\$7.57)	250	1%	(\$45.81)	(\$36.12)	(\$11.98)	(\$9.46)
	2%	(40.94)	(36.26)	(17.09)	(15.14)		2%	(57.45)	(45.30)	(23.98)	(18.92)
	5%	(65.85)	(58.33)	(42.72)	(37.84)		5%	(92.41)	(72.88)	(59.95)	(47.28)
	070	(00.00)	(00.00)	(12.12)	(07.01)		070	(02.11)	(12.00)	(00.00)	(17.20)
500	1%	(\$70.10)	(\$62.07)	(\$46.03)	(\$40.77)	500	1%	(\$98.37)	(\$77.55)	(\$64.60)	(\$50.94)
	2%	(78.03)	(69.09)	(54.21)	(48.01)		2%	(109.50)	(86.32)	(76.08)	(59.98)
	5%	(101.80)	(90.14)	(78.74)	(69.73)		5%	(142.86)	(112.62)	(110.50)	(87.12)
750	20/	(\$111.67)	(\$98.87)	(\$88.60)	(\$70.4E)	750	20/	(\$4EC 74)	(\$400 FO)	(C124 24)	(\$98.01)
750	2%				(\$78.45)	750	2%	(\$156.71)	(\$123.52)	(\$124.34)	· · · /
	5%	(133.62)	(118.30)	(111.32)	(98.56)		5%	(187.51)	(147.80)	(156.22)	(123.14)
1,000	2%	(\$140.94)	(\$124.78)	(\$119.29)	(\$105.63)	1,000	2%	(\$197.79)	(\$155.90)	(\$167.40)	(\$131.97)
•	5%	(160.47)	(142.06)	(139.59)	(123.56)	,	5%	(225.19)	(177.48)	(195.89)	(154.37)
2,000	2%	(\$250.32)	(\$221.59)	(\$234.81)	(\$207.91)	2,000	2%	(\$351.28)	(\$276.85)	(\$329.52)	(\$259.76)
2,000	5%	(265.20)	(234.75)	(250.13)	(221.35)	2,000	5%	(372.17)	(293.29)	(351.02)	(276.55)
	0,0	(200:20)	(20 0)	(2001.0)	(221.00)		0,0	(0.2)	(200.20)	(001102)	(2.0.00)
5,000	5%	(\$573.60)	(\$507.68)	(\$575.92)	(\$509.55)	5,000	5%	(\$804.96)	(\$634.28)	(\$808.21)	(\$636.61)
						(2) Dranged Va	or 4 Data Changa	40.20/	24.00/	40.3%	24.9%
						(3) Proposed Ye	ar 1 Rate Change:	40.3%	24.9%	40.3%	24.9%

<sup>(1)</sup> From NCRB MH(C) Rate Manual

<sup>(3)</sup> From Section A, Page 2

#### North Carolina Mobile Homeowners MH(C) - Adjacent Structures

Derivation of Proposed Year 1 Named Storm Deductible Debit / (Credit)
Comprehensive Coverage
Territory Groups 1 and 2

(1) Current Named Storm Deductible Debit / (Credit)

(2) Proposed Year 1 Named Storm Deductible Debit / (Credit) = (1) x [ 1 + (3) ]

		Primary Residence		Seasonal / Vacation Residence					Primary Residence		Seasonal / Vacation Residence	
All-Peril	Named Storm	Territory	Territory	Territory	Territory	All-Peril	Named Storm	Territory	Territory	Territory	Territory	
Deductible	Deductible	Group 1	Group 2	Group 1	Group 2	Deductible	Deductible	Group 1	Group 2	Group 1	Group 2	
0	1%	\$1.33	\$1.22			0	1%	\$1.79	\$1.37			
	2%	0.68	0.63				2%	0.91	0.70			
	5%	(1.29)	(1.16)				5%	(1.73)	(1.30)			
50	1%	\$0.35	\$0.32			50	1%	\$0.47	\$0.36			
	2%	(0.30)	(0.28)				2%	(0.40)	(0.31)			
	5%	(2.23)	(2.06)				5%	(2.99)	(2.30)			
100	1%	(\$0.63)	(\$0.58)			100	1%	(\$0.85)	(\$0.65)			
	2%	(1.27)	(1.17)				2%	(1.70)	(1.31)			
	5%	(3.16)	(2.92)				5%	(4.24)	(3.27)			
250	1%	(\$2.59)	(\$2.38)	(\$0.63)	(\$0.58)	250	1%	(\$3.48)	(\$2.66)	(\$0.85)	(\$0.65)	
	2%	(3.19)	(2.95)	(1.27)	(1.17)		2%	(4.28)	(3.30)	(1.70)	(1.31)	
	5%	(4.98)	(4.63)	(3.16)	(2.92)		5%	(6.69)	(5.18)	(4.24)	(3.27)	
500	1%	(\$16.36)	(\$15.01)	(\$14.38)	(\$13.19)	500	1%	(\$21.96)	(\$16.79)	(\$19.30)	(\$14.76)	
	2%	(16.65)	(15.28)	(14.57)	(13.37)		2%	(22.35)	(17.10)	(19.56)	(14.96)	
	5%	(18.30)	(16.78)	(16.31)	(15.00)		5%	(24.57)	(18.77)	(21.89)	(16.78)	
750	2%	(\$28.61)	(\$26.23)	(\$26.47)	(\$24.30)	750	2%	(\$38.41)	(\$29.35)	(\$35.53)	(\$27.19)	
	5%	(30.04)	(27.48)	(27.98)	(25.72)		5%	(40.32)	(30.75)	(37.56)	(28.78)	
1,000	2%	(\$38.54)	(\$35.32)	(\$36.46)	(\$33.47)	1,000	2%	(\$51.74)	(\$39.52)	(\$48.94)	(\$37.45)	
	5%	(39.69)	(36.27)	(37.67)	(34.62)		5%	(53.28)	(40.58)	(50.57)	(38.74)	
2,000	2%	(\$74.32)	(\$68.09)	(\$72.57)	(\$66.62)	2,000	2%	(\$99.77)	(\$76.18)	(\$97.42)	(\$74.54)	
	5%	(75.15)	(68.57)	(73.39)	(67.42)		5%	(100.88)	(76.72)	(98.52)	(75.43)	
5,000	5%	(\$174.29)	(\$158.88)	(\$171.52)	(\$157.50)	5,000	5%	(\$233.96)	(\$177.77)	(\$230.24)	(\$176.22)	
						(3) Proposed Year 1 Rate Change:		34.2%	11.9%	34.2%	11.9%	

<sup>(1)</sup> From NCRB MH(C) Rate Manual

<sup>(3)</sup> From Section A, Page 2

Derivation of Proposed Year 1 Named Storm Deductible Debit / (Credit) Comprehensive Coverage Territory Groups 1 and 2

(1) Current Named Storm Deductible Debit / (Credit)

(2) Proposed Year 1 Named Storm Deductible Debit / (Credit)  $= (1) \times [1 + (3)]$ 

		Primary Re	sidence	Seasonal / Vacat	ion Residence			Primary Re	sidence	Seasonal / Vacat	ion Residence
All-Peril	Named Storm	Territory	Territory	Territory	Territory	All-Peril	Named Storm	Territory	Territory	Territory	Territory
Deductible	Deductible	Group 1	Group 2	Group 1	Group 2	Deductible	Deductible	Group 1	Group 2	Group 1	Group 2
0	1%	\$9.42	\$7.38			0	1%	\$12.67	\$8.66		
	2%	8.27	6.48				2%	11.12	7.61		
	5%	4.82	3.77				5%	6.48	4.43		
50	1%	\$4.19	\$3.28			50	1%	\$5.64	\$3.85		
	2%	3.08	2.41				2%	4.14	2.83		
	5%	(0.23)	(0.20)				5%	(0.31)	(0.23)		
100	1%	(\$1.05)	(\$0.82)			100	1%	(\$1.41)	(\$0.96)		
	2%	(2.09)	(1.63)				2%	(2.81)	(1.91)		
	5%	(5.23)	(4.08)				5%	(7.03)	(4.79)		
	370	(0.20)	(4.00)				370	(1.00)	(4.73)		
250	1%	(\$11.51)	(\$9.02)	(\$1.05)	(\$0.82)	250	1%	(\$15.48)	(\$10.59)	(\$1.41)	(\$0.96)
	2%	(12.45)	(9.76)	(2.09)	(1.63)		2%	(16.74)	(11.46)	(2.81)	(1.91)
	5%	(15.28)	(11.99)	(5.23)	(4.08)		5%	(20.55)	(14.08)	(7.03)	(4.79)
	070	(10.20)	(11.00)	(0.20)	(1.00)		070	(20.00)	(11.00)	(7.00)	(1.70)
500	1%	(\$16.74)	(\$13.12)	(\$6.29)	(\$4.93)	500	1%	(\$22.51)	(\$15.40)	(\$8.46)	(\$5.79)
	2%	(17.63)	(13.82)	(7.29)	(5.71)		2%	(23.71)	(16.22)	(9.80)	(6.70)
	5%	(20.29)	(15.92)	(10.29)	(8.07)		5%	(27.29)	(18.69)	(13.84)	(9.47)
			, ,		. ,			, ,	, ,	, ,	, ,
750	2%	(\$21.67)	(\$16.99)	(\$11.87)	(\$9.31)	750	2%	(\$29.15)	(\$19.95)	(\$15.96)	(\$10.93)
	5%	(24.02)	(18.86)	(14.58)	(11.45)		5%	(32.31)	(22.14)	(19.61)	(13.44)
1,000	2%	(\$24.41)	(\$19.15)	(\$15.63)	(\$12.25)	1,000	2%	(\$32.83)	(\$22.48)	(\$21.02)	(\$14.38)
1,000	5%	(26.37)	(20.70)	(17.93)	(14.09)	1,000	5%	(35.47)	(24.30)	(24.11)	(16.54)
0.000	00/	(000.04)	(000,40)	(000.44)	(000.04)	0.000	00/	(0.45.04)	(004.00)	(000.40)	(000.04)
2,000	2%	(\$33.64)	(\$26.42)	(\$29.14)	(\$22.84)	2,000	2%	(\$45.24)	(\$31.02)	(\$39.19)	(\$26.81)
	5%	(35.04)	(27.52)	(30.69)	(24.16)		5%	(47.13)	(32.31)	(41.28)	(28.36)
5,000	5%	(\$59.83)	(\$47.01)	(\$67.61)	(\$53.28)	5,000	5%	(\$80.47)	(\$55.19)	(\$90.93)	(\$62.55)
						(3) Proposed Ye	ar 1 Rate Change:	34.5%	17.4%	34.5%	17.4%

<sup>(1)</sup> From NCRB MH(C) Rate Manual (3) From Section A, Page 2

Derivation of Proposed Year 1 Named Storm Deductible Debit / (Credit) Named Perils Territory Groups 1 and 2

(1) Current Named Storm Deductible Debit / (Credit)

(2) Proposed Year 1 Named Storm Deductible Debit / (Credit)  $= (1) \times [1 + (3)]$ 

		Primary Re	esidence			Primary Re	sidence
All-Peril	Named Storm	Territory	Territory	All-Peril	Named Storm	Territory	Territory
Deductible	Deductible	Group 1	Group 2	Deductible	Deductible	Group 1	Group 2
0	1%	(\$15.24)	(\$13.49)	0	1%	(\$21.39)	(\$16.85)
	2%	(30.48)	(26.99)		2%	(42.77)	(33.72)
	5%	(76.19)	(67.47)		5%	(106.92)	(84.29)
50	1%	(\$28.51)	(\$25.25)	50	1%	(\$40.01)	(\$31.55)
	2%	(43.49)	(38.52)		2%	(61.03)	(48.13)
	5%	(88.45)	(78.33)		5%	(124.13)	(97.86)
100	1%	(\$40.41)	(\$35.79)	100	1%	(\$56.71)	(\$44.71)
	2%	(55.13)	(48.82)		2%	(77.37)	(60.99)
	5%	(99.29)	(87.94)		5%	(139.34)	(109.87)
250	1%	(\$60.28)	(\$53.38)	250	1%	(\$84.59)	(\$66.69)
	2%	(74.61)	(66.07)		2%	(104.70)	(82.55)
	5%	(117.60)	(104.13)		5%	(165.03)	(130.10)
500	1%	(\$93.40)	(\$82.71)	500	1%	(\$131.07)	(\$103.33)
	2%	(103.87)	(91.97)		2%	(145.77)	(114.90)
	5%	(143.67)	(127.20)		5%	(201.62)	(158.92)
750	2%	(\$129.13)	(\$114.32)	750	2%	(\$181.21)	(\$142.83)
	5%	(164.65)	(145.76)		5%	(231.06)	(182.11)
1,000	2%	(\$149.76)	(\$132.57)	1,000	2%	(\$210.16)	(\$165.63)
	5%	(180.06)	(159.39)		5%	(252.69)	(199.14)
2,000	2%	(\$225.32)	(\$199.42)	2,000	2%	(\$316.20)	(\$249.15)
	5%	(241.70)	(213.92)		5%	(339.19)	(267.26)
5,000	5%	(\$426.62)	(\$377.50)	5,000	5%	(\$598.69)	(\$471.64)
				(3) Proposed Ye	ear 1 Rate Change:	40.3%	24.9%

<sup>(1)</sup> From NCRB MH(C) Rate Manual (3) From Section A, Page 2

Derivation of Proposed Year 1 Named Storm Deductible Debit / (Credit) Named Perils Territory Groups 1 and 2

(1) Current Named Storm Deductible Debit / (Credit)

(2) Proposed Year 1 Named Storm Deductible Debit / (Credit)  $= (1) \times [1 + (3)]$ 

		Primary Re	sidence			Primary Re	sidence
All-Peril Deductible	Named Storm Deductible	Territory Group 1	Territory Group 2	All-Peril Deductible	Named Storm Deductible	Territory Group 1	Territory Group 2
0	1%	(\$1.08)	(\$0.99)	0	1%	(\$1.45)	(\$1.11)
	2%	(2.16)	(1.99)		2%	(2.90)	(2.23)
	5%	(5.41)	(4.96)		5%	(7.26)	(5.55)
50	1%	(\$2.06)	(\$1.90)	50	1%	(\$2.77)	(\$2.13)
	2%	(3.13)	(2.88)		2%	(4.20)	(3.22)
	5%	(6.34)	(5.82)		5%	(8.51)	(6.51)
100	1%	(\$3.05)	(\$2.79)	100	1%	(\$4.09)	(\$3.12)
	2%	(4.11)	(3.76)		2%	(5.52)	(4.21)
5%	5%	(7.28)	(6.67)		5%	(9.77)	(7.46)
250	1%	(\$4.00)	(\$3.67)	250	1%	(\$5.37)	(\$4.11)
	2%	(5.03)	(4.61)		2%	(6.75)	(5.16)
	5%	(8.10)	(7.42)		5%	(10.87)	(8.30)
500	1%	(\$5.59)	(\$5.14)	500	1%	(\$7.50)	(\$5.75)
	2%	(6.23)	(5.72)		2%	(8.36)	(6.40)
	5%	(8.98)	(8.24)		5%	(12.05)	(9.22)
750	2%	(\$7.07)	(\$6.50)	750	2%	(\$9.49)	(\$7.27)
	5%	(9.37)	(8.60)		5%	(12.58)	(9.62)
1,000	2%	(\$7.52)	(\$6.90)	1,000	2%	(\$10.09)	(\$7.72)
	5%	(9.48)	(8.70)		5%	(12.73)	(9.73)
2,000	2%	(\$8.86)	(\$8.11)	2,000	2%	(\$11.89)	(\$9.07)
	5%	(9.89)	(9.01)		5%	(13.28)	(10.08)
5,000	5%	(\$11.13)	(\$9.84)	5,000	5%	(\$14.94)	(\$11.01)
				(3) Proposed Ye	ar 1 Rate Change:	34.2%	11.9%

<sup>(1)</sup> From NCRB MH(C) Rate Manual (3) From Section A, Page 2

Derivation of Proposed Year 1 Named Storm Deductible Debit / (Credit) Named Perils Territory Groups 1 and 2

(1) Current Named Storm Deductible Debit / (Credit)

(2) Proposed Year 1 Named Storm Deductible Debit / (Credit)  $= (1) \times [1 + (3)]$ 

		Primary Re	esidence			Primary Re	sidence
All-Peril	Named Storm	Territory	Territory	All-Peril	Named Storm	Territory	Territory
Deductible	Deductible	Group 1	Group 2	Deductible	Deductible	Group 1	Group 2
0	1%	(\$2.10)	(\$1.65)	0	1%	(\$2.82)	(\$1.94)
	2%	(4.21)	(3.31)		2%	(5.66)	(3.89)
	5%	(10.52)	(8.27)		5%	(14.15)	(9.71)
50	1%	(\$6.42)	(\$5.02)	50	1%	(\$8.63)	(\$5.89)
	2%	(8.43)	(6.59)		2%	(11.34)	(7.74)
	5%	(14.47)	(11.30)		5%	(19.46)	(13.27)
100	1%	(\$10.74)	(\$8.42)	100	1%	(\$14.44)	(\$9.89)
	2%	(12.67)	(9.93)		2%	(17.04)	(11.66)
	5%	(18.47)	(14.48)		5%	(24.84)	(17.00)
250	1%	(\$19.35)	(\$15.17)	250	1%	(\$26.02)	(\$17.81)
	2%	(20.74)	(16.26)		2%	(27.89)	(19.09)
	5%	(26.30)	(20.64)		5%	(35.37)	(24.23)
500	1%	(\$33.71)	(\$26.42)	500	1%	(\$45.34)	(\$31.02)
	2%	(32.49)	(25.47)		2%	(43.70)	(29.90)
	5%	(37.39)	(29.36)		5%	(50.29)	(34.47)
750	2%	(\$42.02)	(\$32.94)	750	2%	(\$56.51)	(\$38.67)
	5%	(46.05)	(36.18)		5%	(61.93)	(42.48)
1,000	2%	(\$48.98)	(\$38.39)	1,000	2%	(\$65.88)	(\$45.07)
	5%	(52.52)	(41.28)		5%	(70.64)	(48.46)
2,000	2%	(\$72.97)	(\$57.18)	2,000	2%	(\$98.14)	(\$67.13)
	5%	(76.06)	(59.82)		5%	(102.30)	(70.23)
5,000	5%	(\$143.75)	(\$113.12)	5,000	5%	(\$193.34)	(\$132.80)
				(3) Proposed Ye	ear 1 Rate Change:	34.5%	17.4%

<sup>(1)</sup> From NCRB MH(C) Rate Manual (3) From Section A, Page 2

### North Carolina Mobile Homeowners MH(C)

Wind Exclusion Credits
Territory Groups 1 and 2 (Territories 110-160)

	Mobile Home Structures							
Territory Group	Current Credit	Measured Impact (% Change)	Proposed Credit					
1	59.6%	-11.6%	64.3%					
2	59.6%	-1.0%	60.0%					
		Adjacent Structures						
Territory	Current	Impact	Proposed					
Group	Credit	(% Change)	Credit					
1	37.9%	-30.8%	57.0%					
2	37.9%	-25.8%	53.9%					
		Personal Effects						
		Measured						
Territory	Current	Impact	Proposed					
Group	Credit	(% Change)	Credit					
1	38.9%	-10.5%	45.3%					
2	38.9%	0.7%	38.5%					

Note:

Measured Impact = (1 - Proposed Credit) / (1 - Current Credit) - 1

Derivation of Proposed Year 2 Territory Relativities

	Average Rates & Relativites by Territory Group					
	Terr Grp 1	Terr Grp 2	Terr Grp 3	Terr Grp 4	Terr Grp 5	Terr Grp 6
(1) Proposed Year 1 Average Rate	\$1,327.90	\$1,359.44	\$1,316.01	\$1,598.92	\$1,585.57	\$1,575.63
(2) Average Tie Down Factor	0.903	0.901	0.902	0.902	0.902	0.902
(3) Proposed Year 1 Territory Relativity	1.681	1.327	1.000	0.889	0.756	0.593
(4) Proposed Year 1 Average Deductible Credit	(49.33)	(41.82)	(43.97)	(38.84)	(32.94)	(26.25)
(5) Proposed Year 1 Average Premium	\$1,966.92	\$1,584.21	\$1,143.42	\$1,242.71	\$1,047.84	\$816.14
(6) Earned House Years	1,964.06	2,742.14	13,303.91	9,871.77	10,868.38	43,669.89
(7) 2021 Earned Prem at Proposed Yr 1 Rate Level	\$3,863,153	\$4,344,137	\$15,211,889	\$12,267,722	\$11,388,284	\$35,640,956
(8) Proposed Year 2 Rate Change	40.3%	24.9%	43.6%	32.4%	25.3%	21.4%
(9) 2021 Earned Prem at Proposed Yr 2 Rate Level	\$5,419,716	\$5,425,842	\$21,848,150	\$16,252,180	\$14,257,581	\$43,246,469
(10) Proposed Year 2 Average Premium	\$2,759.44	\$1,978.69	\$1,642.24	\$1,646.33	\$1,311.84	\$990.30
(11) Proposed Year 2 Average Deductible Credit	(69.22)	(52.25)	(63.16)	(51.44)	(41.26)	(31.89)
(12) Average Tie Down Factor	0.903	0.901	0.902	0.902	0.902	0.902
(13) Proposed Year 2 Average Rate	\$1,907.21	\$1,952.50	\$1,890.13	\$2,296.46	\$2,277.28	\$2,263.00
(14) Proposed Year 2 Territory Relativity	1.642	1.154	1.000	0.820	0.659	0.501

<sup>(1), (2), (3), (4), (6), (12)</sup> From Section B, Page 1

 $<sup>(5) = (1) \</sup>times (2) \times (3) + (4)$ 

<sup>(6)</sup> Excludes earned exposure with no Coverage A

 $<sup>(7) = (5) \</sup>times (6)$ 

<sup>(8)</sup> From Section A, Page 2

<sup>(9)</sup> Based on (8) and the extension of exposures method

<sup>(10) = (9) / (6)</sup> 

 $<sup>(11) = (4) \</sup>times [1 + (8)]$ 

<sup>(13)</sup> Based on the extension of exposures method

<sup>(14) = [(10) - (11)] / (12) / (13)</sup> 

Derivation of Proposed Year 2 Territory Relativities

	Average Rates & Relativites by Territory Group					
	Terr Grp 1	Terr Grp 2	Terr Grp 3	Terr Grp 4	Terr Grp 5	Terr Grp 6
(1) Proposed Year 1 Average Rate	\$102.53	\$117.76	\$124.44	\$158.64	\$155.88	\$148.04
(2) Average Tie Down Factor	0.903	0.901	0.902	0.901	0.901	0.901
(3) Proposed Year 1 Territory Relativity	1.871	1.435	1.000	0.818	0.703	0.534
(4) Proposed Year 1 Average Deductible Credit	(10.38)	(7.85)	(8.72)	(7.32)	(6.39)	(4.90)
(5) Proposed Year 1 Average Premium	\$162.83	\$144.42	\$103.52	\$109.64	\$92.40	\$66.36
(6) Earned House Years	1,483.69	2,317.36	10,882.90	8,723.39	9,259.57	39,662.03
(7) 2021 Earned Prem at Proposed Yr 1 Rate Level	\$241,593	\$334,684	\$1,126,644	\$956,465	\$855,602	\$2,631,775
(8) Proposed Year 2 Rate Change	34.2%	11.9%	34.4%	13.7%	8.8%	9.9%
(9) 2021 Earned Prem at Proposed Yr 2 Rate Level	\$324,246	\$374,470	\$1,513,795	\$1,087,160	\$931,406	\$2,893,812
(10) Proposed Year 2 Average Premium	\$218.54	\$161.59	\$139.10	\$124.63	\$100.59	\$72.96
(11) Proposed Year 2 Average Deductible Credit	(13.93)	(8.78)	(11.71)	(8.32)	(6.95)	(5.39)
(12) Average Tie Down Factor	0.903	0.901	0.902	0.901	0.901	0.901
(13) Proposed Year 2 Average Rate	\$137.75	\$158.22	\$167.20	\$213.15	\$209.29	\$198.91
(14) Proposed Year 2 Territory Relativity	1.869	1.195	1.000	0.692	0.570	0.437

<sup>(1), (2), (3), (4), (6), (12)</sup> From Section B, Page 2

 $<sup>(5) = (1) \</sup>times (2) \times (3) + (4)$ 

<sup>(6)</sup> Excludes earned exposure with no Coverage B

 $<sup>(7) = (5) \</sup>times (6)$ 

<sup>(8)</sup> From Section A, Page 2

<sup>(9)</sup> Based on (8) and the extension of exposures method

<sup>(10) = (9) / (6)</sup> 

 $<sup>(11) = (4) \</sup>times [1 + (8)]$ 

<sup>(13)</sup> Based on the extension of exposures method

<sup>(14) = [(10) - (11)]/(12)/(13)</sup> 

Derivation of Proposed Year 2 Territory Relativities

	Average Rates & Relativites by Territory Group					
	Terr Grp 1	Terr Grp 2	Terr Grp 3	Terr Grp 4	Terr Grp 5	Terr Grp 6
(1) Proposed Year 1 Average Rate	\$161.07	\$178.07	\$191.30	\$241.12	\$229.28	\$231.83
(2) Average Tie Down Factor	0.903	0.901	0.902	0.901	0.902	0.902
(3) Proposed Year 1 Territory Relativity	2.354	1.613	1.000	0.787	0.697	0.622
(4) Proposed Year 1 Average Deductible Credit	(13.52)	(10.83)	(8.32)	(6.43)	(5.58)	(4.97)
(5) Proposed Year 1 Average Premium	\$328.86	\$248.03	\$164.25	\$164.63	\$138.50	\$125.03
(6) Earned House Years	1,897.43	2,698.17	13,045.90	9,818.19	10,719.91	44,047.24
(7) 2021 Earned Prem at Proposed Yr 1 Rate Level	\$623,989	\$669,237	\$2,142,760	\$1,616,335	\$1,484,673	\$5,507,243
(8) Proposed Year 2 Rate Change	34.5%	17.4%	12.4%	1.8%	-3.4%	-5.3%
(9) 2021 Earned Prem at Proposed Yr 2 Rate Level	\$839,293	\$785,759	\$2,408,266	\$1,645,738	\$1,433,913	\$5,214,250
(10) Proposed Year 2 Average Premium	\$442.33	\$291.22	\$184.60	\$167.62	\$133.76	\$118.38
(11) Proposed Year 2 Average Deductible Credit	(18.19)	(12.72)	(9.35)	(6.55)	(5.40)	(4.71)
(12) Average Tie Down Factor	0.903	0.901	0.902	0.901	0.902	0.902
(13) Proposed Year 2 Average Rate	\$181.04	\$200.14	\$215.01	\$270.98	\$257.68	\$260.55

1.685

1.000

0.713

0.599

0.524

2.817

(14) Proposed Year 2 Territory Relativity

<sup>(1), (2), (3), (4), (6), (12)</sup> From Section B, Page 3

 $<sup>(5) = (1) \</sup>times (2) \times (3) + (4)$ 

<sup>(6)</sup> Excludes earned exposure with no Coverage C

 $<sup>(7) = (5) \</sup>times (6)$ 

<sup>(8)</sup> From Section A, Page 2

<sup>(9)</sup> Based on (8) and the extension of exposures method

<sup>(10) = (9) / (6)</sup> 

 $<sup>(11) = (4) \</sup>times [1 + (8)]$ 

<sup>(13)</sup> Based on the extension of exposures method

<sup>(14) = [(10) - (11)]/(12)/(13)</sup> 

### Derivation of Proposed Year 2 Base Rates Territory Group 3

Primary Residence

(3) = (2) x [1 + (1)] (5) = (4) x [1 + (1)] (1) (2) (4)

		Comprehensive		Named Perils		
	Proposed	Proposed	Proposed	Proposed	Proposed	
Amount of	Year 2	Year 1	Year 2	Year 1	Year 2	
Insurance	Rate Change	Rate	Rate	Rate	Rate	
1 - 3,999 4,000 - 4,999	43.6% 43.6%	\$382.40 408.00	\$549.23 585.99	\$340.84 363.65	\$489.54 522.30	
5,000 - 5,999	43.6%	429.08	616.27	382.43	549.27	
6,000 - 6,999	43.6%	451.42	648.36	402.35	577.88	
7,000 - 7,999	43.6%	474.05	680.86	422.52	606.85	
8,000 - 8,999	43.6%	496.77	713.49	442.77	635.93	
9,000 - 9,999	43.6%	520.73	747.90	464.13	666.61	
10,000 - 10,999 11,000 - 11,999	43.6% 43.6%	543.41 562.58	780.48 808.01	484.35 501.43	695.65 720.18	
12,000 - 12,999	43.6%	581.76	835.56	518.52	744.73	
13,000 - 13,999	43.6%	600.33	862.23	535.08	768.52	
14,000 - 14,999	43.6%	618.90	888.90	551.63	792.29	
15,000 - 15,999	43.6%	639.94	919.12	570.38	819.22	
16,000 - 16,999	43.6%	662.65	951.74 983.62	590.62 610.41	848.29 876.71	
17,000 - 17,999 18,000 - 18,999	43.6% 43.6%	684.85 706.93	1,015.34	630.09	904.97	
19,000 - 19,999	43.6%	731.11	1,050.07	651.63	935.91	
20,000 - 20,999	43.6%	753.85	1,082.73	671.91	965.04	
21,000 - 21,999	43.6%	772.02	1,108.82	688.10	988.29	
22,000 - 22,999	43.6%	790.19	1,134.92	704.30	1,011.56	
23,000 - 23,999 24,000 - 24,999	43.6% 43.6%	809.39 828.87	1,162.50 1,190.47	721.42 738.77	1,036.15 1,061.07	
25,000 - 25,999	43.6%	849.84	1,220.59	757.46	1,087.91	
26,000 - 26,999	43.6%	871.95	1,252.35	777.18	1,116.23	
27,000 - 27,999	43.6%	893.73	1,283.63	796.58	1,144.10	
28,000 - 28,999	43.6%	915.36	1,314.70	815.85	1,171.77	
29,000 - 29,999	43.6% 43.6%	939.65	1,349.58	837.50	1,202.87	
30,000 - 30,999 31,000 - 31,999	43.6%	964.81 983.70	1,385.72 1,412.85	859.93 876.77	1,235.08 1,259.27	
32,000 - 32,999	43.6%	1,002.07	1,439.23	893.14	1,282.78	
33,000 - 33,999	43.6%	1,020.42	1,465.59	909.50	1,306.28	
34,000 - 34,999	43.6%	1,041.20	1,495.44	928.03	1,332.89	
35,000 - 35,999 36,000 - 36,999	43.6% 43.6%	1,062.29 1,083.36	1,525.73 1,555.99	946.81 965.60	1,359.87 1,386.85	
37,000 - 37,999	43.6%	1,104.44	1,586.27	984.39	1,413.84	
38,000 - 38,999	43.6%	1,125.51	1,616.53	1,003.17	1,440.81	
39,000 - 39,999	43.6%	1,146.58	1,646.79	1,021.96	1,467.80	
40,000 - 40,999	43.6%	1,167.67	1,677.08	1,040.74	1,494.78	
41,000 - 41,999 42,000 - 42,999	43.6% 43.6%	1,188.74 1,209.82	1,707.34 1,737.62	1,059.53 1,078.32	1,521.76 1,548.75	
43,000 - 43,999	43.6%	1,230.89	1,767.88	1,097.10	1,575.72	
44,000 - 44,999	43.6%	1,251.98	1,798.17	1,115.89	1,602.71	
45,000 - 45,999	43.6%	1,273.05	1,828.43	1,134.68	1,629.70	
46,000 - 46,999	43.6%	1,294.13	1,858.71	1,153.46	1,656.67	
47,000 - 47,999 48,000 - 48,999	43.6% 43.6%	1,315.20 1,336.28	1,888.97 1,919.25	1,172.25 1,191.02	1,683.66 1,710.62	
49,000 - 49,999	43.6%	1,357.35	1,949.51	1,209.81	1,737.60	
50,000 - 50,999	43.6%	1,378.44	1,979.80	1,228.59	1,764.58	
51,000 - 51,999	43.6%	1,399.51	2,010.06	1,247.38	1,791.56	
52,000 - 52,999 53,000 - 53,999	43.6%	1,420.59	2,040.34	1,266.17	1,818.55	
54,000 - 54,999	43.6% 43.6%	1,441.66 1,462.73	2,070.60 2,100.86	1,284.95 1,303.74	1,845.52 1,872.51	
55,000 - 55,999	43.6%	1,483.82	2,131.15	1,322.52	1,899.49	
56,000 - 56,999	43.6%	1,504.89	2,161.42	1,341.31	1,926.47	
57,000 - 57,999	43.6%	1,525.97	2,191.69	1,360.10	1,953.46	
58,000 - 58,999 59,000 - 59,999	43.6% 43.6%	1,547.04 1,568.13	2,221.95 2,252.25	1,378.88 1,397.67	1,980.43 2,007.42	
60,000 - 60,999	43.6%	1,589.20	2,282.51	1,416.46	2,034.41	
61,000 - 61,999	43.6%	1,610.28	2,312.78	1,435.24	2,061.38	
62,000 - 62,999	43.6%	1,631.35	2,343.05	1,454.03	2,088.37	
63,000 - 63,999	43.6%	1,652.43	2,373.32	1,472.81	2,115.34	
64,000 - 64,999 65,000 - 65,999	43.6% 43.6%	1,673.50 1,694.59	2,403.58 2,433.88	1,491.60 1,510.39	2,142.33 2,169.32	
66,000 - 66,999	43.6%	1,715.66	2,464.14	1,529.17	2,196.29	
67,000 - 67,999	43.6%	1,736.74	2,494.41	1,547.96	2,223.28	
68,000 - 68,999	43.6%	1,757.81	2,524.68	1,566.75	2,250.26	
69,000 - 69,999	43.6%	1,778.88	2,554.94	1,585.53	2,277.24	
70,000 - 70,999 71,000 - 71,999	43.6% 43.6%	1,799.97 1,821.04	2,585.23 2,615.49	1,604.30 1,623.09	2,304.19 2,331.18	
72,000 - 71,999	43.6%	1,842.12	2,645.77	1,641.88	2,358.17	
73,000 - 73,999	43.6%	1,863.19	2,676.03	1,660.66	2,385.14	
74,000 - 74,999	43.6%	1,884.28	2,706.32	1,679.45	2,412.13	
75,000 - 75,999	43.6%	1,905.35	2,736.58	1,698.24	2,439.12	
76,000 - 76,999 77,000 - 77,999	43.6% 43.6%	1,926.43 1,947.50	2,766.86 2,797.12	1,717.02 1,735.81	2,466.09 2,493.08	
78,000 - 78,999	43.6%	1,968.58	2,827.40	1,754.60	2,520.07	
79,000 - 79,999	43.6%	1,989.65	2,857.66	1,773.38	2,547.04	
+000,08	43.6%	2,387.09	3,428.49	2,013.21	2,891.50	
Each Addl \$1,000	43.6%	21.07	30.26	18.79	26.99	
_aon ∧au φ1,000	<del>-</del> 3.0 /0	21.07	30.20	10.75	20.33	

<sup>(1)</sup> From Section A, Page 2 (2), (4) Based on proposed year 1 MH(C) rate manual.

### Derivation of Proposed Year 2 Base Rates Territory Group 3

Rental

(3) = (2) x [1 + (1)] (5) = (4) x [1 + (1)] (1) (2) (4)

			- (2) x [1 + (1)]		- (4) x [1 + (1)]
	Deserved		hensive	Named	
Amount of	Proposed Year 2	Proposed Year 1	Proposed Year 2	Proposed Year 1	Proposed Year 2
Insurance	Rate Change	Rate	Rate	Rate	Rate
1 - 3,999	43.6%	\$655.08	\$940.87	\$613.51	\$881.16
4,000 - 4,999	43.6%	698.91	1,003.82	654.58	940.15
5,000 - 5,999	43.6%	735.02	1,055.68	688.39	988.71
6,000 - 6,999	43.6%	773.28	1,110.63	724.24	1,040.20
7,000 - 7,999 8,000 - 8,999	43.6% 43.6%	812.06 850.99	1,166.33 1,222.24	760.54 797.00	1,092.33 1,144.70
9,000 - 9,999	43.6%	892.00	1,281.15	835.42	1,199.88
10,000 - 10,999	43.6%	930.87	1,336.97	871.83	1,252.18
11,000 - 11,999	43.6%	963.72	1,384.15	902.58	1,296.34
12,000 - 12,999	43.6%	996.56	1,431.32	933.34	1,340.52
13,000 - 13,999 14,000 - 14,999	43.6% 43.6%	1,028.38 1,060.18	1,477.02 1,522.70	963.14 992.93	1,383.32 1,426.11
15,000 - 15,999	43.6%	1,096.23	1,574.47	1,026.68	1,474.58
16,000 - 16,999	43.6%	1,135.14	1,630.36	1,063.12	1,526.92
17,000 - 17,999	43.6%	1,173.18	1,684.99	1,098.75	1,578.09
18,000 - 18,999 19,000 - 19,999	43.6% 43.6%	1,210.98 1,252.41	1,739.28 1,798.79	1,134.16 1,172.95	1,628.95 1,684.66
20,000 - 20,999	43.6%	1,291.36	1,854.73	1,209.43	1,737.06
21,000 - 21,999	43.6%	1,322.48	1,899.43	1,238.59	1,778.94
22,000 - 22,999	43.6%	1,353.61	1,944.14	1,267.73	1,820.79
23,000 - 23,999	43.6%	1,386.51	1,991.39	1,298.55	1,865.06
24,000 - 24,999 25,000 - 25,999	43.6% 43.6%	1,419.86 1,455.78	2,039.29 2,090.88	1,329.79 1,363.41	1,909.93 1,958.21
26,000 - 26,999	43.6%	1,493.67	2,145.30	1,398.92	2,009.22
27,000 - 27,999	43.6%	1,530.98	2,198.89	1,433.85	2,059.38
28,000 - 28,999	43.6%	1,568.02	2,252.09	1,468.55	2,109.22
29,000 - 29,999 30,000 - 30,999	43.6% 43.6%	1,609.62	2,311.84	1,507.50 1,547.89	2,165.16
31,000 - 30,999	43.6%	1,652.74 1,685.09	2,373.77 2,420.23	1,578.18	2,223.18 2,266.68
32,000 - 32,999	43.6%	1,716.55	2,465.42	1,607.65	2,309.01
33,000 - 33,999	43.6%	1,748.00	2,510.59	1,637.11	2,351.32
34,000 - 34,999	43.6%	1,783.61	2,561.73	1,670.44	2,399.19
35,000 - 35,999 36,000 - 36,999	43.6% 43.6%	1,819.72 1,855.81	2,613.59 2,665.43	1,704.27 1,738.08	2,447.78 2,496.34
37,000 - 37,999	43.6%	1,891.92	2,717.29	1,771.89	2,544.90
38,000 - 38,999	43.6%	1,928.02	2,769.14	1,805.71	2,593.47
39,000 - 39,999	43.6%	1,964.13	2,821.01	1,839.52	2,642.03
40,000 - 40,999	43.6%	2,000.24	2,872.87	1,873.33	2,690.59
41,000 - 41,999 42,000 - 42,999	43.6% 43.6%	2,036.33 2,072.44	2,924.70 2,976.57	1,907.15 1,940.96	2,739.17 2,787.73
43,000 - 43,999	43.6%	2,108.55	3,028.43	1,974.77	2,836.29
44,000 - 44,999	43.6%	2,144.66	3,080.29	2,008.60	2,884.88
45,000 - 45,999	43.6%	2,180.76	3,132.14	2,042.41	2,933.44
46,000 - 46,999 47,000 - 47,999	43.6% 43.6%	2,216.86 2,252.96	3,183.99 3,235.84	2,076.22 2,110.04	2,982.00 3,030.57
48,000 - 48,999	43.6%	2,289.07	3,287.70	2,143.85	3,079.13
49,000 - 49,999	43.6%	2,325.18	3,339.57	2,177.66	3,127.69
50,000 - 50,999	43.6%	2,361.29	3,391.43	2,211.47	3,176.25
51,000 - 51,999	43.6%	2,397.38	3,443.27	2,245.29	3,224.82
52,000 - 52,999 53,000 - 53,999	43.6% 43.6%	2,433.49 2,469.59	3,495.13 3,546.98	2,279.10 2,312.91	3,273.38 3,321.94
54,000 - 54,999	43.6%	2,505.70	3,598.84	2,346.74	3,370.53
55,000 - 55,999	43.6%	2,541.80	3,650.69	2,380.55	3,419.09
56,000 - 56,999	43.6%	2,577.90	3,702.54	2,414.36	3,467.65
57,000 - 57,999 58,000 - 58,999	43.6% 43.6%	2,614.01 2,650.12	3,754.40 3,806.27	2,448.18 2,481.99	3,516.23 3,564.79
59,000 - 59,999	43.6%	2,686.23	3,858.13	2,515.80	3,613.35
60,000 - 60,999	43.6%	2,722.32	3,909.96	2,549.62	3,661.92
61,000 - 61,999	43.6%	2,758.43	3,961.83	2,583.43	3,710.48
62,000 - 62,999	43.6%	2,794.53	4,013.68	2,617.24	3,759.04
63,000 - 63,999 64,000 - 64,999	43.6% 43.6%	2,830.64 2,866.75	4,065.54 4,117.40	2,651.07 2,684.88	3,807.63 3,856.19
65,000 - 65,999	43.6%	2,902.84	4,169.24	2,718.69	3,904.75
66,000 - 66,999	43.6%	2,938.95	4,221.10	2,752.51	3,953.33
67,000 - 67,999	43.6%	2,975.06	4,272.97	2,786.32	4,001.89
68,000 - 68,999	43.6%	3,011.17	4,324.83	2,820.13	4,050.45
69,000 - 69,999 70,000 - 70,999	43.6% 43.6%	3,047.27 3,083.37	4,376.68 4,428.53	2,853.95 2,887.76	4,099.02 4,147.58
71,000 - 71,999	43.6%	3,119.47	4,480.38	2,921.57	4,196.14
72,000 - 72,999	43.6%	3,155.58	4,532.24	2,955.38	4,244.70
73,000 - 73,999	43.6%	3,191.69	4,584.10	2,989.21	4,293.29
74,000 - 74,999 75,000 - 75,999	43.6% 43.6%	3,227.80 3,263.89	4,635.97 4,687.80	3,023.02 3,056.82	4,341.85 4,390.39
76,000 - 76,999	43.6%	3,300.00	4,739.66	3,090.65	4,438.98
77,000 - 77,999	43.6%	3,336.11	4,791.53	3,124.46	4,487.54
78,000 - 78,999	43.6%	3,372.21	4,843.38	3,158.27	4,536.10
79,000 - 79,999	43.6%	3,408.32	4,895.24	3,192.09	4,584.68
80,000+	43.6%	4,177.26	5,999.64	3,225.92	4,633.27
Each Addl \$1,000	43.6%	36.11	51.86	33.82	48.57

<sup>(1)</sup> From Section A, Page 2 (2), (4) Based on proposed year 1 MH(C) rate manual.

### Derivation of Proposed Year 2 Base Rates Territory Group 3

Seasonal/Vacation

(3) = (2) x [1 + (1)] (5) = (4) x [1 + (1)] (1) (2) (4)

			- (2) x [1 + (1)]		- (4) x [1 + (1)]
			hensive	Named	
	Proposed	Proposed	Proposed	Proposed	Proposed
Amount of	Year 2	Year 1	Year 2	Year 1	Year 2
Insurance	Rate Change	Rate	Rate	Rate	Rate
1 - 3,999	43.6%	\$382.40	\$549.23	\$340.84	\$489.54
4,000 - 4,999	43.6%	408.00	585.99	363.65	522.30
5,000 - 5,999	43.6%	429.08	616.27	382.43	549.27
6,000 - 6,999 7,000 - 7,999	43.6% 43.6%	451.42 474.05	648.36 680.86	402.35 422.52	577.88 606.85
8,000 - 8,999	43.6%	496.77	713.49	442.77	635.93
9,000 - 9,999	43.6%	520.73	747.90	464.13	666.61
10,000 - 10,999	43.6%	543.41	780.48	484.35	695.65
11,000 - 11,999	43.6%	562.58	808.01	501.43	720.18
12,000 - 12,999	43.6%	581.76	835.56	518.52	744.73
13,000 - 13,999	43.6%	600.33	862.23	535.08	768.52
14,000 - 14,999	43.6%	618.90	888.90	551.63	792.29
15,000 - 15,999	43.6%	639.94	919.12	570.38	819.22
16,000 - 16,999	43.6%	662.65	951.74	590.62	848.29
17,000 - 17,999 18,000 - 18,999	43.6% 43.6%	684.85 706.93	983.62 1,015.34	610.41 630.09	876.71 904.97
19,000 - 19,999	43.6%	731.11	1,050.07	651.63	935.91
20,000 - 20,999	43.6%	753.85	1,082.73	671.91	965.04
21,000 - 21,999	43.6%	772.02	1,108.82	688.10	988.29
22,000 - 22,999	43.6%	790.19	1,134.92	704.30	1,011.56
23,000 - 23,999	43.6%	809.39	1,162.50	721.42	1,036.15
24,000 - 24,999	43.6%	828.87	1,190.47	738.77	1,061.07
25,000 - 25,999	43.6%	849.84	1,220.59	757.46	1,087.91
26,000 - 26,999	43.6%	871.95	1,252.35	777.18	1,116.23
27,000 - 27,999	43.6%	893.73	1,283.63	796.58	1,144.10
28,000 - 28,999	43.6%	915.36	1,314.70	815.85	1,171.77
29,000 - 29,999	43.6%	939.65	1,349.58	837.50	1,202.87
30,000 - 30,999	43.6%	964.81	1,385.72	859.93	1,235.08
31,000 - 31,999	43.6%	983.70	1,412.85	876.77	1,259.27
32,000 - 32,999 33,000 - 33,999	43.6% 43.6%	1,002.07 1,020.42	1,439.23 1,465.59	893.14 909.50	1,282.78 1,306.28
34,000 - 34,999	43.6%	1,041.20	1,495.44	928.03	1,332.89
35,000 - 35,999	43.6%	1,062.29	1,525.73	946.81	1,359.87
36,000 - 36,999	43.6%	1,083.36	1,555.99	965.60	1,386.85
37,000 - 37,999	43.6%	1,104.44	1,586.27	984.39	1,413.84
38,000 - 38,999	43.6%	1,125.51	1,616.53	1,003.17	1,440.81
39,000 - 39,999	43.6%	1,146.58	1,646.79	1,021.96	1,467.80
40,000 - 40,999	43.6%	1,167.67	1,677.08	1,040.74	1,494.78
41,000 - 41,999	43.6%	1,188.74	1,707.34	1,059.53	1,521.76
42,000 - 42,999	43.6%	1,209.82	1,737.62	1,078.32	1,548.75
43,000 - 43,999	43.6%	1,230.89	1,767.88	1,097.10	1,575.72
44,000 - 44,999	43.6%	1,251.98	1,798.17	1,115.89	1,602.71
45,000 - 45,999	43.6%	1,273.05	1,828.43	1,134.68	1,629.70
46,000 - 46,999	43.6%	1,294.13	1,858.71	1,153.46	1,656.67
47,000 - 47,999 48,000 - 48,999	43.6% 43.6%	1,315.20 1,336.28	1,888.97 1,919.25	1,172.25 1,191.02	1,683.66
49,000 - 49,999	43.6%	1,357.35	1,949.51	1,209.81	1,710.62 1,737.60
50,000 - 50,999	43.6%	1,378.44	1,979.80	1,228.59	1,764.58
51,000 - 51,999	43.6%	1,399.51	2,010.06	1,247.38	1,791.56
52,000 - 52,999	43.6%	1,420.59	2,040.34	1,266.17	1,818.55
53,000 - 53,999	43.6%	1,441.66	2,070.60	1,284.95	1,845.52
54,000 - 54,999	43.6%	1,462.73	2,100.86	1,303.74	1,872.51
55,000 - 55,999	43.6%	1,483.82	2,131.15	1,322.52	1,899.49
56,000 - 56,999	43.6%	1,504.89	2,161.42	1,341.31	1,926.47
57,000 - 57,999	43.6%	1,525.97	2,191.69	1,360.10	1,953.46
58,000 - 58,999	43.6%	1,547.04	2,221.95	1,378.88	1,980.43
59,000 - 59,999	43.6%	1,568.13	2,252.25	1,397.67	2,007.42
60,000 - 60,999 61,000 - 61,999	43.6% 43.6%	1,589.20 1,610.28	2,282.51 2,312.78	1,416.46 1,435.24	2,034.41 2,061.38
62,000 - 62,999	43.6%	1,631.35	2,343.05	1,454.03	2,088.37
63,000 - 63,999	43.6%	1,652.43	2,373.32	1,472.81	2,115.34
64,000 - 64,999	43.6%	1,673.50	2,403.58	1,491.60	2,142.33
65,000 - 65,999	43.6%	1,694.59	2,433.88	1,510.39	2,169.32
66,000 - 66,999	43.6%	1,715.66	2,464.14	1,529.17	2,196.29
67,000 - 67,999	43.6%	1,736.74	2,494.41	1,547.96	2,223.28
68,000 - 68,999	43.6%	1,757.81	2,524.68	1,566.75	2,250.26
69,000 - 69,999	43.6%	1,778.88	2,554.94	1,585.53	2,277.24
70,000 - 70,999	43.6%	1,799.97	2,585.23	1,604.30	2,304.19
71,000 - 71,999	43.6%	1,821.04	2,615.49	1,623.09	2,331.18
72,000 - 72,999	43.6%	1,842.12	2,645.77	1,641.88	2,358.17
73,000 - 73,999	43.6%	1,863.19	2,676.03	1,660.66	2,385.14
74,000 - 74,999	43.6%	1,884.28	2,706.32	1,679.45	2,412.13
75,000 - 75,999	43.6%	1,905.35	2,736.58	1,698.24	2,439.12
76,000 - 76,999 77,000 - 77,999	43.6% 43.6%	1,926.43	2,766.86	1,717.02 1,735.81	2,466.09
77,000 - 77,999 78,000 - 78,999	43.6% 43.6%	1,947.50 1,968.58	2,797.12 2,827.40	1,754.60	2,493.08 2,520.07
79,000 - 79,999	43.6%	1,989.65	2,857.66	1,773.38	2,547.04
80,000+	43.6%	2,544.59	3,654.70	1,792.17	2,574.03
,		,	.,	,	,5
Each Addl \$1,000	43.6%	21.07	30.26	18.79	26.99

<sup>(1)</sup> From Section A, Page 2 (2), (4) Based on proposed year 1 MH(C) rate manual.

### Derivation of Proposed Year 2 Base Rates Territory Group 3

(3) = (2) x [1 + (1)] (5) = (4) x [1 + (1)] (1) (4)

		Compre	hensive	Named Perils		
	Proposed	Proposed	Proposed	Proposed	Proposed	
Amount of	Year 2	Year 1	Year 2	Year 1	Year 2	
Insurance	Rate Change	Rate	Rate	Rate	Rate	
100 - 199 200 - 299	34.4%	-	-	\$3.33	\$4.47	
300 - 399	34.4% 34.4%	\$8.34	\$11.21	5.27 7.20	7.08 9.67	
400 - 499	34.4%	10.59	14.23	9.14	12.28	
500 - 599	34.4%	12.83	17.24	11.07	14.87	
600 - 699	34.4%	15.07	20.25	13.01	17.48	
700 - 799	34.4%	17.32	23.27	14.94	20.07	
800 - 899	34.4%	19.56	26.28	16.87	22.67	
900 - 999	34.4%	21.81	29.30	18.81	25.27	
1,000 - 1,099	34.4%	24.05	32.31	20.74	27.86	
1,100 - 1,199 1,200 - 1,299	34.4% 34.4%	26.29 28.54	35.32 38.34	22.68 24.61	30.47 33.06	
1,300 - 1,399	34.4%	30.78	41.35	26.55	35.67	
1,400 - 1,499	34.4%	33.02	44.36	28.48	38.26	
1,500 - 1,599	34.4%	35.27	47.39	30.42	40.87	
1,600 - 1,699	34.4%	37.51	50.40	32.35	43.46	
1,700 - 1,799	34.4%	39.76	53.42	34.29	46.07	
1,800 - 1,899	34.4%	42.00	56.43	36.22	48.66	
1,900 - 1,999	34.4%	44.24	59.44	38.16	51.27	
2,000 - 2,099	34.4%	46.49	62.46	40.09	53.86	
2,100 - 2,199 2,200 - 2,299	34.4% 34.4%	48.73 50.97	65.47 68.48	42.03 43.96	56.47 59.06	
2,300 - 2,399	34.4%	53.22	71.50	45.90	61.67	
2,400 - 2,499	34.4%	55.46	74.51	47.83	64.26	
2,500 - 2,599	34.4%	57.70	77.52	49.76	66.85	
2,600 - 2,699	34.4%	59.95	80.55	51.70	69.46	
2,700 - 2,799	34.4%	62.19	83.55	53.63	72.05	
2,800 - 2,899	34.4%	64.44	86.58	55.57	74.66	
2,900 - 2,999	34.4%	66.68	89.59	57.50	77.25	
3,000 - 3,099	34.4%	68.92	92.60	59.44	79.86	
3,100 - 3,199 3,200 - 3,299	34.4% 34.4%	71.17 73.41	95.62 98.63	61.37 63.31	82.45 85.06	
3,300 - 3,399	34.4%	75.65	101.64	65.24	87.65	
3,400 - 3,499	34.4%	77.90	104.66	67.18	90.26	
3,500 - 3,599	34.4%	80.14	107.67	69.11	92.85	
3,600 - 3,699	34.4%	82.39	110.69	71.05	95.46	
3,700 - 3,799	34.4%	84.63	113.70	72.98	98.05	
3,800 - 3,899	34.4%	86.87	116.71	74.92	100.66	
3,900 - 3,999 4,000 - 4,099	34.4% 34.4%	89.12 91.36	119.74 122.75	76.85 78.79	103.25 105.86	
4,100 - 4,199	34.4%	93.60	125.76	80.72	108.45	
4,200 - 4,299	34.4%	95.85	128.78	82.65	111.04	
4,300 - 4,399	34.4%	98.09	131.79	84.59	113.65	
4,400 - 4,499	34.4%	100.34	134.81	86.52	116.24	
4,500 - 4,599	34.4%	102.58	137.82	88.46	118.85	
4,600 - 4,699	34.4%	104.82	140.83	90.39	121.44	
4,700 - 4,799	34.4%	107.07	143.85	92.33	124.05	
4,800 - 4,899 4,900 - 4,999	34.4%	109.31 111.55	146.86	94.26	126.64	
5,000 - 5,099	34.4% 34.4%	113.80	149.87 152.89	96.20 98.13	129.25 131.84	
5,100 - 5,199	34.4%	116.04	155.90	100.07	134.45	
5,200 - 5,299	34.4%	118.29	158.93	102.00	137.04	
5,300 - 5,399	34.4%	120.53	161.94	103.94	139.65	
5,400 - 5,499	34.4%	122.77	164.95	105.87	142.24	
5,500 - 5,599	34.4%	125.02	167.97	107.81	144.85	
5,600 - 5,699	34.4%	127.26	170.98	109.74	147.44	
5,700 - 5,799 5,800 - 5,800	34.4%	129.50	173.99 177.01	111.67	150.03 152.64	
5,800 - 5,899 5,900 - 5,999	34.4% 34.4%	131.75 133.99	180.02	113.61 115.54	152.64 155.23	
6,000 - 6,099	34.4%	136.23	183.03	117.48	157.84	
6,100 - 6,199	34.4%	138.48	186.05	119.41	160.43	
6,200 - 6,299	34.4%	140.72	189.06	121.35	163.04	
6,300 - 6,399	34.4%	142.97	192.09	123.28	165.63	
6,400 - 6,499	34.4%	145.21	195.10	125.22	168.24	
6,500 - 6,599	34.4%	147.45	198.10	127.15	170.83	
6,600 - 6,699	34.4%	149.70	201.13	129.09	173.44	
6,700 - 6,799 6,800 - 6,899	34.4% 34.4%	151.94 154.18	204.14	131.02 132.96	176.03 178.64	
6,800 - 6,899 6,900 - 6,999	34.4% 34.4%	154.18 156.43	207.15 210.17	132.96	178.64 181.23	
7,000+	34.4%	274.43	368.71	247.03	331.89	
.,		0			2000	
Each Addl \$1,000	34.4%	2.24	3.01	1.93	2.59	

<sup>(1)</sup> From Section A, Page 2 (2), (4) Based on proposed year 1 MH(C) rate manual.

### Derivation of Proposed Year 2 Base Rates Territory Group 3

(3) = (2) x [1 + (1)]

			- (2) X [1 + (1)]
	Proposed	Proposed	Proposed
Amount of	Year 2	Year 1	Year 2
Insurance	Rate Change	Rate	Rate
500 - 599	12.4%	\$22.49	\$25.29
600 - 699	12.4%	23.38	26.29
700 - 799	12.4%	24.27	27.29
800 - 899	12.4%	25.15	28.28
900 - 999	12.4%	26.04	29.28
1,000 - 1,099	12.4%	26.93	30.28
1,100 - 1,199	12.4%	27.82	31.28
1,200 - 1,299	12.4%	28.71	32.28
1,300 - 1,399	12.4%	29.60	33.28
1,400 - 1,499	12.4%	30.48	34.27
1,500 - 1,599	12.4%	31.37	35.27
1,600 - 1,699	12.4%	32.26	36.27
1,700 - 1,799	12.4%	33.15	37.28
1,800 - 1,899	12.4%	34.04	38.28
1,900 - 1,999	12.4%	34.93	39.28
2,000 - 2,099	12.4%	35.81	40.27
2,100 - 2,199	12.4%	36.70	41.27
2,200 - 2,299	12.4%	37.59	42.27
2,300 - 2,399	12.4%	38.48	43.27
2,400 - 2,499	12.4%	39.37	44.27
2,500 - 2,599	12.4%	40.26	45.27
2,600 - 2,699	12.4%	41.14	46.26
2,700 - 2,799	12.4%	42.03	47.26
2,800 - 2,899	12.4%	42.92	48.26
2,900 - 2,999	12.4%	43.81	49.26
3,000 - 3,099	12.4%	44.70	50.26
3,100 - 3,199	12.4%	45.59	51.26
3,200 - 3,299	12.4%	46.47	52.25
3,300 - 3,399	12.4%	47.36	53.25
3,400 - 3,499	12.4%	48.25	54.26
3,500 - 3,599	12.4%	49.14	55.26
3,600 - 3,699	12.4%	50.03	56.26
3,700 - 3,799	12.4%	50.92	57.26
3,800 - 3,899	12.4%	51.80	58.25
3,900 - 3,999	12.4%	52.69	59.25
4,000 - 4,099	12.4%	53.58	60.25
4,100 - 4,199	12.4%	54.47	61.25
4,200 - 4,299	12.4%	55.36	62.25
4,300 - 4,399	12.4%	56.25	63.25
4,400 - 4,499	12.4%	57.13	64.24
4,500 - 4,599	12.4%	58.02	65.24
4,600 - 4,699	12.4%	58.91	66.24
4,700 - 4,799	12.4%	59.80	67.24
4,800 - 4,899	12.4%	60.69	68.24
4,900 - 4,999	12.4%	61.58	69.24
5,000 - 5,099	12.4%	62.46	70.23
5,100 - 5,199	12.4%	63.35	71.23
5,200 - 5,299	12.4%	64.24	72.24
5,300 - 5,399	12.4%	65.13	73.24
5,400 - 5,499	12.4%	66.02	74.24
5,500 - 5,599	12.4%	66.91	75.24
5,600 - 5,699	12.4%	67.79	76.23
5,700 - 5,799	12.4%	68.68	77.23
5,800 - 5,899	12.4%	69.57	78.23
5,900 - 5,999	12.4%	70.46	79.23
6,000 - 6,099	12.4%	71.35	80.23
6,100 - 6,199	12.4%	72.24	81.23
6,200 - 6,299	12.4%	73.12	82.22
6,300 - 6,399	12.4%	74.01	83.22
6,400 - 6,499	12.4%	74.90	84.22
6,500 - 6,599	12.4%	75.79	85.22
6,600 - 6,699	12.4%	76.68	86.22
6,700 - 6,799	12.4%	77.56	87.21
6,800 - 6,899	12.4%	78.45	88.21
6,900 - 6,999	12.4%	79.34	89.21
7,000+	12.4%	213.52	240.09
Each Addl \$1,000	12.4%	0.89	1.00

<sup>(1)</sup> From Section A, Page 2 (2) Based on proposed year 1 MH(C) rate manual.

#### North Carolina Mobile Homeowners MH(C) - Liability

Derivation of Proposed Year 2 Rates by Limit

(2)

14.1%

14.1%

14.1%

14.1%

(3)

38.00

44.33

46.93

49.24

\$39.24

(1)

 $= (1) \times [1 + (2)]$ Proposed Proposed Proposed Liability Year 2 Year 2 Year 1 Limit Rate Rate Change Rate 14.1% 25,000 \$25.23 \$28.78 50,000 28.77 14.1% 32.82

33.31

38.86

41.14

43.16

\$34.40

(1) Based on proposed year 1 MH(C) rate manual.

100,000

200,000

250,000

300,000

Average

<sup>(2)</sup> From Section A, Page 2

Derivation of Proposed Year 2 Deductible Debit / (Credit) Comprehensive Coverage (Primary Residence)

(1)	(2) (3)		(4)	(4) (5)		(7)
		Propo	sed Year 1 Ded	uctible Debit / (C	credit)	
All Peril	Territory	Territory	Territory	Territory	Territory	Territory
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	\$41.72	\$32.90	\$27.32	\$24.00	\$20.43	\$16.04
50	18.97	14.97	12.45	10.94	9.29	7.30
100	0.00	0.00	0.00	0.00	0.00	0.00
250	(34.14)	(26.92)	(22.36)	(19.65)	(16.72)	(13.13)
500	(87.26)	(68.79)	(57.16)	(50.21)	(42.73)	(33.55)
750	(133.35)	(105.11)	(87.38)	(76.73)	(65.31)	(51.28)
1,000	(170.46)	(134.37)	(111.70)	(98.10)	(83.50)	(65.57)
2,000	(287.05)	(226.25)	(188.14)	(165.20)	(140.64)	(110.43)
5,000	(573.12)	(451.70)	(375.67)	(329.88)	(280.85)	(220.51)
	(8)	(9)	(10)	(11)	(12)	(13)
			Proposed Year	2 Rate Change		
	Territory	Territory	Territory	Territory	Territory	Territory
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
	40.3%	24.9%	43.6%	32.4%	25.3%	21.4%
(14)	(15)	(16)	(17)	(18)	(19)	(20)
( /	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]
		Propo	sed Year 2 Ded	uctible Dobit / (C	`rodit\	
All Peril	Territory	Territory	Territory	Territory	Territory	Territory
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	\$58.55	\$41.10	\$39.24	\$31.78	\$25.59	\$19.48
50	26.63	18.70	17.88	14.49	11.64	8.86
100	0.00	0.00	0.00	0.00	0.00	0.00
250	(47.91)	(33.64)	(32.12)	(26.03)	(20.95)	(15.94)
500	(122.46)	(85.94)	(82.10)	(66.49)	(53.52)	(40.75)
750	(187.13)	(131.32)	(125.50)	(101.63)	(81.81)	(62.28)
1,000	(239.22)	(167.88)	(160.43)	(129.92)	(104.59)	(79.62)
2,000	(402.83)	(282.67)	(270.21)	(218.79)	(176.17)	(134.10)
5,000	(804.29)	(564.33)	(539.56)	(436.89)	(351.80)	(267.79)
-,	(0)	(2230)	(222.20)	()	(2230)	(==:::0)

<sup>(2)</sup> through (7) from proposed year 1 MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 2 Deductible Debit / (Credit) Comprehensive Coverage (Seasonal / Vacation)

(1)	(1) (2)		(4)	(5)	(6)	(7)
		Propo	sed Year 1 Ded	uctible Debit / (C	Credit)	
All Peril	Territory	Territory	Territory	Territory	Territory	Territory
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	N/A	N/A	N/A	N/A	N/A	N/A
50	N/A	N/A	N/A	N/A	N/A	N/A
100	N/A	N/A	N/A	N/A	N/A	N/A
250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
500	(53.13)	(41.89)	(34.79)	(30.54)	(25.99)	(20.41)
750	(99.20)	(78.19)	(65.01)	(57.08)	(48.60)	(38.16)
1,000	(136.32)	(107.45)	(89.34)	(78.44)	(66.79)	(52.44)
2,000	(252.91)	(199.32)	(165.76)	(145.55)	(123.92)	(97.30)
5,000	(538.98)	(424.78)	(353.31)	(310.22)	(264.13)	(207.38)
	(8)	(9)	(10)	(11)	(12)	(13)
			Proposed Year	O Data Changa		
	Townitow	Touritou	<u> </u>		Touritou	Touritous
	Territory	Territory	Territory	Territory	Territory	Territory
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
	40.3%	24.9%	43.6%	32.4%	25.3%	21.4%
(4.4)	(4.5)	(40)	(47)	(40)	(40)	(00)
(14)	(15) = (2) x [1+(8)]	(16)	(17)	(18)	(19)	$(20)$ = $(7) \times [1+(13)]$
	= (2) X [1+(0)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (1) X [1+(13)]
		Propo	sed Year 2 Ded	uctible Debit / (C	Credit)	
All Peril	Territory	Territory	Territory	Territory	Territory	Territory
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	N/A	N/A	N/A	N/A	N/A	N/A
50	N/A	N/A	N/A	N/A	N/A	N/A
100	N/A	N/A	N/A	N/A	N/A	N/A
250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
500	(74.56)	(52.34)	(49.96)	(40.45)	(32.56)	(24.79)
750	(139.21)	(97.68)	(93.36)	(75.60)	(60.88)	(46.34)
1,000	(191.30)	(134.24)	(128.31)	(103.89)	(83.66)	(63.68)
2,000	(354.92)	(249.03)	(238.07)	(192.76)	(155.23)	(118.16)
5,000	(756.37)	(530.71)	(507.44)	(410.86)	(330.85)	(251.85)
-,	()	()	(/	( )	(222.30)	(==:::00)

<sup>(2)</sup> through (7) from proposed year 1 MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 2 Deductible Debit / (Credit) Comprehensive Coverage (Primary Residence)

(1)	(2)	(3)	(3) (4)		(6)	(7)
		Propo	sed Year 1 Ded	uctible Debit / (C	Credit)	
All Peril	Territory	Territory	Territory	Territory	Territory	Territory
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	\$2.67	\$2.04	\$1.56	\$1.28	\$1.10	\$0.84
50	1.33	1.03	0.78	0.63	0.54	0.41
100	0.00	0.00	0.00	0.00	0.00	0.00
250	(2.67)	(2.04)	(1.56)	(1.28)	(1.10)	(0.84)
500	(21.32)	(16.30)	(12.47)	(10.19)	(8.75)	(6.65)
750	(35.98)	(27.51)	(21.04)	(17.18)	(14.76)	(11.22)
1,000	(45.56)	(34.84)	(26.66)	(21.76)	(18.68)	(14.22)
2,000	(75.52)	(57.74)	(44.18)	(36.06)	(30.95)	(23.58)
5,000	(148.88)	(113.81)	(87.06)	(71.06)	(60.98)	(46.52)
	(8)	(9)	(10)	(11)	(12)	(13)
			Proposed Year	2 Poto Chongo		
	Territory	Territory	Territory	Territory	Territory	Territory
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
	34.2%	11.9%	34.4%	13.7%	8.8%	9.9%
(14)	(15)	(16)	(17)	(18)	(19)	(20)
	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]
		Propo	sed Year 2 Ded	uctible Debit / (C	`redit\	
All Peril	Territory	Territory	Territory	Territory	Territory	Territory
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	\$3.59	\$2.28	\$2.09	\$1.46	\$1.20	\$0.92
50	1.78	1.15	1.05	0.71	0.59	0.45
100	0.00	0.00	0.00	0.00	0.00	0.00
250	(3.59)	(2.28)	(2.09)	(1.46)	(1.20)	(0.92)
500	(28.62)	(18.24)	(16.75)	(11.58)	(9.52)	(7.31)
750	(48.29)	(30.78)	(28.27)	(19.53)	(16.06)	(12.33)
1,000	(61.16)	(38.98)	(35.81)	(24.74)	(20.33)	(15.63)
2,000	(101.38)	(64.61)	(59.35)	(40.99)	(33.69)	(25.92)
5,000	(199.86)	(127.34)	(116.97)	(80.78)	(66.37)	(51.13)
-,	( )	( 3.7	(/	()	( 2-)	(- '-')

<sup>(2)</sup> through (7) from proposed year 1 MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 2 Deductible Debit / (Credit) Comprehensive Coverage (Seasonal / Vacation)

(1)	(2)	(2) (3)		(4) (5)		(7)
		Propo	osed Year 1 Dec	ductible Debit / (0	Credit)	
All Per	il Territory	Territory	Territory	Territory	Territory	Territory
Deductib	ole Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	N/A	N/A	N/A	N/A	N/A	N/A
50	N/A	N/A	N/A	N/A	N/A	N/A
100	N/A	N/A	N/A	N/A	N/A	N/A
250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
500	(18.65)	(14.25)	(10.92)	(8.91)	(7.67)	(5.81)
750	(33.30)	(25.48)	(19.48)	(15.89)	(13.65)	(10.39)
1,000	(42.89)	(32.81)	(25.10)	(20.47)	(17.58)	(13.39)
2,000	(72.85)	(55.71)	(42.62)	(34.77)	(29.84)	(22.76)
5,000	(146.21)	(111.77)	(85.50)	(69.79)	(59.88)	(45.69)
	(8)	(9)	(10)	(11)	(12)	(13)
			Proposed Year	· 2 Rate Change		
	Territory	Territory	Territory	Territory	Territory	Territory
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
	34.2%	11.9%	34.4%	13.7%	8.8%	9.9%
(14)	(15)	(16)	(17)	(18)	(19)	(20)
(14)	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]
	( ) [ (-)]	(-) [ (-)]	( ) [ ( -72	(-) [ ( )]	( ) [ ( )]	( ) [ ( -72
		Propo	osed Year 2 Dec	ductible Debit / (0	Credit)	
All Per	il Territory	Territory	Territory	Territory	Territory	Territory
Deductib	ole Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	N/A	N/A	N/A	N/A	N/A	N/A
50	N/A	N/A	N/A	N/A	N/A	N/A
100	N/A	N/A	N/A	N/A	N/A	N/A
250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
500	(25.03)	(15.95)	(14.68)	(10.13)	(8.35)	(6.39)
750	(44.71)	(28.50)	(26.17)	(18.07)	(14.85)	(11.41)
1,000	(57.57)	(36.70)	(33.72)	(23.27)	(19.13)	(14.71)
2,000	(97.79)	(62.33)	(57.26)	(39.53)	(32.48)	(25.01)
5,000	(196.27)	(125.06)	(114.88)	, , , ,		(50.21)

<sup>(2)</sup> through (7) from proposed year 1 MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 2 Deductible Debit / (Credit) Comprehensive Coverage (Primary Residence)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)				
			Propo	sed Year 1 Ded	uctible Debit / (C	credit)					
	All Peril	Territory	Territory	Territory	Territory	Territory	Territory				
	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6				
_	0	\$14.22	\$9.72	\$6.61	\$5.18	\$4.59	\$4.10				
	50	7.11	4.86	3.31	2.59	2.29	2.05				
	100	0.00	0.00	0.00	0.00	0.00	0.00				
	250	(14.22)	(9.72)	(6.61)	(5.18)	(4.59)	(4.10)				
	500	(21.33)	(14.58)	(9.91)	(7.77)	(6.88)	(6.16)				
	750	(27.02)	(18.48)	(12.54)	(9.84)	(8.72)	(7.79)				
	1,000	(31.07)	(21.25)	(14.42)	(11.32)	(10.03)	(8.96)				
	2,000	(44.92)	(30.74)	(20.82)	(16.38)	(14.50)	(12.95)				
	5,000	(82.14)	(56.22)	(38.05)	(29.96)	(26.53)	(23.68)				
		(8)	(9)	(10)	(11)	(12)	(13)				
		Proposed Year 2 Rate Change									
		Territory	Territory	Territory	Territory	Territory	Territory				
		Group 1	Group 2	Group 3	Group 4	Group 5	Group 6				
		34.5%	17.4%	12.4%	1.8%	-3.4%	-5.3%				
	(14)	(15)	(16)	(17)	(18)	(19)	(20)				
	(14)	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	(20) = $(7) \times [1+(13)]$				
		= (2) x [11(0)]	= (0) X[11(0)]	- (.) x [(.o)]	- (o) x[()]	- (0) X[11(12)]	- (1) x [11(10)]				
			Propo	sed Year 2 Ded	Deductible Debit / (Credit)						
	All Peril	Territory	Territory	Territory	Territory	Territory	Territory				
_	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6				
	0	\$19.12	\$11.41	\$7.43	\$5.27	\$4.44	\$3.88				
	50	9.57	5.71	3.72	2.63	2.21	1.95				
	100	0.00	0.00	0.00	0.00	0.00	0.00				
	250	(19.12)	(11.41)	(7.43)	(5.27)	(4.44)	(3.88)				
	500	(28.69)	(17.12)	(11.14)	(7.91)	(6.65)	(5.83)				
	750	(36.34)	(21.69)	(14.10)	(10.02)	(8.42)	(7.38)				
	1,000	(41.79)	(24.95)	(16.21)	(11.52)	(9.69)	(8.48)				
	2,000	(60.42)	(36.08)	(23.42)	(16.67)	(14.01)	(12.27)				
	5,000	(110.47)	(66.00)	(42.79)	(30.50)	(25.63)	(22.43)				

<sup>(2)</sup> through (7) from proposed year 1 MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 2 Deductible Debit / (Credit) Comprehensive Coverage (Seasonal / Vacation)

	(1)	(2)	(3)	(4)	(4) (5)		(7)
			Propo	sed Year 1 Ded	uctible Debit / (C	Credit)	
	All Peril	Territory	Territory	Territory	Territory	Territory	Territory
	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
	0	N/A	N/A	N/A	N/A	N/A	N/A
	50	N/A	N/A	N/A	N/A	N/A	N/A
	100	N/A	N/A	N/A	N/A	N/A	N/A
	250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	500	(7.11)	(4.86)	(3.31)	(2.59)	(2.29)	(2.05)
	750	(12.80)	(8.76)	(5.93)	(4.66)	(4.13)	(3.69)
	1,000	(16.87)	(11.54)	(7.80)	(6.15)	(5.44)	(4.86)
	2,000	(30.71)	(21.01)	(14.21)	(11.20)	(9.91)	(8.85)
	5,000	(67.92)	(46.50)	(31.44)	(24.78)	(21.93)	(19.58)
		(8)	(9)	(10)	(11)	(12)	(13)
				<b>5</b>			
				Proposed Year			
		Territory	Territory	Territory	Territory	Territory	Territory
		Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
		34.5%	17.4%	12.4%	1.8%	-3.4%	-5.3%
	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	( · · · /	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]
			Propo	sed Year 2 Ded	uctible Debit / (C	Credit)	
	All Peril	Territory	Territory	Territory	Territory	Territory	Territory
_	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
	0	N/A	N/A	N/A	N/A	N/A	N/A
	50	N/A	N/A	N/A	N/A	N/A	N/A
	100	N/A	N/A	N/A	N/A	N/A	N/A
	250	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	500	(9.57)	(5.71)	(3.72)	(2.63)	(2.21)	(1.95)
	750	(17.22)	(10.28)	(6.66)	(4.75)	(3.99)	(3.50)
	1,000	(22.68)	(13.55)	(8.77)	(6.26)	(5.26)	(4.60)
	2,000	(41.30)	(24.67)	(15.98)	(11.40)	(9.57)	(8.38)
	5,000	(91.35)	(54.59)	(35.35)	(25.22)	(21.19)	(18.54)

<sup>(2)</sup> through (7) from proposed year 1 MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 2 Deductible Debit / (Credit)
Named Perils Coverage

(1)	(1) (2)		(4)	(5)	(6)	(7)
		Propo	sed Year 1 Ded	uctible Debit / (C	Credit)	
All Peril	Territory	Territory	Territory	Territory	Territory	Territory
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
50	(18.97)	(14.97)	(12.45)	(10.94)	(9.29)	(7.30)
100	(36.05)	(28.42)	(23.58)	(20.73)	(17.64)	(13.86)
250	(64.48)	(50.84)	(42.25)	(37.11)	(31.58)	(24.80)
500	(106.29)	(83.81)	(69.69)	(61.21)	(52.07)	(40.88)
750	(140.68)	(110.93)	(92.27)	(81.04)	(68.93)	(54.11)
1,000	(166.32)	(131.15)	(109.10)	(95.83)	(81.51)	(63.99)
2,000	(242.01)	(190.84)	(158.78)	(139.52)	(118.62)	(93.13)
5,000	(422.17)	(332.91)	(277.04)	(243.51)	(206.98)	(162.51)
	(8)	(9)	(10)	(11)	(12)	(13)
			Proposed Year			
	Territory	Territory	Territory	Territory	Territory	Territory
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
	40.3%	24.9%	43.6%	32.4%	25.3%	21.4%
(4.4)	(4.5)	(40)	(47)	(40)	(40)	(00)
(14)	(15) = (2) x [1+(8)]	(16) = (3) x [1+(9)]	(17) = (4) x [1+(10)]	(18) = (5) x [1+(11)]	(19) = (6) x [1+(12)]	$(20)$ = $(7) \times [1+(13)]$
	= (2) X [1+(0)]	= (3) X [1+(9)]	= (4) X [1+(10)]	= (5) X [1+(11)]	= (0) X [1+(12)]	= (1) X [1+(13)]
		Propo	sed Year 2 Ded	uctible Debit / (C	credit)	
All Peril	Territory	Territory	Territory	Territory	Territory	Territory
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
50	(26.63)	(18.70)	(17.88)	(14.49)	(11.64)	(8.86)
100	(50.59)	(35.51)	(33.87)	(27.45)	(22.09)	(16.83)
250	(90.49)	(63.51)	(60.69)	(49.15)	(39.56)	(30.11)
500	(149.16)	(104.71)	(100.09)	(81.07)	(65.23)	(49.64)
750	(197.43)	(138.59)	(132.52)	(107.33)	(86.35)	(65.72)
1,000	(233.41)	(163.85)	(156.69)	(126.92)	(102.10)	(77.71)
2,000	(339.62)	(238.43)	(228.05)	(184.78)	(148.59)	(113.10)
5,000	(592.44)	(415.92)	(397.90)	(322.51)	(259.27)	(197.35)
•	, ,	. ,	. ,	, ,	. ,	,

<sup>(2)</sup> through (7) from proposed year 1 MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 2 Deductible Debit / (Credit)
Named Perils Coverage

	(1)	(2)	(3)	(4)	(5)	(6)	(7)				
			Propo	sed Year 1 Ded	uctible Debit / (0	Credit)					
	All Peril	Territory	Territory	Territory	Territory	Territory	Territory				
	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6				
	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00				
	50	(1.33)	(1.02)	(0.77)	(0.63)	(0.54)	(0.41)				
	100	(2.67)	(2.04)	(1.56)	(1.28)	(1.10)	(0.83)				
	250	(4.00)	(3.06)	(2.35)	(1.91)	(1.64)	(1.24)				
	500	(6.08)	(4.68)	(3.58)	(2.89)	(2.50)	(1.89)				
	750	(8.00)	(6.17)	(4.73)	(3.79)	(3.28)	(2.48)				
	1,000	(9.71)	(7.52)	(5.75)	(4.60)	(3.97)	(3.00)				
	2,000	(16.24)	(12.64)	(9.63)	(7.69)	(6.63)	(4.98)				
	5,000	(35.12)	(27.45)	(20.83)	(16.60)	(14.30)	(10.72)				
		(8)	(9)	(10)	(11)	(12)	(13)				
		Proposed Year 2 Rate Change									
		Territory	Territory	Territory	Territory	Territory	Territory				
		Group 1	Group 2	Group 3	Group 4	Group 5	Group 6				
		34.2%	11.9%	34.4%	13.7%	8.8%	9.9%				
	(14)	(15)	(16)	(17)	(18)	(19)	(20)				
		= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]				
			Propo	sed Year 2 Ded	uctible Debit / (0	Credit)					
	All Peril	Territory	Territory	Territory	Territory	Territory	Territory				
_	Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6				
	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00				
	50	(1.78)	(1.15)	(1.04)	(0.71)	(0.59)	(0.45)				
	100	(3.59)	(2.28)	(2.10)	(1.46)	(1.20)	(0.91)				
	250	(5.37)	(3.42)	(3.16)	(2.17)	(1.79)	(1.37)				
	500	(8.16)	(5.23)	(4.82)	(3.28)	(2.72)	(2.07)				
	750	(10.73)	(6.90)	(6.35)	(4.31)	(3.57)	(2.72)				
	1,000	(13.03)	(8.41)	(7.72)	(5.23)	(4.32)	(3.29)				
	2,000	(21.80)	(14.14)	(12.93)	(8.74)	(7.21)	(5.48)				
	5,000	(47.14)	(30.71)	(27.98)	(18.87)	(15.56)	(11.78)				

<sup>(2)</sup> through (7) from proposed year 1 MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

### Derivation of Proposed Year 2 Deductible Debit / (Credit) Named Perils Coverage

(1)	(2) (3)		(4)	(4) (5)		(7)
		Propo	sed Year 1 Ded	uctible Debit / (0	Credit)	
All Peril	Territory	Territory	Territory	Territory	Territory	Territory
Deductible	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
50	(5.92)	(4.06)	(2.75)	(2.16)	(1.91)	(1.71)
100	(11.85)	(8.10)	(5.51)	(4.33)	(3.83)	(3.43)
250	(23.70)	(16.20)	(11.02)	(8.63)	(7.65)	(6.84)
500	(41.26)	(28.22)	(19.17)	(15.03)	(13.33)	(11.89)
750	(55.90)	(38.23)	(25.96)	(20.35)	(18.04)	(16.11)
1,000	(67.01)	(45.82)	(31.11)	(24.39)	(21.63)	(19.30)
2,000	(105.86)	(72.38)	(49.12)	(38.52)	(34.15)	(30.47)
5,000	(211.29)	(144.44)	(97.97)	(76.87)	(68.13)	(60.78)
	(8)	(9)	(10)	(11)	(12)	(13)
			Proposed Year	2 Rate Change		
	Territory	Territory	Territory	Territory	Territory	Territory
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
	34.5%	17.4%	12.4%	1.8%	-3.4%	-5.3%
(14)	(15)	(16)	(17)	(18)	(19)	(20)
( /	= (2) x [1+(8)]	= (3) x [1+(9)]	= (4) x [1+(10)]	= (5) x [1+(11)]	= (6) x [1+(12)]	= (7) x [1+(13)]
		_		5 1:://6	N PO	
All Davil	Touritous		sed Year 2 Ded			Touritous
All Peril Deductible	Territory	Territory	Territory	Territory	Territory	Territory
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
50	(7.96)	(4.77)	(3.10)	(2.20)	(1.85)	(1.62)
100	(15.94)	(9.51)	(6.20)	(4.40)	(3.70)	(3.25)
250	(31.87)	(19.02)	(12.39)	(8.79)	(7.40)	(6.47)
500	(55.50)	(33.13)	(21.56)	(15.30)	(12.88)	(11.26)
750	(75.18)	(44.88)	(29.20)	(20.72)	(17.44)	(15.25)
1,000	(90.12)	(53.79)	(34.99)	(24.83)	(20.90)	(18.27)
2,000	(142.38)	(84.97)	(55.23) (39.2		(33.00)	(28.86) (57.56)
5,000	(284.18)	(169.57)	(110.17)	(78.25)	(78.25) (65.84)	

<sup>(2)</sup> through (7) from proposed year 1 MH(C) Rate Manual

<sup>(8)</sup> through (13) From Section A, Page 2

Derivation of Proposed Year 2 Named Storm Deductible Debit / (Credit)
Comprehensive Coverage
Territory Groups 1 and 2

(1) Proposed Year 1 Named Storm Deductible Debit / (Credit)

(2) Proposed Year 2 Named Storm Deductible Debit / (Credit) = (1)  $\times$  [ 1 + (3) ]

		Primary Re	esidence	Seasonal / Vacat	ion Residence			Primary Re	esidence	Seasonal / Vacat	ion Residence
All-Peril	Named Storm	Territory	Territory	Territory	Territory	All-Peril	Named Storm	Territory	Territory	Territory	Territory
Deductible	Deductible	Group 1	Group 2	Group 1	Group 2	Deductible	Deductible	Group 1	Group 2	Group 1	Group 2
0	1%	\$29.30	\$23.11			0	1%	\$41.12	\$28.87		
	2%	16.90	13.32				2%	23.72	16.64		
	5%	(20.33)	(16.04)				5%	(28.53)	(20.04)		
50	1%	\$6.79	\$5.36			50	1%	\$9.53	\$6.70		
	2%	(5.39)	(4.24)				2%	(7.56)	(5.30)		
	5%	(41.95)	(33.05)				5%	(58.87)	(41.29)		
100	1%	(\$11.98)	(\$9.46)			100	1%	(\$16.81)	(\$11.82)		
	2%	(23.98)	(18.92)				2%	(33.65)	(23.64)		
	5%	(59.95)	(47.28)				5%	(84.13)	(59.07)		
250	1%	(\$45.81)	(\$36.12)	(\$11.98)	(\$9.46)	250	1%	(\$64.29)	(\$45.13)	(\$16.81)	(\$11.82)
	2%	(57.45)	(45.30)	(23.98)	(18.92)		2%	(80.62)	(56.60)	(33.65)	(23.64)
	5%	(92.41)	(72.88)	(59.95)	(47.28)		5%	(129.68)	(91.05)	(84.13)	(59.07)
500	1%	(\$98.37)	(\$77.55)	(\$64.60)	(\$50.94)	500	1%	(\$138.05)	(\$96.89)	(\$90.66)	(\$63.64)
	2%	(109.50)	(86.32)	(76.08)	(59.98)		2%	(153.67)	(107.85)	(106.77)	(74.94)
	5%	(142.86)	(112.62)	(110.50)	(87.12)		5%	(200.48)	(140.70)	(155.07)	(108.84)
750	2%	(\$156.71)	(\$123.52)	(\$124.34)	(\$98.01)	750	2%	(\$219.92)	(\$154.32)	(\$174.49)	(\$122.45)
	5%	(187.51)	(147.80)	(156.22)	(123.14)		5%	(263.14)	(184.66)	(219.23)	(153.85)
1,000	2%	(\$197.79)	(\$155.90)	(\$167.40)	(\$131.97)	1,000	2%	(\$277.57)	(\$194.78)	(\$234.92)	(\$164.88)
	5%	(225.19)	(177.48)	(195.89)	(154.37)		5%	(316.02)	(221.74)	(274.90)	(192.86)
2,000	2%	(\$351.28)	(\$276.85)	(\$329.52)	(\$259.76)	2,000	2%	(\$492.97)	(\$345.89)	(\$462.43)	(\$324.53)
	5%	(372.17)	(293.29)	(351.02)	(276.55)		5%	(522.28)	(366.43)	(492.60)	(345.51)
5,000	5%	(\$804.96)	(\$634.28)	(\$808.21)	(\$636.61)	5,000	5%	(\$1,129.63)	(\$792.45)	(\$1,134.19)	(\$795.36)
						(3) Proposed Ye	ear 2 Rate Change:	40.3%	24.9%	40.3%	24.9%

<sup>(1)</sup> From Proposed Year 1 NCRB MH(C) Rate Manual

<sup>(3)</sup> From Section A, Page 2

Derivation of Proposed Year 2 Named Storm Deductible Debit / (Credit)
Comprehensive Coverage
Territory Groups 1 and 2

(1) Proposed Year 1 Named Storm Deductible Debit / (Credit)

(2) Proposed Year 2 Named Storm Deductible Debit / (Credit) = (1) x [ 1 + (3) ]

		Primary Re	sidence	Seasonal / Vacat	easonal / Vacation Residence				Primary Residence		Seasonal / Vacation Residence	
All-Peril	Named Storm	Territory	Territory	Territory	Territory	All-Peril	Named Storm	Territory	Territory	Territory	Territory	
Deductible	Deductible	Group 1	Group 2	Group 1	Group 2	Deductible	Deductible	Group 1	Group 2	Group 1	Group 2	
0	1%	\$1.79	\$1.37			0	1%	\$2.40	\$1.53			
	2%	0.91	0.70				2%	1.22	0.78			
	5%	(1.73)	(1.30)				5%	(2.32)	(1.45)			
50	1%	\$0.47	\$0.36			50	1%	\$0.63	\$0.40			
	2%	(0.40)	(0.31)				2%	(0.54)	(0.35)			
	5%	(2.99)	(2.30)				5%	(4.01)	(2.57)			
100	1%	(\$0.85)	(\$0.65)			100	1%	(\$1.14)	(\$0.73)			
	2%	(1.70)	(1.31)				2%	(2.28)	(1.47)			
	5%	(4.24)	(3.27)				5%	(5.69)	(3.66)			
250	1%	(\$3.48)	(\$2.66)	(\$0.85)	(\$0.65)	250	1%	(\$4.67)	(\$2.98)	(\$1.14)	(\$0.73)	
	2%	(4.28)	(3.30)	(1.70)	(1.31)		2%	(5.75)	(3.69)	(2.28)	(1.47)	
	5%	(6.69)	(5.18)	(4.24)	(3.27)		5%	(8.98)	(5.80)	(5.69)	(3.66)	
500	1%	(\$21.96)	(\$16.79)	(\$19.30)	(\$14.76)	500	1%	(\$29.48)	(\$18.79)	(\$25.91)	(\$16.51)	
	2%	(22.35)	(17.10)	(19.56)	(14.96)		2%	(30.00)	(19.13)	(26.26)	(16.74)	
	5%	(24.57)	(18.77)	(21.89)	(16.78)		5%	(32.98)	(21.00)	(29.38)	(18.77)	
750	2%	(\$38.41)	(\$29.35)	(\$35.53)	(\$27.19)	750	2%	(\$51.56)	(\$32.84)	(\$47.69)	(\$30.42)	
	5%	(40.32)	(30.75)	(37.56)	(28.78)		5%	(54.12)	(34.41)	(50.42)	(32.20)	
1,000	2%	(\$51.74)	(\$39.52)	(\$48.94)	(\$37.45)	1,000	2%	(\$69.45)	(\$44.22)	(\$65.70)	(\$41.90)	
	5%	(53.28)	(40.58)	(50.57)	(38.74)		5%	(71.52)	(45.40)	(67.88)	(43.34)	
2,000	2%	(\$99.77)	(\$76.18)	(\$97.42)	(\$74.54)	2,000	2%	(\$133.93)	(\$85.24)	(\$130.77)	(\$83.40)	
	5%	(100.88)	(76.72)	(98.52)	(75.43)		5%	(135.42)	(85.84)	(132.25)	(84.40)	
5,000	5%	(\$233.96)	(\$177.77)	(\$230.24)	(\$176.22)	5,000	5%	(\$314.06)	(\$198.90)	(\$309.07)	(\$197.17)	
						(3) Proposed Ye	ear 2 Rate Change:	34.2%	11.9%	34.2%	11.9%	

<sup>(1)</sup> From Proposed Year 1 NCRB MH(C) Rate Manual

<sup>(3)</sup> From Section A, Page 2

Derivation of Proposed Year 2 Named Storm Deductible Debit / (Credit)
Comprehensive Coverage
Territory Groups 1 and 2

(1) Proposed Year 1 Named Storm Deductible Debit / (Credit)

(2) Proposed Year 2 Named Storm Deductible Debit / (Credit) = (1)  $\times$  [ 1 + (3) ]

		Primary Re	sidence	Seasonal / Vacat	ion Residence			Primary Re	esidence	Seasonal / Vacat	ion Residence
All-Peril	Named Storm	Territory	Territory	Territory	Territory	All-Peril	Named Storm	Territory	Territory	Territory	Territory
Deductible	Deductible	Group 1	Group 2	Group 1	Group 2	Deductible	Deductible	Group 1	Group 2	Group 1	Group 2
0	1%	\$12.67	\$8.66			0	1%	\$17.04	\$10.17		
	2%	11.12	7.61				2%	14.96	8.93		
	5%	6.48	4.43				5%	8.72	5.20		
50	1%	\$5.64	\$3.85			50	1%	\$7.59	\$4.52		
	2%	4.14	2.83				2%	5.57	3.32		
	5%	(0.31)	(0.23)				5%	(0.42)	(0.27)		
100	1%	(\$1.41)	(\$0.96)			100	1%	(\$1.90)	(\$1.13)		
	2%	(2.81)	(1.91)				2%	(3.78)	(2.24)		
	5%	(7.03)	(4.79)				5%	(9.45)	(5.62)		
250	1%	(\$15.48)	(\$10.59)	(\$1.41)	(\$0.96)	250	1%	(\$20.82)	(\$12.43)	(\$1.90)	(\$1.13)
	2%	(16.74)	(11.46)	(2.81)	(1.91)		2%	(22.51)	(13.45)	(3.78)	(2.24)
	5%	(20.55)	(14.08)	(7.03)	(4.79)		5%	(27.64)	(16.53)	(9.45)	(5.62)
500	1%	(\$22.51)	(\$15.40)	(\$8.46)	(\$5.79)	500	1%	(\$30.27)	(\$18.08)	(\$11.38)	(\$6.80)
	2%	(23.71)	(16.22)	(9.80)	(6.70)		2%	(31.89)	(19.04)	(13.18)	(7.87)
	5%	(27.29)	(18.69)	(13.84)	(9.47)		5%	(36.70)	(21.94)	(18.61)	(11.12)
750	2%	(\$29.15)	(\$19.95)	(\$15.96)	(\$10.93)	750	2%	(\$39.21)	(\$23.42)	(\$21.47)	(\$12.83)
	5%	(32.31)	(22.14)	(19.61)	(13.44)		5%	(43.46)	(25.99)	(26.37)	(15.78)
1,000	2%	(\$32.83)	(\$22.48)	(\$21.02)	(\$14.38)	1,000	2%	(\$44.15)	(\$26.39)	(\$28.27)	(\$16.88)
	5%	(35.47)	(24.30)	(24.11)	(16.54)		5%	(47.71)	(28.53)	(32.43)	(19.42)
2,000	2%	(\$45.24)	(\$31.02)	(\$39.19)	(\$26.81)	2,000	2%	(\$60.85)	(\$36.42)	(\$52.71)	(\$31.47)
	5%	(47.13)	(32.31)	(41.28)	(28.36)		5%	(63.39)	(37.93)	(55.52)	(33.29)
5,000	5%	(\$80.47)	(\$55.19)	(\$90.93)	(\$62.55)	5,000	5%	(\$108.23)	(\$64.79)	(\$122.30)	(\$73.43)
						(3) Proposed Ye	ear 2 Rate Change:	34.5%	17.4%	34.5%	17.4%

<sup>(1)</sup> From Proposed Year 1 NCRB MH(C) Rate Manual

<sup>(3)</sup> From Section A, Page 2

Derivation of Proposed Year 2 Named Storm Deductible Debit / (Credit) Named Perils Territory Groups 1 and 2

(1) Proposed Year 1 Named Storm Deductible Debit / (Credit)

(2) Proposed Year 2 Named Storm Deductible Debit / (Credit) = (1) x [1 + (3)]

		Primary Re	sidence			Primary Re	sidence
All-Peril	Named Storm	Territory	Territory	All-Peril	Named Storm	Territory	Territory
Deductible	Deductible	Group 1	Group 2	Deductible	Deductible	Group 1	Group 2
0	1%	(\$21.39)	(\$16.85)	0	1%	(\$30.02)	(\$21.05)
	2%	(42.77)	(33.72)		2%	(60.02)	(42.13)
	5%	(106.92)	(84.29)		5%	(150.05)	(105.31)
50	1%	(\$40.01)	(\$31.55)	50	1%	(\$56.15)	(\$39.42)
	2%	(61.03)	(48.13)		2%	(85.65)	(60.13)
	5%	(124.13)	(97.86)		5%	(174.20)	(122.26)
100	1%	(\$56.71)	(\$44.71)	100	1%	(\$79.58)	(\$55.86)
	2%	(77.37)	(60.99)		2%	(108.58)	(76.20)
	5%	(139.34)	(109.87)		5%	(195.54)	(137.27)
250	1%	(\$84.59)	(\$66.69)	250	1%	(\$118.71)	(\$83.32)
	2%	(104.70)	(82.55)		2%	(146.93)	(103.14)
	5%	(165.03)	(130.10)		5%	(231.59)	(162.54)
500	1%	(\$131.07)	(\$103.33)	500	1%	(\$183.94)	(\$129.10)
	2%	(145.77)	(114.90)		2%	(204.57)	(143.55)
	5%	(201.62)	(158.92)		5%	(282.94)	(198.55)
750	2%	(\$181.21)	(\$142.83)	750	2%	(\$254.30)	(\$178.45)
	5%	(231.06)	(182.11)		5%	(324.26)	(227.52)
1,000	2%	(\$210.16)	(\$165.63)	1,000	2%	(\$294.93)	(\$206.93)
	5%	(252.69)	(199.14)		5%	(354.61)	(248.80)
2,000	2%	(\$316.20)	(\$249.15)	2,000	2%	(\$443.74)	(\$311.28)
	5%	(339.19)	(267.26)		5%	(476.00)	(333.91)
5,000	5%	(\$598.69)	(\$471.64)	5,000	5%	(\$840.17)	(\$589.25)
				(3) Proposed Ye	ar 2 Rate Change:	40.3%	24.9%

<sup>(1)</sup> From Proposed Year 1 NCRB MH(C) Rate Manual (3) From Section A, Page 2

Derivation of Proposed Year 2 Named Storm Deductible Debit / (Credit) Named Perils Territory Groups 1 and 2

(1) Proposed Year 1 Named Storm Deductible Debit / (Credit)

(2) Proposed Year 2 Named Storm Deductible Debit / (Credit) = (1) x [1 + (3)]

		Primary Re	sidence			Primary Re	sidence
All-Peril Deductible	Named Storm Deductible	Territory Group 1	Territory Group 2	All-Peril Deductible	Named Storm Deductible	Territory Group 1	Territory Group 2
0	1%	(\$1.45)	(\$1.11)	0	1%	(\$1.95)	(\$1.24)
	2%	(2.90)	(2.23)		2%	(3.89)	(2.50)
	5%	(7.26)	(5.55)		5%	(9.75)	(6.21)
50	1%	(\$2.77)	(\$2.13)	50	1%	(\$3.72)	(\$2.38)
	2%	(4.20)	(3.22)		2%	(5.64)	(3.60)
	5%	(8.51)	(6.51)		5%	(11.42)	(7.28)
100	1%	(\$4.09)	(\$3.12)	100	1%	(\$5.49)	(\$3.49)
	2%	(5.52)	(4.21)		2%	(7.41)	(4.71)
	5%	(9.77)	(7.46)		5%	(13.12)	(8.35)
250	1%	(\$5.37)	(\$4.11)	250	1%	(\$7.21)	(\$4.60)
	2%	(6.75)	(5.16)		2%	(9.06)	(5.77)
	5%	(10.87)	(8.30)		5%	(14.59)	(9.29)
500	1%	(\$7.50)	(\$5.75)	500	1%	(\$10.07)	(\$6.43)
	2%	(8.36)	(6.40)		2%	(11.22)	(7.16)
	5%	(12.05)	(9.22)		5%	(16.18)	(10.32)
750	2%	(\$9.49)	(\$7.27)	750	2%	(\$12.74)	(\$8.13)
	5%	(12.58)	(9.62)		5%	(16.89)	(10.76)
1,000	2%	(\$10.09)	(\$7.72)	1,000	2%	(\$13.54)	(\$8.64)
	5%	(12.73)	(9.73)		5%	(17.09)	(10.89)
2,000	2%	(\$11.89)	(\$9.07)	2,000	2%	(\$15.96)	(\$10.15)
	5%	(13.28)	(10.08)		5%	(17.83)	(11.28)
5,000	5%	(\$14.94)	(\$11.01)	5,000	5%	(\$20.06)	(\$12.32)
				(3) Proposed Ye	ar 2 Rate Change:	34.2%	11.9%

<sup>(1)</sup> From Proposed Year 1 NCRB MH(C) Rate Manual (3) From Section A, Page 2

Derivation of Proposed Year 2 Named Storm Deductible Debit / (Credit) Named Perils Territory Groups 1 and 2

(1) Proposed Year 1 Named Storm Deductible Debit / (Credit)

(2) Proposed Year 2 Named Storm Deductible Debit / (Credit) = (1) x [1 + (3)]

		Primary Re	sidence			Primary Re	sidence
All-Peril Deductible	Named Storm Deductible	Territory Group 1	Territory Group 2	All-Peril Deductible	Named Storm Deductible	Territory Group 1	Territory Group 2
0	1%	(\$2.82)	(\$1.94)	0	1%	(\$3.79)	(\$2.28)
	2%	(5.66)	(3.89)		2%	(7.61)	(4.57)
	5%	(14.15)	(9.71)		5%	(19.03)	(11.40)
50	1%	(\$8.63)	(\$5.89)	50	1%	(\$11.61)	(\$6.91)
	2%	(11.34)	(7.74)		2%	(15.25)	(9.09)
	5%	(19.46)	(13.27)		5%	(26.17)	(15.58)
100	1%	(\$14.44)	(\$9.89)	100	1%	(\$19.42)	(\$11.61)
	2%	(17.04)	(11.66)		2%	(22.92)	(13.69)
	5%	(24.84)	(17.00)		5%	(33.41)	(19.96)
250	1%	(\$26.02)	(\$17.81)	250	1%	(\$35.00)	(\$20.91)
	2%	(27.89)	(19.09)		2%	(37.51)	(22.41)
	5%	(35.37)	(24.23)		5%	(47.57)	(28.45)
500	1%	(\$45.34)	(\$31.02)	500	1%	(\$60.98)	(\$36.42)
	2%	(43.70)	(29.90)		2%	(58.77)	(35.10)
	5%	(50.29)	(34.47)		5%	(67.64)	(40.47)
750	2%	(\$56.51)	(\$38.67)	750	2%	(\$76.00)	(\$45.40)
	5%	(61.93)	(42.48)		5%	(83.29)	(49.87)
1,000	2%	(\$65.88)	(\$45.07)	1,000	2%	(\$88.61)	(\$52.91)
	5%	(70.64)	(48.46)		5%	(95.01)	(56.89)
2,000	2%	(\$98.14)	(\$67.13)	2,000	2%	(\$131.99)	(\$78.81)
	5%	(102.30)	(70.23)		5%	(137.59)	(82.45)
5,000	5%	(\$193.34)	(\$132.80)	5,000	5%	(\$260.03)	(\$155.91)
				(3) Proposed Ye	ear 2 Rate Change:	34.5%	17.4%

(1) From Proposed Year 1 NCRB MH(C) Rate Manual (3) From Section A, Page 2

# North Carolina Mobile Homeowners MH(C) Program

**Current Rate Pages** 

#### **NORTH CAROLINA**

COMPREHENSIVE MO TERRITORY GROUI	BILE HOME STRUCT 3; \$100 DEDUCTIB	
· · · · · · · · · · · · · · · · · · ·	Premiu	ıms
	Primary	
Amount of Insurance	Residence	Rental
1 - 3,999	\$266.25	\$456.10
4,000 - 4,999	284.07	486.62
5,000 - 5,999	298.75	511.76
6,000 - 6,999	314.30	538.40
7,000 - 7,999	330.06	565.40
8,000 - 8,999	345.88	592.50
9,000 - 9,999	362.56	621.06
10,000 - 10,999	378.35	648.12
11,000 - 11,999	391.70	670.99
12,000 - 12,999	405.05	693.86
13,000 - 13,999	417.98	716.01
14,000 - 14,999	430.91	738.15
15,000 - 15,999	445.56	763.25
16,000 - 16,999	461.37	790.34
17,000 - 17,999	476.83	816.83
18,000 - 18,999	492.20	843.15
19,000 - 19,999	509.04	871.99
20,000 - 20,999	524.87	899.11
21,000 - 21,999	537.52	920.78
22,000 - 22,999	550.17	942.45
23,000 - 23,999	563.54	965.36
24,000 - 24,999	577.10	988.58
	591.70	1,013.59
25,000 - 25,999	607.10	1,013.5
26,000 - 26,999	622.26	<u> </u>
27,000 - 27,999	637.32	1,065.95 1,091.74
28,000 - 28,999		
29,000 - 29,999	654.23	1,120.70
30,000 - 30,999	671.75	1,150.72
31,000 - 31,999	684.90	1,173.25
32,000 - 32,999	697.69	1,195.15
33,000 - 33,999	710.47	1,217.05
34,000 - 34,999	724.94	1,241.84
35,000 - 35,999	739.62	1,266.98
36,000 - 36,999	754.29	1,292.11
37,000 - 37,999	768.97	1,317.25
38,000 - 38,999	783.64	1,342.39
39,000 - 39,999	798.31	1,367.53
40,000 - 40,999	812.99	1,392.67
41,000 - 41,999	827.66	1,417.80

	COMPREHENSIVE MOBILE HOME STRUCTURES					
TERRITORY GROUP	TERRITORY GROUP 3; \$100 DEDUCTIBLE					
	Premiu	ıms				
Amount of Incurons	Primary	Dontol				
Amount of Insurance	Residence \$842.34	Rental \$1,442.94				
42,000 - 42,999	· ·					
43,000 - 43,999	857.01	1,468.08 1,493.22				
44,000 - 44,999	871.69					
45,000 - 45,999	886.36	1,518.36 1,543.49				
46,000 - 46,999	901.04					
47,000 - 47,999	915.71	1,568.63				
48,000 - 48,999	930.39	1,593.77				
49,000 - 49,999	945.06	1,618.91				
50,000 - 50,999	959.74	1,644.05				
51,000 - 51,999	974.41	1,669.18				
52,000 - 52,999	989.09	1,694.32				
53,000 - 53,999	1,003.76	1,719.46				
54,000 - 54,999	1,018.43	1,744.60				
55,000 - 55,999	1,033.11	1,769.73				
56,000 - 56,999	1,047.78	1,794.87				
57,000 - 57,999	1,062.46	1,820.01				
58,000 - 58,999	1,077.13	1,845.15				
59,000 - 59,999	1,091.81	1,870.29				
60,000 - 60,999	1,106.48	1,895.42				
61,000 - 61,999	1,121.16	1,920.56				
62,000 - 62,999	1,135.83	1,945.70				
63,000 - 63,999	1,150.51	1,970.84				
64,000 - 64,999	1,165.18	1,995.98				
65,000 - 65,999	1,179.86	2,021.11				
66,000 - 66,999	1,194.53	2,046.25				
67,000 - 67,999	1,209.21	2,071.39				
68,000 - 68,999	1,223.88	2,096.53				
69,000 - 69,999	1,238.55	2,121.67				
70,000 - 70,999	1,253.23	2,146.80				
71,000 - 71,999	1,267.90	2,171.94				
72,000 - 72,999	1,282.58	2,197.08				
73,000 - 73,999	1,297.25	2,222.22				
74,000 - 74,999	1,311.93	2,247.36				
75,000 - 75,999	1,326.60	2,272.49				
76,000 - 76,999	1,341.28	2,297.63				
77,000 - 77,999	1,355.95	2,322.77				
78,000 - 78,999	1,370.63	2,347.91				
79,000 - 79,999	1,385.30	2,373.05				
Each Add'l \$1,000	\$14.67	\$25.14				

Territory Group 1	Surcharge	72.0%
Territory Group 2	Surcharge	52.6%
Territory Group 4	Discount	-3.6%
Territory Group 5	Discount	-13.3%
Territory Group 6	Discount	-29.9%

#### **NORTH CAROLINA**

NAMED PERILS MOB	ILE HOME STRUCTU	RES
TERRITORY GROU	P 3; \$0 DEDUCTIBLE	E
	Premiu	ıms
	Primary	
Amount of Insurance	Residence	Rental
1 - 3,999	\$237.31	\$427.16
4,000 - 4,999	253.19	455.75
5,000 - 5,999	266.27	479.29
6,000 - 6,999	280.14	504.25
7,000 - 7,999	294.18	529.53
8,000 - 8,999	308.28	554.91
9,000 - 9,999	323.15	581.66
10,000 - 10,999	337.23	607.01
11,000 - 11,999	349.12	628.42
12,000 - 12,999	361.02	649.84
13,000 - 13,999	372.55	670.59
14,000 - 14,999	384.07	691.33
15,000 - 15,999	397.13	714.83
16,000 - 16,999	411.22	740.20
17,000 - 17,999	425.00	765.01
18,000 - 18,999	438.70	789.66
19,000 - 19,999	453.70	816.67
20,000 - 20,999	467.82	842.07
21,000 - 21,999	479.09	862.37
22,000 - 22,999	490.37	882.66
23,000 - 23,999	502.29	904.12
24,000 - 24,999	514.37	925.87
25,000 - 25,999	527.38	949.28
26,000 - 26,999	541.11	974.00
27,000 - 27,999	554.62	998.32
28,000 - 28,999	568.04	1,022.48
29,000 - 29,999	583.11	1,049.60
30,000 - 30,999	598.73	1,077.72
31,000 - 31,999	610.45	1,098.81
32,000 - 32,999	621.85	1,119.33
33,000 - 33,999	633.24	1,139.84
34,000 - 34,999	646.14	1,163.05
35,000 - 35,999	659.22	1,186.60
36,000 - 36,999	672.30	1,210.14
37,000 - 37,999	685.38	1,233.68
38,000 - 38,999	698.46	1,257.23
39.000 - 39.999	711.54	1,280.77
40,000 - 40,999	724.62	1,304.31
41.000 - 41.999	737.70	1,327.86

	NAMED PERILS MOBILE HOME STRUCTURES				
TERRITORY GROU	P 3; \$0 DEDUCTIBLE	1			
	Premiu	ims			
Amount of Insurance	Primary Residence	Rental			
42,000 - 42,999	\$750.78	\$1,351.40			
43,000 - 43,999	763.86	1,374.94			
44,000 - 44,999	776.94	1,398.49			
45,000 - 45,999	790.02	1,422.03			
46,000 - 46,999	803.10	1,445.57			
47.000 - 47.999	816.18	1,469.12			
48,000 - 48,999	829.25	1,492.66			
49,000 - 49,999	842.33	1,516.20			
50,000 - 50,999	855.41	1,539.74			
51,000 - 51,999	868.49	1,563.29			
52,000 - 52,999	881.57	1,586.83			
53,000 - 53,999	894.65	1,610.37			
54,000 - 54,999	907.73	1,633.92			
55,000 - 55,999	920.81	1,657.46			
56,000 - 56,999	933.89	1,681.00			
57,000 - 57,999	946.97	1,704.55			
58,000 - 58,999	960.05	1,728.09			
59,000 - 59,999	973.13	1,751.63			
60,000 - 60,999	986.21	1,775.18			
61,000 - 61,999	999.29	1,798.72			
62,000 - 62,999	1,012.37	1,822.26			
63,000 - 63,999	1,025.45	1,845.81			
64,000 - 64,999	1,038.53	1,869.35			
65,000 - 65,999	1,051.61	1,892.89			
66,000 - 66,999	1,064.69	1,916.44			
67,000 - 67,999	1,077.77	1,939.98			
68,000 - 68,999	1,090.85	1,963.52			
69,000 - 69,999	1,103.93	1,987.07			
70,000 - 70,999	1,117.00	2,010.61			
71,000 - 71,999	1,130.08	2,034.15			
72,000 - 72,999	1,143.16	2,057.69			
73,000 - 73,999	1,156.24	2,081.24			
74,000 - 74,999	1,169.32	2,104.78			
75,000 - 75,999	1,182.40	2,128.32			
76,000 - 76,999	1,195.48	2,151.87			
77,000 - 77,999	1,208.56	2,175.41			
78,000 - 78,999	1,221.64	2,198.95			
79,000 - 79,999	1,234.72	2,222.50			
Each Add'l \$1,000	\$13.08	\$23.55			

Territory Group 1	Surcharge	72.0%
Territory Group 2	Surcharge	52.6%
Territory Group 4	Discount	-3.6%
Territory Group 5	Discount	-13.3%
Territory Group 6	Discount	-29.9%

#### MOBILE HOMEOWNERS POLICY: MH(C) PROGRAM NORTH CAROLINA **RATE PAGES**

SEASONAL/VACATION		
TERRITORY GROU	JP 3; \$250 DEDUCTIBL	
	Premiu	
Amount of Incurance	Comprehensive	Named
Amount of Insurance	Comprehensive \$266.25	Perils \$237.31
1 - 3,999	284.07	253.19
4,000 - 4,999	298.75	266.27
5,000 - 5,999		
6,000 - 6,999	314.30	280.14
7,000 - 7,999	330.06	294.18
8,000 - 8,999	345.88	308.28
9,000 - 9,999	362.56	323.15
10,000 - 10,999	378.35	337.23
11,000 - 11,999	391.70	349.12
12,000 - 12,999	405.05	361.02
13,000 - 13,999	417.98	372.55
14,000 - 14,999	430.91	384.07
15,000 - 15,999	445.56	397.13
16,000 - 16,999	461.37	411.22
17,000 - 17,999	476.83	425.00
18,000 - 18,999	492.20	438.70
19,000 - 19,999	509.04	453.70
20,000 - 20,999	524.87	467.82
21,000 - 21,999	537.52	479.09
22,000 - 22,999	550.17	490.37
23,000 - 23,999	563.54	502.29
24,000 - 24,999	577.10	514.37
25,000 - 25,999	591.70	527.38
26,000 - 26,999	607.10	541.11
27,000 - 27,999	622.26	554.62
28,000 - 28,999	637.32	568.04
29,000 - 29,999	654.23	583.11
30,000 - 30,999	671.75	598.73
31,000 - 31,999	684.90	610.45
32,000 - 32,999	697.69	621.85
33,000 - 33,999	710.47	633.24
34,000 - 34,999	724.94	646.14
35,000 - 35,999	739.62	659.22
36,000 - 36,999	754.29	672.30
37,000 - 37,999	768.97	685.38
38,000 - 38,999	783.64	698.46
39,000 - 39,999	798.31	711.54
40,000 - 40,999	812.99	724.62
41,000 - 41,999	827.66	737.70

SEASONAL/VACATION	MOBILE HOME STRU	CTURES
TERRITORY GROU	IP 3; \$250 DEDUCTIB	LE
	Premiu	
0	0	Named
Amount of Insurance	Comprehensive \$842.34	Perils \$750.78
42,000 - 42,999	1	
43,000 - 43,999	857.01	763.86
44,000 - 44,999	871.69	776.94
45,000 - 45,999	886.36	790.02
46,000 - 46,999	901.04	803.10
47,000 - 47,999	915.71	816.18
48,000 - 48,999	930.39	829.25
49,000 - 49,999	945.06	842.33
50,000 - 50,999	959.74	855.41
51,000 - 51,999	974.41	868.49
52,000 - 52,999	989.09	881.57
53,000 - 53,999	1,003.76	894.65
54,000 - 54,999	1,018.43	907.73
55,000 - 55,999	1,033.11	920.81
56,000 - 56,999	1,047.78	933.89
57,000 - 57,999	1,062.46	946.97
58,000 - 58,999	1,077.13	960.05
59,000 - 59,999	1,091.81	973.13
60,000 - 60,999	1,106.48	986.21
61,000 - 61,999	1,121.16	999.29
62,000 - 62,999	1,135.83	1,012.37
63,000 - 63,999	1,150.51	1,025.45
64,000 - 64,999	1,165.18	1,038.53
65,000 - 65,999	1,179.86	1,051.61
66,000 - 66,999	1,194.53	1,064.69
67,000 - 67,999	1,209.21	1,077.77
68,000 - 68,999	1,223.88	1,090.85
69,000 - 69,999	1,238.55	1,103.93
70,000 - 70,999	1,253.23	1,117.00
71,000 - 71,999	1,267.90	1,130.08
72,000 - 72,999	1,282.58	1,143.16
73,000 - 73,999	1,297.25	1,156.24
74,000 - 74,999	1,311.93	1,169.32
75,000 - 75,999	1,326.60	1,182.40
76,000 - 76,999	1,341.28	1,195.48
77,000 - 77,999	1,355.95	1,208.56
78,000 - 78,999	1,370.63	1,221.64
79,000 - 79,999	1,385.30	1,234.72
Each Add'I \$1,000	\$14.67	\$13.08

Territory Group 1	Surcharge	72.0%
Territory Group 2	Surcharge	52.6%
Territory Group 4	Discount	-3.6%
Territory Group 5	Discount	-13.3%
Territory Group 6	Discount	-29.9%

#### **NORTH CAROLINA**

ADJACENT STRUCTURES						
TERR	RITORY GROUP 3					
	Premiums					
Amount of Insurance	Comprehensive	Named Perils				
100 - 199	N/A	\$2.48				
200 - 299	N/A	3.92				
300 - 399	\$6.21	5.36				
400 - 499	7.88	6.80				
500 - 599	9.55	8.24				
600 - 699	11.22	9.68				
700 - 799	12.89	11.12				
800 - 899	14.56	12.56				
900 - 999	16.23	14.00				
1,000 - 1,099	17.90	15.44				
1,100 - 1,199	19.57	16.88				
1,200 - 1,299	21.24	18.32				
1,300 - 1,399	22.91	19.76				
1,400 - 1,499	24.58	21.20				
1,500 - 1,599	26.25	22.64				
1,600 - 1,699	27.92	24.08				
1,700 - 1,799	29.59	25.52				
1,800 - 1,899	31.26	26.96				
1,900 - 1,999	32.93	28.40				
2,000 - 2,099	34.60	29.84				
2,100 - 2,199	36.27	31.28				
2,200 - 2,299	37.94	32.72				
2,300 - 2,399	39.61	34.16				
2,400 - 2,499	41.28	35.60				
2,500 - 2,599	42.95	37.04				
2,600 - 2,699	44.62	38.48				
2,700 - 2,799	46.29	39.92				
2,800 - 2,899	47.96	41.36				
2,900 - 2,999	49.63	42.80				
3,000 - 3,099	51.30	44.24				
3,100 - 3,199	52.97	45.68				
3,200 - 3,299	54.64	47.12				
3,300 - 3,399	56.31	48.56				
3,400 - 3,499	57.98	50.00				
3,500 - 3,599	59.65	51.44				

TERRITORY GROUP 3				
	Premiums			
Amount of Insurance	Comprehensive	Named Perils		
3,600 - 3,699	\$61.32	\$52.88		
3,700 - 3,799	62.99	54.32		
3,800 - 3,899	64.66	55.76		
3,900 - 3,999	66.33	57.20		
4,000 - 4,099	68.00	58.64		
4,100 - 4,199	69.67	60.08		
4,200 - 4,299	71.34	61.52		
4,300 - 4,399	73.01	62.96		
4,400 - 4,499	74.68	64.40		
4,500 - 4,599	76.35	65.84		
4,600 - 4,699	78.02	67.28		
4,700 - 4,799	79.69	68.72		
4,800 - 4,899	81.36	70.16		
4,900 - 4,999	83.03	71.60		
5,000 - 5,099	84.70	73.04		
5,100 - 5,199	86.37	74.48		
5,200 - 5,299	88.04	75.92		
5,300 - 5,399	89.71	77.36		
5,400 - 5,499	91.38	78.80		
5,500 - 5,599	93.05	80.24		
5,600 - 5,699	94.72	81.68		
5,700 - 5,799	96.39	83.12		
5,800 - 5,899	98.06	84.56		
5,900 - 5,999	99.73	86.00		
6,000 - 6,099	101.40	87.44		
6,100 - 6,199	103.07	88.88		
6,200 - 6,299	104.74	90.32		
6,300 - 6,399	106.41	91.76		
6,400 - 6,499	108.08	93.20		
6,500 - 6,599	109.75	94.64		
6,600 - 6,699	111.42	96.08		
6,700 - 6,799	113.09	97.52		
6,800 - 6,899	114.76	98.96		
6,900 - 6,999	116.43	100.40		
Each Add'l \$100	\$1.67	\$1.44		

**ADJACENT STRUCTURES** 

	Base De	Base Deductible		
	Comprehensive	Named Perils		
Primary Residence	\$100 Deductible	No Deductible		
Seasonal/Vacation	\$250 Deductible	\$250 Deductible		
Tenants	\$100 Deductible	No Deductible		

Territory Group 1	Surcharge	87.2%
Territory Group 2	Surcharge	72.2%
Territory Group 4	Discount	-3.4%
Territory Group 5	Discount	-13.2%
Territory Group 6	Discount	-34.8%

Note: Rates shown applicable to all occupancy types

#### **NORTH CAROLINA**

	COMPREHENSIVE PERSONAL EFFECTS				
	TERRITORY GROUP 3				
Amount of Insurance	Premium \$20.00				
500 - 599	20.79				
600 - 699	21.58				
700 - 799					
800 - 899	22.37				
900 - 999	23.16				
1,000 - 1,099	23.95				
1,100 - 1,199	24.74				
1,200 - 1,299	25.53				
1,300 - 1,399	26.32				
1,400 - 1,499	27.11				
1,500 - 1,599	27.90				
1,600 - 1,699	28.69				
1,700 - 1,799	29.48				
1,800 - 1,899	30.27				
1,900 - 1,999	31.06				
2,000 - 2,099	31.85				
2,100 - 2,199	32.64				
2,200 - 2,299	33.43				
2,300 - 2,399	34.22				
2,400 - 2,499	35.01				
2,500 - 2,599	35.80				
2,600 - 2,699	36.59				
2,700 - 2,799	37.38				
2,800 - 2,899	38.17				
2,900 - 2,999	38.96				
3,000 - 3,099	39.75				
	40.54				
3,100 - 3,199	41.33				
3,200 - 3,299	41.33				
3,300 - 3,399					
3,400 - 3,499	42.91				
3,500 - 3,599	43.70				
3,600 - 3,699	44.49				
3,700 - 3,799	45.28				

	Base Deductible
Primary Residence	\$100 Deductible
Seasonal/Vacation	\$250 Deductible
Tenants	\$100 Deductible

Note: Rates shown applicable to all occupancy types

NAL EFFECTS			
TERRITORY GROUP 3  Amount of Insurance Premium			
\$46.07			
46.86			
47.65			
48.44			
49.23			
50.02			
50.81			
51.60			
52.39			
53.18			
53.97			
54.76			
55.55			
56.34			
57.13			
57.92			
58.71			
59.50			
60.29			
61.08			
61.87			
62.66			
63.45			
64.24			
65.03			
65.82			
66.61			
67.40			
68.19			
68.98			
69.77			
70.56 \$0.79			

Territory Group 1	Surcharge	97.0%
Territory Group 2	Surcharge	54.7%
Territory Group 4	Discount	-13.0%
Territory Group 5	Discount	-18.8%
Territory Group 6	Discount	-26.1%

**NORTH CAROLINA** 

#### **DEDUCTIBLE - COMPREHENSIVE COVERAGE**

#### **Primary Residence:**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Add	\$29.73	\$26.33	\$19.02	\$18.12	\$16.31	\$13.21
None	Adjacent Structures	Add	1.99	1.82	1.16	1.13	1.01	0.76
	Personal Effects	Add	10.57	8.28	5.88	5.09	4.75	4.33
	<b>Mobile Home Structures</b>	Add	\$13.52	\$11.98	\$8.67	\$8.26	\$7.42	\$6.01
\$50	Adjacent Structures	Add	0.99	0.92	0.58	0.55	0.50	0.37
	Personal Effects	Add	5.29	4.14	2.94	2.54	2.37	2.17
	Mobile Home Structures	Included						
\$100	Adjacent Structures	Included						
	Personal Effects	Included						
	<b>Mobile Home Structures</b>	Subtract	\$24.33	\$21.55	\$15.57	\$14.84	\$13.35	\$10.8°
\$250	Adjacent Structures	Subtract	1.99	1.82	1.16	1.13	1.01	0.70
	Personal Effects	Subtract	10.57	8.28	5.88	5.09	4.75	4.3
	Mobile Home Structures	Subtract	\$62.18	\$55.06	\$39.80	\$37.91	\$34.11	\$27.6
\$500	Adjacent Structures	Subtract	15.88	14.57	9.28	8.96	8.04	6.0
	Personal Effects	Subtract	15.86	12.42	8.81	7.63	7.12	6.5
	<b>Mobile Home Structures</b>	Subtract	\$95.02	\$84.13	\$60.84	\$57.94	\$52.14	\$42.2
\$750	Adjacent Structures	Subtract	26.80	24.59	15.66	15.11	13.56	10.2
,	Personal Effects	Subtract	20.09	15.74	11.15	9.67	9.02	8.2
	Mobile Home Structures	Subtract	\$121.47	\$107.55	\$77.77	\$74.07	\$66.66	\$53.99
\$1,000	Adjacent Structures	Subtract	33.94	31.14	19.84	19.14	17.16	12.9
4.,000	Personal Effects	Subtract	23.10	18.10	12.82	11.12	10.38	9.4
	<b>Mobile Home Structures</b>	Subtract	\$204.55	\$181.09	\$130.99	\$124.74	\$112.28	\$90.93
\$2,000	Adjacent Structures	Subtract	56.26	51.61	32.88	31.72	28.44	21.4
42/444	Personal Effects	Subtract	33.40	26.18	18.52	16.09	15.00	13.68
	Mobile Home Structures	Subtract	\$408.40	\$361.54	\$261.56	\$249.08	\$224.21	\$181.5
\$5,000	Adjacent Structures	Subtract	110.91	101.72	64.80	62.51	56.03	42.33
<b>#3,000</b>	Personal Effects	Subtract	61.07	47.89	33.84	29.43	27.45	25.0°

#### **NORTH CAROLINA**

#### **Seasonal/Vacation Residence:**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	<b>Mobile Home Structures</b>	Included						
\$250	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$37.86	\$33.53	\$24.22	\$23.06	\$20.75	\$16.81
\$500	Adjacent Structures	Subtract	13.89	12.74	8.13	7.84	7.05	5.29
	Personal Effects	Subtract	5.29	4.14	2.94	2.54	2.37	2.17
	Mobile Home Structures	Subtract	\$70.69	\$62.58	\$45.26	\$43.10	\$38.80	\$31.42
\$750	Adjacent Structures	Subtract	24.81	22.77	14.50	13.98	12.54	9.45
	Personal Effects	Subtract	9.52	7.46	5.27	4.58	4.27	3.90
	Mobile Home Structures	Subtract	\$97.14	\$86.00	\$62.20	\$59.23	\$53.32	\$43.18
\$1,000	Adjacent Structures	Subtract	31.95	29.32	18.68	18.01	16.15	12.18
	Personal Effects	Subtract	12.54	9.83	6.94	6.04	5.63	5.13
	Mobile Home Structures	Subtract	\$180.22	\$159.54	\$115.41	\$109.90	\$98.93	\$80.12
\$2,000	Adjacent Structures	Subtract	54.27	49.79	31.72	30.59	27.42	20.71
	Personal Effects	Subtract	22.83	17.90	12.64	11.00	10.25	9.35
	Mobile Home Structures	Subtract	\$384.07	\$340.00	\$245.99	\$234.24	\$210.86	\$170.77
\$5,000	Adjacent Structures	Subtract	108.92	99.90	63.64	61.39	55.02	41.57
	Personal Effects	Subtract	50.50	39.61	27.96	24.34	22.69	20.68

#### **DEDUCTIBLE - NAMED PERILS COVERAGE**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Included						
None	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$13.52	\$11.98	\$8.67	\$8.26	\$7.42	\$6.01
\$50	Adjacent Structures	Subtract	0.99	0.92	0.58	0.55	0.50	0.37
	Personal Effects	Subtract	4.40	3.46	2.45	2.12	1.98	1.81
	Mobile Home Structures	Subtract	\$25.69	\$22.75	\$16.42	\$15.65	\$14.08	\$11.41
\$100	Adjacent Structures	Subtract	1.99	1.82	1.16	1.13	1.01	0.76
	Personal Effects	Subtract	8.81	6.90	4.90	4.25	3.96	3.62
	<b>Mobile Home Structures</b>	Subtract	\$45.95	\$40.69	\$29.42	\$28.02	\$25.21	\$20.42
\$250	Adjacent Structures	Subtract	2.98	2.74	1.75	1.68	1.51	1.13
	Personal Effects	Subtract	17.62	13.80	9.80	8.48	7.92	7.22
	Mobile Home Structures	Subtract	\$75.74	\$67.08	\$48.52	\$46.22	\$41.57	\$33.6
\$500	Adjacent Structures	Subtract	4.53	4.18	2.67	2.54	2.29	1.7
	Personal Effects	Subtract	30.68	24.04	17.05	14.76	13.79	12.5
	<b>Mobile Home Structures</b>	Subtract	\$100.25	\$88.79	\$64.24	\$61.19	\$55.03	\$44.5
\$750	Adjacent Structures	Subtract	5.96	5.52	3.52	3.34	3.01	2.2
	Personal Effects	Subtract	41.56	32.56	23.09	19.99	18.67	17.0°
	Mobile Home Structures	Subtract	\$118.52	\$104.97	\$75.96	\$72.36	\$65.07	\$52.69
\$1,000	Adjacent Structures	Subtract	7.23	6.72	4.28	4.05	3.65	2.73
	Personal Effects	Subtract	49.82	39.03	27.67	23.96	22.38	20.3
	Mobile Home Structures	Subtract	\$172.45	\$152.75	\$110.55	\$105.35	\$94.70	\$76.6
\$2,000	Adjacent Structures	Subtract	12.10	11.29	7.16	6.76	6.09	4.53
Ì	Personal Effects	Subtract	78.71	61.65	43.68	37.84	35.34	32.18
	<b>Mobile Home Structures</b>	Subtract	\$300.83	\$266.46	\$192.89	\$183.87	\$165.24	\$133.82
\$5,000	Adjacent Structures	Subtract	26.16	24.53	15.50	14.61	13.14	9.70
Ì	Personal Effects	Subtract	157.10	123.03	87.13	75.51	70.50	64.19

**NORTH CAROLINA** 

**RATE PAGES** 

## OPTIONAL NAMED STORM PERCENTAGE DEDUCTIBLE TERRITORY GROUPS 1 AND 2 ONLY

#### **DEDUCTIBLE COMPREHENSIVE COVERAGE**

The surcharges/credits displayed incorporate the surcharges/credits for the All Perils Deductibles. Do not use the surcharges/credits for the All Perils Deductibles when rating a policy with a higher Named Storm Percentage Deductible. For Comprehensive Coverage Primary Residence, the 1%, 2%, or 5% Named Storm Deductible surcharge/credit applies to the \$100 deductible rate. For Comprehensive Coverage Seasonal/Vacation Residence, the 1%, 2%, or 5% Named Storm Deductible credit applies to the \$250 deductible rate.

#### **1% Named Storm Deductible**

			Primary Residence		Seasonal/ Resid	
All Other Perils Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 1	Territory Group 2
	Mobile Home Structures	Add	\$20.88	\$18.50		
None	Adjacent Structures	Add	1.33	1.22		
	Personal Effects	Add	9.42	7.38		
	Mobile Home Structures	Add	\$4.84	\$4.29		
\$50	Adjacent Structures	Add	0.35	0.32		
	Personal Effects	Add	4.19	3.28		
	Mobile Home Structures	Subtract	\$8.54	\$7.57		
\$100	Adjacent Structures	Subtract	0.63	0.58		
	Personal Effects	Subtract	1.05	0.82		
	Mobile Home Structures	Subtract	\$32.64	\$28.91	\$8.54	\$7.57
\$250	Adjacent Structures	Subtract	2.59	2.38	0.63	0.58
	Personal Effects	Subtract	11.51	9.02	1.05	0.82
	Mobile Home Structures	Subtract	\$70.10	\$62.07	\$46.03	\$40.77
\$500	Adjacent Structures	Subtract	16.36	15.01	14.38	13.19
	Personal Effects	Subtract	16.74	13.12	6.29	4.93

			Primary Residence		Seasonal/ Resid	
All Other Perils	0		Territory	Territory	Territory	Territory
<b>Deductible Amount</b>	Coverage		Group 1	Group 2	Group 1	Group 2
	Mobile Home Structures	Add	\$12.04	\$10.66		
None	Adjacent Structures	Add	0.68	0.63		
	Personal Effects	Add	8.27	6.48		
	Mobile Home Structures	Subtract	\$3.84	\$3.39		
\$50	Adjacent Structures	Subtract	0.30	0.28		
	Personal Effects	Add	3.08	2.41		
	Mobile Home Structures	Subtract	\$17.09	\$15.14		
\$100	Adjacent Structures	Subtract	1.27	1.17		
	Personal Effects	Subtract	2.09	1.63		
	Mobile Home Structures	Subtract	\$40.94	\$36.26	\$17.09	\$15.1
\$250	Adjacent Structures	Subtract	3.19	2.95	1.27	1.1
	Personal Effects	Subtract	12.45	9.76	2.09	1.6
	Mobile Home Structures	Subtract	\$78.03	\$69.09	\$54.21	\$48.0
\$500	Adjacent Structures	Subtract	16.65	15.28	14.57	13.3
	Personal Effects	Subtract	17.63	13.82	7.29	5.7

MOBILE HOMEOWNERS POLICY: MH(C) PROGRAM

#### NORTH CAROLINA

#### **RATE PAGES**

	<b>Mobile Home Structures</b>	Subtract	\$111.67	\$98.87	\$88.60	\$78.45
\$750	Adjacent Structures	Subtract	28.61	26.23	26.47	24.30
	Personal Effects	Subtract	21.67	16.99	11.87	9.31
	Mobile Home Structures	Subtract	\$140.94	\$124.78	\$119.29	\$105.63
\$1,000	Adjacent Structures	Subtract	38.54	35.32	36.46	33.47
	Personal Effects	Subtract	24.41	19.15	15.63	12.25
	Mobile Home Structures	Subtract	\$250.32	\$221.59	\$234.81	\$207.91
\$2,000	Adjacent Structures	Subtract	74.32	68.09	72.57	66.62
	Personal Effects	Subtract	33.64	26.42	29.14	22.84

			Primary R	Primary Residence		Vacation ence
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 1	Territory Group 2
	Mobile Home Structures	Subtract	\$14.49	\$12.84	_	
None	Adjacent Structures	Subtract	1.29	1.16		
	Personal Effects	Add	4.82	3.77		
	Mobile Home Structures	Subtract	\$29.89	\$26.45		
\$50	Adjacent Structures	Subtract	2.23	2.06		
	Personal Effects	Subtract	0.23	0.20		
	Mobile Home Structures	Subtract	\$42.72	\$37.84		
\$100	Adjacent Structures	Subtract	3.16	2.92		
	Personal Effects	Subtract	5.23	4.08		
	Mobile Home Structures	Subtract	\$65.85	\$58.33	\$42.72	\$37.8
\$250	Adjacent Structures	Subtract	4.98	4.63	3.16	2.9
	Personal Effects	Subtract	15.28	11.99	5.23	4.0
	Mobile Home Structures	Subtract	\$101.80	\$90.14	\$78.74	\$69.7
\$500	Adjacent Structures	Subtract	18.30	16.78	16.31	15.0
	Personal Effects	Subtract	20.29	15.92	10.29	8.0
	Mobile Home Structures	Subtract	\$133.62	\$118.30	\$111.32	\$98.5
\$750	Adjacent Structures	Subtract	30.04	27.48	27.98	25.7
	Personal Effects	Subtract	24.02	18.86	14.58	11.4
	Mobile Home Structures	Subtract	\$160.47	\$142.06	\$139.59	\$123.5
\$1,000	Adjacent Structures	Subtract	39.69	36.27	37.67	34.6
-	Personal Effects	Subtract	26.37	20.70	17.93	14.0
	Mobile Home Structures	Subtract	\$265.20	\$234.75	\$250.13	\$221.3
\$2,000	Adjacent Structures	Subtract	75.15	68.57	73.39	67.4
	Personal Effects	Subtract	35.04	27.52	30.69	24.10
	Mobile Home Structures	Subtract	\$573.60	\$507.68	\$575.92	\$509.5
\$5,000	Adjacent Structures	Subtract	174.29	158.88	171.52	157.50
•	Personal Effects	Subtract	59.83	47.01	67.61	53.28

#### **DEDUCTIBLE NAMED PERILS COVERAGE**

The surcharges/credits displayed incorporate the surcharges/credits for the All Perils Deductibles. Do not use the surcharges/credits for the All Perils Deductibles when rating a policy with a higher Named Storm Percentage Deductible. For Named Perils Coverage, the 1%, 2%, or 5% Named Storm Deductible credit applies to the \$0 deductible rate.

#### **1% Named Storm Deductible**

			Primary Residence		
All Other Perils Deductible Amount	Coverage		Territory Group 1	Territory Group 2	
	Mobile Home Structures	Subtract	\$15.24	\$13.49	
None	Adjacent Structures	Subtract	1.08	0.99	
	Personal Effects	Subtract	2.10	1.6	
	Mobile Home Structures	Subtract	\$28.51	\$25.2	
\$50	Adjacent Structures	Subtract	2.06	1.90	
	Personal Effects	Subtract	6.42	5.02	
	Mobile Home Structures	Subtract	\$40.41	\$35.7	
\$100	Adjacent Structures	Subtract	3.05	2.79	
	Personal Effects	Subtract	10.74	8.42	
	Mobile Home Structures	Subtract	\$60.28	\$53.3	
\$250	Adjacent Structures	Subtract	4.00	3.67	
	Personal Effects	Subtract	19.35	15.1	
	Mobile Home Structures	Subtract	\$93.40	\$82.7°	
\$500	Adjacent Structures	Subtract	5.59	5.14	
	Personal Effects	Subtract	33.71	26.42	

			Primary R	esidence
All Other Perils Deductible Amount	Coverage		Territory Group 1	Territory Group 2
	Mobile Home Structures	Subtract	\$30.48	\$26.9
None	Adjacent Structures	Subtract	2.16	1.9
	Personal Effects	Subtract	4.21	3.3
	<b>Mobile Home Structures</b>	Subtract	\$43.49	\$38.5
\$50	Adjacent Structures	Subtract	3.13	2.8
	Personal Effects	Subtract	8.43	6.5
	Mobile Home Structures	Subtract	\$55.13	\$48.8
\$100	Adjacent Structures	Subtract	4.11	3.7
	Personal Effects	Subtract	12.67	9.9
	Mobile Home Structures	Subtract	\$74.61	\$66.0
\$250	Adjacent Structures	Subtract	5.03	4.6
	Personal Effects	Subtract	20.74	16.2
	Mobile Home Structures	Subtract	\$103.87	\$91.9
\$500	Adjacent Structures	Subtract	6.23	5.7
	Personal Effects	Subtract	32.49	25.4
	Mobile Home Structures	Subtract	\$129.13	\$114.3
\$750	Adjacent Structures	Subtract	7.07	6.5
	Personal Effects	Subtract	42.02	32.9
	Mobile Home Structures	Subtract	\$149.76	\$132.5
\$1,000	Adjacent Structures	Subtract	7.52	6.9
	Personal Effects	Subtract	48.98	38.3

#### **NORTH CAROLINA**

	<b>Mobile Home Structures</b>	Subtract	\$225.32	\$199.42	
\$2,000	Adjacent Structures	Subtract	8.86	8.11	
	Personal Effects	Subtract	72.97	57.18	

			Primary Residence		
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2	
	Mobile Home Structures	Subtract	<b>\$76.19</b>	\$67.4	
None	Adjacent Structures	Subtract	5.41	4.9	
	Personal Effects	Subtract	10.52	8.2	
	Mobile Home Structures	Subtract	\$88.45	\$78.3	
\$50	Adjacent Structures	Subtract	6.34	5.82	
	Personal Effects	Subtract	14.47	11.3	
	Mobile Home Structures	Subtract	\$99.29	\$87.9	
\$100	Adjacent Structures	Subtract	7.28	6.6	
	Personal Effects	Subtract	18.47	14.4	
	Mobile Home Structures	Subtract	\$117.60	\$104.1	
\$250	Adjacent Structures	Subtract	8.10	7.4	
	Personal Effects	Subtract	26.30	20.6	
	Mobile Home Structures	Subtract	\$143.67	\$127.2	
\$500	Adjacent Structures	Subtract	8.98	8.2	
	Personal Effects	Subtract	37.39	29.3	
	Mobile Home Structures	Subtract	\$164.65	\$145.7	
\$750	Adjacent Structures	Subtract	9.37	8.6	
	Personal Effects	Subtract	46.05	36.1	
	Mobile Home Structures	Subtract	\$180.06	\$159.3	
\$1,000	Adjacent Structures	Subtract	9.48	8.7	
	Personal Effects	Subtract	52.52	41.2	
	Mobile Home Structures	Subtract	\$241.70	\$213.9	
\$2,000	Adjacent Structures	Subtract	9.89	9.0	
•	Personal Effects	Subtract	76.06	59.8	
	Mobile Home Structures	Subtract	\$426.62	\$377.5	
\$5,000	Adjacent Structures	Subtract	11.13	9.8	
	Personal Effects	Subtract	143.75	113.1	

#### **NORTH CAROLINA**

#### TERRITORY GROUP SURCHARGE/DISCOUNT

Mobile Home Structures				
Territory Group 1	72.0%			
Territory Group 2	52.6%			
Territory Group 3	0.0%			
Territory Group 4	-3.6%			
Territory Group 5	-13.3%			
Territory Group 6	-29.9%			

Adjacent Structures					
Territory Group 1	87.2%				
Territory Group 2	72.2%				
Territory Group 3	0.0%				
Territory Group 4	-3.4%				
Territory Group 5	-13.2%				
Territory Group 6	-34.8%				

Comprehensive Personal Effects		
Territory Group 1	97.0%	
Territory Group 2	54.7%	
Territory Group 3	0.0%	
Territory Group 4	-13.0%	
Territory Group 5	-18.8%	
Territory Group 6	-26.1%	

#### TRIP COVERAGE

30 Day Trip; \$100 Deductible = \$25

#### NATURAL DISASTER PROTECTION COVERAGE

A \$3.00 premium charge per mobile home shall apply

#### FIRE DEPARTMENT SERVICE CHARGE

Additional Amounts of Insurance:

\$2.00 per \$100 of Insurance
Maximum additional Amount of Insurance = \$400

#### RADIO AND TELEVISION ANTENNA COVERAGE

Additional Amounts of Insurance:

\$5.00 per \$100 of Insurance Maximum additional Amount of Insurance = \$2,500

#### **MEDICAL PAYMENTS TO OTHERS**

Additional Limit	Premium
\$1,000	\$3.00

#### **LIABILITY**

\$500 Medical Payments to Others Coverage and \$250 Damage to Property of Others automatically included.

Personal Liability Coverages		
Limits	Premium	
\$25,000	\$22.12	
50,000	25.22	
100,000	29.20	
200,000	34.06	
250,000	36.06	
300,000	37.83	

#### INFLATION COVERAGE

\$5.00 per mobile home

#### **DETERMINATION OF TERM PREMIUMS**

Multiply the 1 year unrounded premium for the specific coverage by the term factor then total and round total of all coverages.

#### **TERM FACTORS**

#### Apply to all Coverages:

Term	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year
Factor	1.00	2.00	3.00	3.85	4.65	5.35	6.00

#### PERSONAL EFFECTS REPLACEMENT COST ENDORSEMENT

\$0.30 per \$100 of Insurance
The Minimum Additional Premium is \$15.00

#### REPLACEMENT COST COVERAGE

When coverage is provided on a replacement cost basis, charge 5% of the premium from the premium rate table.

#### MOBILE HOME ADDITIONAL LIVING EXPENSE COVERAGE

\$25 per day = \$6 per mobile home \$50 per day = \$16 per mobile home

#### WINDSTORM OR HAIL EXCLUSION

(Territories 110, 120, 130, 140, 150, 160)

	Territory	Territory
	Group 1	Group 2
Mobile Home Structures	59.6%	59.6%
Adjacent Structures	37.9%	37.9%
Comprehensive Personal Effects	38.9%	38.9%

#### STATED VALUE LOSS SETTLEMENT

When coverage is provided on a stated value basis, charge 3% of the premium from the premium rate table.

# North Carolina Mobile Homeowners MH(C) Program

**Proposed Rate Pages - Year 1** 

COMPREHENSIVE MOBILE HOME STRUCTURES TERRITORY GROUP 3; \$100 DEDUCTIBLE			
- I - I - I - I - I - I - I - I - I - I	Premiums		
Amount of Insurance	Primary Residence	Rental	
1 - 3,999	\$382.40	\$655.08	
4,000 - 4,999	408.00	698.91	
5,000 - 5,999	429.08	735.02	
6,000 - 6,999	451.42	773.28	
7,000 - 7,999	474.05	812.06	
8,000 - 8,999	496.77	850.99	
9,000 - 9,999	520.73	892.00	
10,000 - 10,999	543.41	930.87	
11,000 - 11,999	562.58	963.72	
12,000 - 12,999	581.76	996.56	
13,000 - 13,999	600.33	1,028.38	
14,000 - 14,999	618.90	1,060.18	
15,000 - 15,999	639.94	1,096.23	
16,000 - 16,999	662.65	1,135.14	
17,000 - 17,999	684.85	1,173.18	
18,000 - 18,999	706.93	1,210.98	
19,000 - 19,999	731.11	1,252.41	
20,000 - 20,999	753.85	1,291.36	
21,000 - 21,999	772.02	1,322.48	
22,000 - 22,999	790.19	1,353.61	
23,000 - 23,999	809.39	1,386.51	
24,000 - 24,999	828.87	1,419.86	
25,000 - 25,999	849.84	1,455.78	
26,000 - 26,999	871.95	1,493.67	
27,000 - 27,999	893.73	1,530.98	
28,000 - 28,999	915.36	1,568.02	
29,000 - 29,999	939.65	1,609.62	
30,000 - 30,999	964.81	1,652.74	
31,000 - 31,999	983.70	1,685.09	
32,000 - 32,999	1,002.07	1,716.55	
33,000 - 33,999	1,020.42	1,748.00	
34,000 - 34,999	1,041.20	1,783.61	
35,000 - 35,999	1,062.29	1,819.72	
36,000 - 36,999	1,083.36	1,855.81	
37,000 - 37,999	1,104.44	1,891.92	
38,000 - 38,999	1,125.51	1,928.02	
39,000 - 39,999	1,146.58	1,964.13	
40,000 - 40,999	1,167.67	2,000.24	
41,000 - 41,999	1,188.74	2,036.33	

COMPREHENSIVE MOBILE HOME STRUCTURES			
TERRITORY GROUP	TERRITORY GROUP 3; \$100 DEDUCTIBLE		
	Premiums		
	Primary	D	
Amount of Insurance	Residence	Rental	
42,000 - 42,999	\$1,209.82	\$2,072.44	
43,000 - 43,999	1,230.89	2,108.55	
44,000 - 44,999	1,251.98	2,144.66	
45,000 - 45,999	1,273.05	2,180.76	
46,000 - 46,999	1,294.13	2,216.86	
47,000 - 47,999	1,315.20	2,252.96	
48,000 - 48,999	1,336.28	2,289.07	
49,000 - 49,999	1,357.35	2,325.18	
50,000 - 50,999	1,378.44	2,361.29	
51,000 - 51,999	1,399.51	2,397.38	
52,000 - 52,999	1,420.59	2,433.49	
53,000 - 53,999	1,441.66	2,469.59	
54,000 - 54,999	1,462.73	2,505.70	
55,000 - 55,999	1,483.82	2,541.80	
56,000 - 56,999	1,504.89	2,577.90	
57,000 - 57,999	1,525.97	2,614.01	
58,000 - 58,999	1,547.04	2,650.12	
59,000 - 59,999	1,568.13	2,686.23	
60,000 - 60,999	1,589.20	2,722.32	
61,000 - 61,999	1,610.28	2,758.43	
62,000 - 62,999	1,631.35	2,794.53	
63,000 - 63,999	1,652.43	2,830.64	
64,000 - 64,999	1,673.50	2,866.75	
65,000 - 65,999	1,694.59	2,902.84	
66,000 - 66,999	1,715.66	2,938.95	
67,000 - 67,999	1,736.74	2,975.06	
68,000 - 68,999	1,757.81	3,011.17	
69,000 - 69,999	1,778.88	3,047.27	
70,000 - 70,999	1,799.97	3,083.37	
71,000 - 71,999	1,821.04	3,119.47	
72,000 - 72,999	1,842.12	3,155.58	
73,000 - 73,999	1,863.19	3,191.69	
74,000 - 74,999	1,884.28	3,227.80	
75,000 - 75,999	1,905.35	3,263.89	
76,000 - 76,999	1,926.43	3,300.00	
77,000 - 77,999	1,947.50	3,336.11	
78,000 - 78,999	1,968.58	3,372.21	
79,000 - 79,999	1,989.65	3,408.32	
Each Add'I \$1,000	\$21.07	\$36.11	

Territory Group 1	Surcharge	68.1%
Territory Group 2	Surcharge	32.7%
Territory Group 4	Discount	-11.1%
Territory Group 5	Discount	-24.4%
Territory Group 6	Discount	-40.7%

	NAMED PERILS MOBILE HOME STRUCTURES		
TERRITORY GROUP 3; \$0 DEDUCTIBLE			
	Premiums		
Amount of Insurance	Primary Residence	Rental	
1 - 3.999	\$340.84	\$613.51	
4,000 - 4,999	363.65	654.58	
5,000 - 5,999	382.43	688.39	
· · · · · · · · · · · · · · · · · · ·	402.35	724.24	
6,000 - 6,999	422.52	760.54	
7,000 - 7,999 8,000 - 8,999	442.77	797.00	
<u> </u>	464.13		
9,000 - 9,999	484.35	835.42 871.83	
10,000 - 10,999			
11,000 - 11,999	501.43	902.58	
12,000 - 12,999	518.52	933.34	
13,000 - 13,999	535.08	963.14	
14,000 - 14,999	551.63	992.93	
15,000 - 15,999	570.38	1,026.68	
16,000 - 16,999	590.62	1,063.12	
17,000 - 17,999	610.41	1,098.75	
18,000 - 18,999	630.09	1,134.16	
19,000 - 19,999	651.63	1,172.95	
20,000 - 20,999	671.91	1,209.43	
21,000 - 21,999	688.10	1,238.59	
22,000 - 22,999	704.30	1,267.73	
23,000 - 23,999	721.42	1,298.55	
24,000 - 24,999	738.77	1,329.79	
25,000 - 25,999	757.46	1,363.41	
26,000 - 26,999	777.18	1,398.92	
27,000 - 27,999	796.58	1,433.85	
28,000 - 28,999	815.85	1,468.55	
29,000 - 29,999	837.50	1,507.50	
30,000 - 30,999	859.93	1,547.89	
31,000 - 31,999	876.77	1,578.18	
32,000 - 32,999	893.14	1,607.65	
33,000 - 33,999	909.50	1,637.11	
34,000 - 34,999	928.03	1,670.44	
35,000 - 35,999	946.81	1,704.27	
36,000 - 36,999	965.60	1,738.08	
37,000 - 37,999	984.39	1,771.89	
38,000 - 38,999	1,003.17	1,805.71	
39,000 - 39,999	1,021.96	1,839.52	
40,000 - 40,999	1,040.74	1,873.33	
41,000 - 41,999	1,059.53	1,907.15	

NAMED PERILS MOB	NAMED PERILS MOBILE HOME STRUCTURES		
TERRITORY GROU	IP 3; \$0 DEDUCTIBLE		
	Premiums		
	Primary		
Amount of Insurance	Residence	Rental	
42,000 - 42,999	\$1,078.32	\$1,940.96	
43,000 - 43,999	1,097.10	1,974.77	
44,000 - 44,999	1,115.89	2,008.60	
45,000 - 45,999	1,134.68	2,042.41	
46,000 - 46,999	1,153.46	2,076.22	
47,000 - 47,999	1,172.25	2,110.04	
48,000 - 48,999	1,191.02	2,143.85	
49,000 - 49,999	1,209.81	2,177.66	
50,000 - 50,999	1,228.59	2,211.47	
51,000 - 51,999 52,000 - 52,999	1,247.38 1,266.17	2,245.29 2,279.10	
52,000 - 52,999 53,000 - 53,999	1,284.95	2,279.10	
, ,	1,303.74	2,312.71	
54,000 - 54,999 55,000 - 55,999	1,322.52	2,340.74	
56,000 - 56,999	1,341.31	2,414.36	
57,000 - 57,999	1,360.10	2,448.18	
58,000 - 58,999	1,378.88	2,481.99	
59,000 - 59,999	1,397.67	2,515.80	
60,000 - 60,999	1,416.46	2,549.62	
61,000 - 61,999	1,435.24	2,583.43	
62,000 - 62,999	1,454.03	2,617.24	
63,000 - 63,999	1,472.81	2,651.07	
64,000 - 64,999	1,491.60	2,684.88	
65,000 - 65,999	1,510.39	2,718.69	
66,000 - 66,999	1,529.17	2,752.51	
67,000 - 67,999	1,547.96	2,786.32	
68,000 - 68,999	1,566.75	2,820.13	
69,000 - 69,999	1,585.53	2,853.95	
70,000 - 70,999	1,604.30	2,887.76	
71,000 - 71,999	1,623.09	2,921.57	
72,000 - 72,999	1,641.88	2,955.38	
73,000 - 73,999	1,660.66	2,989.21	
74,000 - 74,999	1,679.45	3,023.02	
75,000 - 75,999	1,698.24	3,056.82	
76,000 - 76,999	1,717.02	3,090.65	
77,000 - 77,999	1,735.81	3,124.46	
78,000 - 78,999	1,754.60	3,158.27	
79,000 - 79,999	1,773.38	3,192.09	
Each Add'I \$1,000	\$18.79	\$33.82	

<b>Territory Group 1</b>	Surcharge	68.1%
Territory Group 2	Surcharge	32.7%
Territory Group 4	Discount	-11.1%
Territory Group 5	Discount	-24.4%
Territory Group 6	Discount	-40.7%

	SEASONAL/VACATION MOBILE HOME STRUCTURES TERRITORY GROUP 3; \$250 DEDUCTIBLE		
IERRITORI GRO	Premiums		
Amount of Insurance	Named Comprehensive Perils		
1 - 3,999	\$382.40	\$340.84	
4,000 - 4,999	408.00	363.65	
5,000 - 5,999	429.08	382.43	
6,000 - 6,999	451.42	402.35	
7,000 - 7,999	474.05	422.52	
8,000 - 8,999	496.77	442.77	
9.000 - 9.999	520.73	464.13	
10,000 - 10,999	543.41	484.35	
11,000 - 11,999	562.58	501.43	
12,000 - 12,999	581.76	518.52	
13,000 - 13,999	600.33	535.08	
14,000 - 14,999	618.90	551.63	
15.000 - 15.999	639.94	570.38	
16,000 - 16,999	662.65	590.62	
	684.85	610.41	
17,000 - 17,999	706.93	630.09	
18,000 - 18,999			
19,000 - 19,999	731.11 753.85	651.63 671.91	
20,000 - 20,999	772.02	688.10	
21,000 - 21,999	790.19	704.30	
22,000 - 22,999			
23,000 - 23,999	809.39	721.42	
24,000 - 24,999	828.87	738.77	
25,000 - 25,999	849.84	757.46	
26,000 - 26,999	871.95	777.18	
27,000 - 27,999	893.73	796.58	
28,000 - 28,999	915.36	815.85	
29,000 - 29,999	939.65	837.50	
30,000 - 30,999	964.81	859.93	
31,000 - 31,999	983.70	876.77	
32,000 - 32,999	1,002.07	893.14	
33,000 - 33,999	1,020.42	909.50	
34,000 - 34,999	1,041.20	928.03	
35,000 - 35,999	1,062.29	946.81	
36,000 - 36,999	1,083.36	965.60	
37,000 - 37,999	1,104.44	984.39	
38,000 - 38,999	1,125.51	1,003.17	
39,000 - 39,999	1,146.58	1,021.96	
40,000 - 40,999	1,167.67	1,040.74	
41,000 - 41,999	1,188.74	1,059.53	

SEASONAL/VACATION	MOBILE HOME STRU	CTURES
TERRITORY GROU	IP 3; \$250 DEDUCTIB	LE
	Premiu	ms
		Named
Amount of Insurance	Comprehensive	Perils
42,000 - 42,999	\$1,209.82	\$1,078.32
43,000 - 43,999	1,230.89	1,097.10
44,000 - 44,999	1,251.98	1,115.89
45,000 - 45,999	1,273.05	1,134.68
46,000 - 46,999	1,294.13	1,153.46
47,000 - 47,999	1,315.20	1,172.25
48,000 - 48,999	1,336.28	1,191.02
49,000 - 49,999	1,357.35	1,209.81
50,000 - 50,999	1,378.44	1,228.59
51,000 - 51,999	1,399.51	1,247.38
52,000 - 52,999	1,420.59	1,266.17
53,000 - 53,999	1,441.66	1,284.95
54,000 - 54,999	1,462.73	1,303.74
55,000 - 55,999	1,483.82	1,322.52
56,000 - 56,999	1,504.89	1,341.31
57,000 - 57,999	1,525.97	1,360.10
58,000 - 58,999	1,547.04	1,378.88
59,000 - 59,999	1,568.13	1,397.67
60,000 - 60,999	1,589.20	1,416.46
61,000 - 61,999	1,610.28	1,435.24
62,000 - 62,999	1,631.35	1,454.03
63,000 - 63,999	1,652.43	1,472.81
64,000 - 64,999	1,673.50	1,491.60
65,000 - 65,999	1,694.59	1,510.39
66,000 - 66,999	1,715.66	1,529.17
67,000 - 67,999	1,736.74	1,547.96
68,000 - 68,999	1,757.81	1,566.75
69,000 - 69,999	1,778.88	1,585.53
70,000 - 70,999	1,799.97	1,604.30
71,000 - 71,999	1,821.04	1,623.09
72,000 - 72,999	1,842.12	1,641.88
73,000 - 73,999	1,863.19	1,660.66
74,000 - 74,999	1,884.28	1,679.45
75,000 - 75,999	1,905.35	1,698.24
76,000 - 76,999	1,926.43	1,717.02
77,000 - 77,999	1,947.50	1,735.81
78,000 - 78,999	1,968.58	1,754.60
79,000 - 79,999	1,989.65	1,773.38
Each Add'l \$1,000	\$21.07	\$18.79

Territory Group 1	Surcharge	68.1%
Territory Group 2	Surcharge	32.7%
Territory Group 4	Discount	-11.1%
Territory Group 5	Discount	-24.4%
Territory Group 6	Discount	-40.7%

#### **NORTH CAROLINA**

	ENT STRUCTURES	
TERR	RITORY GROUP 3 Premi	ums
		uiii3
Amount of Insurance	Comprehensive	Named Perils
100 - 199	N/A	\$3.33
200 - 299	N/A	5.27
300 - 399	\$8.34	7.20
400 - 499	10.59	9.14
500 - 599	12.83	11.07
600 - 699	15.07	13.01
700 - 799	17.32	14.94
800 - 899	19.56	16.87
900 - 999	21.81	18.81
1,000 - 1,099	24.05	20.74
1,100 - 1,199	26.29	22.68
1,200 - 1,299	28.54	24.61
1,300 - 1,399	30.78	26.55
1,400 - 1,499	33.02	28.48
1,500 - 1,599	35.27	30.42
1,600 - 1,699	37.51	32.35
1,700 - 1,799	39.76	34.29
1,800 - 1,899	42.00	36.22
1,900 - 1,999	44.24	38.16
2,000 - 2,099	46.49	40.09
2,100 - 2,199	48.73	42.03
2,200 - 2,299	50.97	43.96
2,300 - 2,399	53.22	45.90
2,400 - 2,499	55.46	47.83
2,500 - 2,599	57.70	49.76
2,600 - 2,699	59.95	51.70
2,700 - 2,799	62.19	53.63
2,800 - 2,899	64.44	55.57
2,900 - 2,999	66.68	57.50
3,000 - 3,099	68.92	59.44
3,100 - 3,199	71.17	61.37
3,200 - 3,299	73.41	63.31
3,200 - 3,277 3,300 - 3,399	75.41	65.24
3,400 - 3,499	77.90	67.18
3,400 - 3,477 3,500 - 3,599	80.14	69.11

TERRIT	TORY GROUP 3			
	Premiun	Premiums		
Amount of Insurance	Comprehensive	Named Perils		
3,600 - 3,699	\$82.39	\$71.05		
3,700 - 3,799	84.63	72.98		
3,800 - 3,899	86.87	74.92		
3,900 - 3,999	89.12	76.85		
4,000 - 4,099	91.36	78.79		
4,100 - 4,199	93.60	80.72		
4,200 - 4,299	95.85	82.65		
4,300 - 4,399	98.09	84.59		
4,400 - 4,499	100.34	86.52		
4,500 - 4,599	102.58	88.46		
4,600 - 4,699	104.82	90.39		
4,700 - 4,799	107.07	92.33		
4,800 - 4,899	109.31	94.26		
4,900 - 4,999	111.55	96.20		
5,000 - 5,099	113.80	98.13		
5,100 - 5,199	116.04	100.07		
5,200 - 5,299	118.29	102.00		
5,300 - 5,399	120.53	103.94		
5,400 - 5,499	122.77	105.87		
5,500 - 5,599	125.02	107.81		
5,600 - 5,699	127.26	109.74		
5,700 - 5,799	129.50	111.67		
5,800 - 5,899	131.75	113.61		
5,900 - 5,999	133.99	115.54		
6,000 - 6,099	136.23	117.48		
6,100 - 6,199	138.48	119.41		
6,200 - 6,299	140.72	121.35		
6,300 - 6,399	142.97	123.28		
6,400 - 6,499	145.21	125.22		
6,500 - 6,599	147.45	127.15		
6,600 - 6,699	149.70	129.09		
6,700 - 6,799	151.94	131.02		
6,800 - 6,899	154.18	132.96		
6,900 - 6,999	156.43	134.89		
Each Add'I \$100	\$2.24	\$1.93		

**ADJACENT STRUCTURES** 

	Base De	Base Deductible	
	Comprehensive	Named Perils	
Primary Residence	\$100 Deductible	No Deductible	
Seasonal/Vacation	\$250 Deductible	\$250 Deductible	
Tenants	\$100 Deductible	No Deductible	

Territory Group 1	Surcharge	87.1%
Territory Group 2	Surcharge	43.5%
Territory Group 4	Discount	-18.2%
Territory Group 5	Discount	-29.7%
Territory Group 6	Discount	-46.6%

Note: Rates shown applicable to all occupancy types

#### **NORTH CAROLINA**

TERRITORY GRO	OUP 3
Amount of Insurance	Premium
500 - 599	
600 - 699	
700 - 799	
800 - 899	
900 - 999	
1,000 - 1,099	
1,100 - 1,199	
1,200 - 1,299	
1,300 - 1,399	
1,400 - 1,499	
1,500 - 1,599	
1,600 - 1,699	
1,700 - 1,799	
1,800 - 1,899	
1,900 - 1,999	
2,000 - 2,099	
2,100 - 2,199	
2,200 - 2,299	
2,300 - 2,399	
2,400 - 2,499	
2,500 - 2,599	
2,600 - 2,699	
2,700 - 2,799	
2,800 - 2,899	
2,900 - 2,999	
3,000 - 3,099	
3,100 - 3,199	
3,200 - 3,299	
3,300 - 3,399	
3,400 - 3,499	
3,500 - 3,599	
3,600 - 3,699	

	Base Deductible
Primary Residence	\$100 Deductible
Seasonal/Vacation	\$250 Deductible
Tenants	\$100 Deductible

Note: Rates shown applicable to all occupancy types

COMPREHENSIVE PERSO	COMPREHENSIVE PERSONAL EFFECTS				
TERRITORY GROUP 3					
Amount of Insurance	Premium				
3,800 - 3,899	\$51.80				
3,900 - 3,999	52.69				
4,000 - 4,099	53.58				
4,100 - 4,199	54.47				
4,200 - 4,299	55.36				
4,300 - 4,399	56.25				
4,400 - 4,499	57.13				
4,500 - 4,599	58.02				
4,600 - 4,699	58.91				
4,700 - 4,799	59.80				
4,800 - 4,899	60.69				
4,900 - 4,999	61.58				
5,000 - 5,099	62.46				
5,100 - 5,199	63.35				
5,200 - 5,299	64.24				
5,300 - 5,399	65.13				
5,400 - 5,499	66.02				
5,500 - 5,599	66.91				
5,600 - 5,699	67.79				
5,700 - 5,799	68.68				
5,800 - 5,899	69.57				
5,900 - 5,999	70.46				
6,000 - 6,099	71.35				
6,100 - 6,199	72.24				
6,200 - 6,299	73.12				
6,300 - 6,399	74.01				
6,400 - 6,499	74.90				
6,500 - 6,599	75.79				
6,600 - 6,699	76.68				
• •	77.56				
6,700 - 6,799	78.45				
6,800 - 6,899	79.34				
6,900 - 6,999					
Each Add'l \$100	\$0.89				

Territory Group 1	Surcharge	135.4%
Territory Group 2	Surcharge	61.3%
Territory Group 4	Discount	-21.3%
Territory Group 5	Discount	-30.3%
Territory Group 6	Discount	-37.8%

**NORTH CAROLINA** 

#### **DEDUCTIBLE - COMPREHENSIVE COVERAGE**

#### **Primary Residence:**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Add	\$41.72	\$32.90	\$27.32	\$24.00	\$20.43	\$16.04
None	Adjacent Structures	Add	2.67	2.04	1.56	1.28	1.10	0.84
•	Personal Effects	Add	14.22	9.72	6.61	5.18	4.59	4.10
	Mobile Home Structures	Add	\$18.97	\$14.97	\$12.45	\$10.94	\$9.29	\$7.30
\$50	Adjacent Structures	Add	1.33	1.03	0.78	0.63	0.54	0.41
•	Personal Effects	Add	7.11	4.86	3.31	2.59	2.29	2.05
	Mobile Home Structures	Included						
\$100	Adjacent Structures	Included						
	Personal Effects	Included						
	<b>Mobile Home Structures</b>	Subtract	\$34.14	\$26.92	\$22.36	\$19.65	\$16.72	\$13.13
\$250	Adjacent Structures	Subtract	2.67	2.04	1.56	1.28	1.10	0.84
	Personal Effects	Subtract	14.22	9.72	6.61	5.18	4.59	4.10
	Mobile Home Structures	Subtract	\$87.26	\$68.79	\$57.16	\$50.21	\$42.73	\$33.55
\$500	Adjacent Structures	Subtract	21.32	16.30	12.47	10.19	8.75	6.65
	Personal Effects	Subtract	21.33	14.58	9.91	7.77	6.88	6.16
	<b>Mobile Home Structures</b>	Subtract	\$133.35	\$105.11	\$87.38	\$76.73	\$65.31	\$51.28
\$750	Adjacent Structures	Subtract	35.98	27.51	21.04	17.18	14.76	11.22
•	Personal Effects	Subtract	27.02	18.48	12.54	9.84	8.72	7.79
	<b>Mobile Home Structures</b>	Subtract	\$170.46	\$134.37	\$111.70	\$98.10	\$83.50	\$65.57
\$1,000	Adjacent Structures	Subtract	45.56	34.84	26.66	21.76	18.68	14.22
, -,	Personal Effects	Subtract	31.07	21.25	14.42	11.32	10.03	8.96
	Mobile Home Structures	Subtract	\$287.05	\$226.25	\$188.14	\$165.20	\$140.64	\$110.43
\$2,000	Adjacent Structures	Subtract	75.52	57.74	44.18	36.06	30.95	23.58
	Personal Effects	Subtract	44.92	30.74	20.82	16.38	14.50	12.95
	Mobile Home Structures	Subtract	\$573.12	\$451.70	\$375.67	\$329.88	\$280.85	\$220.51
\$5,000	Adjacent Structures	Subtract	148.88	113.81	87.06	71.06	60.98	46.52
,-,	Personal Effects	Subtract	82.14	56.22	38.05	29.96	26.53	23.68

NORTH CAROLINA

#### **Seasonal/Vacation Residence:**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Included						
\$250	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$53.13	\$41.89	\$34.79	\$30.54	\$25.99	\$20.4
\$500	Adjacent Structures	Subtract	18.65	14.25	10.92	8.91	7.67	5.8
	Personal Effects	Subtract	7.11	4.86	3.31	2.59	2.29	2.0
	Mobile Home Structures	Subtract	\$99.20	\$78.19	\$65.01	\$57.08	\$48.60	\$38.1
\$750	Adjacent Structures	Subtract	33.30	25.48	19.48	15.89	13.65	10.3
	Personal Effects	Subtract	12.80	8.76	5.93	4.66	4.13	3.6
	Mobile Home Structures	Subtract	\$136.32	\$107.45	\$89.34	\$78.44	\$66.79	\$52.4
\$1,000	Adjacent Structures	Subtract	42.89	32.81	25.10	20.47	17.58	13.3
	Personal Effects	Subtract	16.87	11.54	7.80	6.15	5.44	4.8
	<b>Mobile Home Structures</b>	Subtract	\$252.91	\$199.32	\$165.76	\$145.55	\$123.92	\$97.3
\$2,000	Adjacent Structures	Subtract	72.85	55.71	42.62	34.77	29.84	22.7
	Personal Effects	Subtract	30.71	21.01	14.21	11.20	9.91	8.8
	Mobile Home Structures	Subtract	\$538.98	\$424.78	\$353.31	\$310.22	\$264.13	\$207.3
\$5,000	Adjacent Structures	Subtract	146.21	111.77	85.50	69.79	59.88	45.69
	Personal Effects	Subtract	67.92	46.50	31.44	24.78	21.93	19.58

#### NORTH CAROLINA

## MOBILE HOMEOWNERS POLICY: MH(C) PROGRAM RATE PAGES

#### **DEDUCTIBLE - NAMED PERILS COVERAGE**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Included						
None	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$18.97	\$14.97	\$12.45	\$10.94	\$9.29	\$7.30
\$50	Adjacent Structures	Subtract	1.33	1.02	0.77	0.63	0.54	0.41
	Personal Effects	Subtract	5.92	4.06	2.75	2.16	1.91	1.71
	Mobile Home Structures	Subtract	\$36.05	\$28.42	\$23.58	\$20.73	\$17.64	\$13.86
\$100	Adjacent Structures	Subtract	2.67	2.04	1.56	1.28	1.10	0.83
	Personal Effects	Subtract	11.85	8.10	5.51	4.33	3.83	3.43
	Mobile Home Structures	Subtract	\$64.48	\$50.84	\$42.25	\$37.11	\$31.58	\$24.80
\$250	Adjacent Structures	Subtract	4.00	3.06	2.35	1.91	1.64	1.24
	Personal Effects	Subtract	23.70	16.20	11.02	8.63	7.65	6.84
	Mobile Home Structures	Subtract	\$106.29	\$83.81	\$69.69	\$61.21	\$52.07	\$40.88
\$500	Adjacent Structures	Subtract	6.08	4.68	3.58	2.89	2.50	1.89
	Personal Effects	Subtract	41.26	28.22	19.17	15.03	13.33	11.89
	Mobile Home Structures	Subtract	\$140.68	\$110.93	\$92.27	\$81.04	\$68.93	\$54.11
\$750	Adjacent Structures	Subtract	8.00	6.17	4.73	3.79	3.28	2.48
	Personal Effects	Subtract	55.90	38.23	25.96	20.35	18.04	16.11
	Mobile Home Structures	Subtract	\$166.32	\$131.15	\$109.10	\$95.83	\$81.51	\$63.99
\$1,000	Adjacent Structures	Subtract	9.71	7.52	5.75	4.60	3.97	3.00
	Personal Effects	Subtract	67.01	45.82	31.11	24.39	21.63	19.30
	Mobile Home Structures	Subtract	\$242.01	\$190.84	\$158.78	\$139.52	\$118.62	\$93.13
\$2,000	Adjacent Structures	Subtract	16.24	12.64	9.63	7.69	6.63	4.98
ļ	Personal Effects	Subtract	105.86	72.38	49.12	38.52	34.15	30.47
	Mobile Home Structures	Subtract	\$422.17	\$332.91	\$277.04	\$243.51	\$206.98	\$162.51
\$5,000	Adjacent Structures	Subtract	35.12	27.45	20.83	16.60	14.30	10.72
-	Personal Effects	Subtract	211.29	144.44	97.97	76.87	68.13	60.78

## OPTIONAL NAMED STORM PERCENTAGE DEDUCTIBLE TERRITORY GROUPS 1 AND 2 ONLY

#### **DEDUCTIBLE COMPREHENSIVE COVERAGE**

The surcharges/credits displayed incorporate the surcharges/credits for the All Perils Deductibles. Do not use the surcharges/credits for the All Perils Deductibles when rating a policy with a higher Named Storm Percentage Deductible. For Comprehensive Coverage Primary Residence, the 1%, 2%, or 5% Named Storm Deductible surcharge/credit applies to the \$100 deductible rate. For Comprehensive Coverage Seasonal/Vacation Residence, the 1%, 2%, or 5% Named Storm Deductible credit applies to the \$250 deductible rate.

#### **1% Named Storm Deductible**

			Primary Residence		Seasonal/Vacation Residence	
All Other Perils Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 1	Territory Group 2
	Mobile Home Structures	Add	\$29.30	\$23.11		
None	Adjacent Structures	Add	1.79	1.37		
	Personal Effects	Add	12.67	8.66		
	Mobile Home Structures	Add	\$6.79	\$5.36		
\$50	Adjacent Structures	Add	0.47	0.36		
	Personal Effects	Add	5.64	3.85		
	Mobile Home Structures	Subtract	\$11.98	\$9.46		
\$100	Adjacent Structures	Subtract	0.85	0.65		
	Personal Effects	Subtract	1.41	0.96		
	Mobile Home Structures	Subtract	\$45.81	\$36.12	\$11.98	\$9.4
\$250	Adjacent Structures	Subtract	3.48	2.66	0.85	0.6
	Personal Effects	Subtract	15.48	10.59	1.41	0.90
	Mobile Home Structures	Subtract	\$98.37	\$77.55	\$64.60	\$50.94
\$500	Adjacent Structures	Subtract	21.96	16.79	19.30	14.70
	Personal Effects	Subtract	22.51	15.40	8.46	5.79

#### **2% Named Storm Deductible**

			Primary Residence		Seasonal/Vacation Residence	
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 1	Territory Group 2
	Mobile Home Structures	Add	\$16.90	\$13.32		
None	Adjacent Structures	Add	0.91	0.70		
	Personal Effects	Add	11.12	7.61		
	Mobile Home Structures	Subtract	\$5.39	\$4.24		
\$50	Adjacent Structures	Subtract	0.40	0.31		
	Personal Effects	Add	4.14	2.83		
	Mobile Home Structures	Subtract	\$23.98	\$18.92		
\$100	Adjacent Structures	Subtract	1.70	1.31		
	Personal Effects	Subtract	2.81	1.91		
	Mobile Home Structures	Subtract	\$57.45	\$45.30	\$23.98	\$18.9
\$250	Adjacent Structures	Subtract	4.28	3.30	1.70	1.3
	Personal Effects	Subtract	16.74	11.46	2.81	1.9
	Mobile Home Structures	Subtract	\$0.00	\$0.00	\$0.00	\$0.0
\$500	Adjacent Structures	Subtract	0.00	0.00	0.00	0.0
	Personal Effects	Subtract	0.00	0.00	0.00	0.0

MHC-R-12

MOBILE HOMEOWNERS POLICY: MH(C) PROGRAM

#### **NORTH CAROLINA**

#### **RATE PAGES**

	<b>Mobile Home Structures</b>	Subtract	\$156.71	\$123.52	\$124.34	\$98.01
\$750	Adjacent Structures	Subtract	38.41	29.35	35.53	27.19
	Personal Effects	Subtract	29.15	19.95	15.96	10.93
	Mobile Home Structures	Subtract	\$197.79	\$155.90	\$167.40	\$131.97
\$1,000	Adjacent Structures	Subtract	51.74	39.52	48.94	37.45
	Personal Effects	Subtract	32.83	22.48	21.02	14.38
	Mobile Home Structures	Subtract	\$351.28	\$276.85	\$329.52	\$259.76
\$2,000	Adjacent Structures	Subtract	99.77	76.18	97.42	74.54
	Personal Effects	Subtract	45.24	31.02	39.19	26.81

			Primary R	Primary Residence		Seasonal/Vacation Residence	
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 1	Territory Group 2	
	Mobile Home Structures	Subtract	\$20.33	\$16.04	_	-	
None	Adjacent Structures	Subtract	1.73	1.30			
	Personal Effects	Add	6.48	4.43			
	Mobile Home Structures	Subtract	\$41.95	\$33.05			
\$50	Adjacent Structures	Subtract	2.99	2.30			
	Personal Effects	Subtract	0.31	0.23			
	Mobile Home Structures	Subtract	\$59.95	\$47.28			
\$100	Adjacent Structures	Subtract	4.24	3.27			
	Personal Effects	Subtract	7.03	4.79			
	Mobile Home Structures	Subtract	\$92.41	\$72.88	\$59.95	\$47.28	
\$250	Adjacent Structures	Subtract	6.69	5.18	4.24	3.27	
	Personal Effects	Subtract	20.55	14.08	7.03	4.79	
	Mobile Home Structures	Subtract	\$142.86	\$112.62	\$110.50	\$87.12	
\$500	Adjacent Structures	Subtract	24.57	18.77	21.89	16.78	
	Personal Effects	Subtract	27.29	18.69	13.84	9.47	
	Mobile Home Structures	Subtract	\$187.51	\$147.80	\$156.22	\$123.1	
\$750	Adjacent Structures	Subtract	40.32	30.75	37.56	28.78	
	Personal Effects	Subtract	32.31	22.14	19.61	13.4	
	Mobile Home Structures	Subtract	\$225.19	\$177.48	\$195.89	\$154.37	
\$1,000	Adjacent Structures	Subtract	53.28	40.58	50.57	38.74	
	Personal Effects	Subtract	35.47	24.30	24.11	16.54	
	Mobile Home Structures	Subtract	\$372.17	\$293.29	\$351.02	\$276.5	
\$2,000	Adjacent Structures	Subtract	100.88	76.72	98.52	75.43	
•	Personal Effects	Subtract	47.13	32.31	41.28	28.36	
	Mobile Home Structures	Subtract	\$804.96	\$634.28	\$808.21	\$636.61	
\$5,000	Adjacent Structures	Subtract	233.96	177.77	230.24	176.22	
	Personal Effects	Subtract	80.47	55.19	90.93	62.55	

**NORTH CAROLINA** 

### MOBILE HOMEOWNERS POLICY: MH(C) PROGRAM

RATE PAGES

#### **DEDUCTIBLE NAMED PERILS COVERAGE**

The surcharges/credits displayed incorporate the surcharges/credits for the All Perils Deductibles. Do not use the surcharges/credits for the All Perils Deductibles when rating a policy with a higher Named Storm Percentage Deductible. For Named Perils Coverage, the 1%, 2%, or 5% Named Storm Deductible credit applies to the \$0 deductible rate.

#### **1% Named Storm Deductible**

			Primary R	esidence
All Other Perils Deductible Amount	Coverage		Territory Group 1	Territory Group 2
	Mobile Home Structures	Subtract	\$21.39	\$16.85
None	Adjacent Structures	Subtract	1.45	1.11
	Personal Effects	Subtract	2.82	1.94
\$50	Mobile Home Structures	Subtract	\$40.01	\$31.55
	Adjacent Structures	Subtract	2.77	2.13
	Personal Effects	Subtract	8.63	5.89
	Mobile Home Structures	Subtract	\$56.71	\$44.71
\$100	Adjacent Structures	Subtract	4.09	3.12
	Personal Effects	Subtract	14.44	9.89
	Mobile Home Structures	Subtract	\$84.59	\$66.69
\$250	Adjacent Structures	Subtract	5.37	4.11
	Personal Effects	Subtract	26.02	17.81
	Mobile Home Structures	Subtract	\$131.07	\$103.33
\$500	Adjacent Structures	Subtract	7.50	5.75
	Personal Effects	Subtract	45.34	31.02

	Coverage		Primary R	esidence
All Other Perils Deductible Amount			Territory Group 1	Territory Group 2
	Mobile Home Structures	Subtract	\$42.77	\$33.7
None	Adjacent Structures	Subtract	2.90	2.23
	Personal Effects	Subtract	5.66	3.8
	<b>Mobile Home Structures</b>	Subtract	\$61.03	\$48.1
\$50	Adjacent Structures	Subtract	4.20	3.2
	Personal Effects	Subtract	11.34	7.7
	Mobile Home Structures	Subtract	\$77.37	\$60.9
\$100	Adjacent Structures	Subtract	5.52	4.2
	Personal Effects	Subtract	17.04	11.6
	<b>Mobile Home Structures</b>	Subtract	\$104.70	\$82.5
\$250	Adjacent Structures	Subtract	6.75	5.1
	Personal Effects	Subtract	27.89	19.0
	Mobile Home Structures	Subtract	\$0.00	\$0.0
\$500	Adjacent Structures	Subtract	0.00	0.0
	Personal Effects	Subtract	0.00	0.0
	Mobile Home Structures	Subtract	\$181.21	\$142.8
\$750	Adjacent Structures	Subtract	9.49	7.2
	Personal Effects	Subtract	56.51	38.6
	Mobile Home Structures	Subtract	\$210.16	\$165.6
\$1,000	Adjacent Structures	Subtract	10.09	7.7
	Personal Effects	Subtract	65.88	45.0

### ${\bf MOBILE\ HOMEOWNERS\ POLICY:\ MH(C)\ PROGRAM}$

#### **NORTH CAROLINA**

### RATE PAGES

	<b>Mobile Home Structures</b>	Subtract	\$316.20	\$249.15
\$2,000	Adjacent Structures	Subtract	11.89	9.07
	Personal Effects	Subtract	98.14	67.13

			Primary Residence		
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2	
	Mobile Home Structures	Subtract	\$106.92	\$84.29	
None	Adjacent Structures	Subtract	7.26	5.5	
	Personal Effects	Subtract	14.15	9.7	
	Mobile Home Structures	Subtract	\$124.13	\$97.8	
\$50	Adjacent Structures	Subtract	8.51	6.5	
	Personal Effects	Subtract	19.46	13.27	
	<b>Mobile Home Structures</b>	Subtract	\$139.34	\$109.87	
\$100	Adjacent Structures	Subtract	9.77	7.4	
	Personal Effects	Subtract	24.84	17.0	
	<b>Mobile Home Structures</b>	Subtract	\$165.03	\$130.1	
\$250	Adjacent Structures	Subtract	10.87	8.3	
	Personal Effects	Subtract	35.37	24.2	
	<b>Mobile Home Structures</b>	Subtract	\$201.62	\$158.9	
\$500	Adjacent Structures	Subtract	12.05	9.2	
	Personal Effects	Subtract	50.29	34.4	
	<b>Mobile Home Structures</b>	Subtract	\$231.06	<b>\$182.1</b>	
\$750	Adjacent Structures	Subtract	12.58	9.6	
	Personal Effects	Subtract	61.93	42.4	
	<b>Mobile Home Structures</b>	Subtract	\$252.69	\$199.1	
\$1,000	Adjacent Structures	Subtract	12.73	9.7	
	Personal Effects	Subtract	70.64	48.4	
	<b>Mobile Home Structures</b>	Subtract	\$339.19	\$267.2	
\$2,000	Adjacent Structures	Subtract	13.28	10.0	
	Personal Effects	Subtract	102.30	70.2	
	Mobile Home Structures	Subtract	\$598.69	\$471.6	
\$5,000	Adjacent Structures	Subtract	14.94	11.0	
-	Personal Effects	Subtract	193.34	132.80	

#### **NORTH CAROLINA**

#### TERRITORY GROUP SURCHARGE/DISCOUNT

Mobile Home Structures				
Territory Group 1	68.1%			
Territory Group 2 32.7%				
Territory Group 3	0.0%			
Territory Group 4	-11.1%			
Territory Group 5	-24.4%			
Territory Group 6	-40.7%			

Adjacent Structures				
Territory Group 1	87.1%			
Territory Group 2	43.5%			
Territory Group 3	0.0%			
Territory Group 4	-18.2%			
Territory Group 5	-29.7%			
Territory Group 6	-46.6%			

Comprehensive Personal Effects				
Territory Group 1	135.4%			
Territory Group 2	61.3%			
Territory Group 3	0.0%			
Territory Group 4	-21.3%			
Territory Group 5	-30.3%			
Territory Group 6	-37.8%			

#### TRIP COVERAGE

30 Day Trip; \$100 Deductible = \$25

#### NATURAL DISASTER PROTECTION COVERAGE

A \$3.00 premium charge per mobile home shall apply

#### FIRE DEPARTMENT SERVICE CHARGE

Additional Amounts of Insurance:

\$2.00 per \$100 of Insurance
Maximum additional Amount of Insurance = \$400

#### RADIO AND TELEVISION ANTENNA COVERAGE

Additional Amounts of Insurance:

\$5.00 per \$100 of Insurance
Maximum additional Amount of Insurance = \$2,500

#### **MEDICAL PAYMENTS TO OTHERS**

Additional Limit	Premium
\$1,000	\$3.00

#### **LIABILITY**

\$500 Medical Payments to Others Coverage and \$250 Damage to Property of Others automatically included.

Personal Liability Coverages		
Limits	Premium	
\$25,000	\$25.23	
50,000	28.77	
100,000	33.31	
200,000	38.86	
250,000	41.14	
300,000	43.16	

#### **INFLATION COVERAGE**

\$5.00 per mobile home

#### **DETERMINATION OF TERM PREMIUMS**

Multiply the 1 year unrounded premium for the specific coverage by the term factor then total and round total of all coverages.

#### **TERM FACTORS**

#### Apply to all Coverages:

Term	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year
Factor	1.00	2.00	3.00	3.85	4.65	5.35	6.00

#### PERSONAL EFFECTS REPLACEMENT COST ENDORSEMENT

\$0.30 per \$100 of Insurance The Minimum Additional Premium is \$15.00

#### REPLACEMENT COST COVERAGE

When coverage is provided on a replacement cost basis, charge 5% of the premium from the premium rate table.

#### MOBILE HOME ADDITIONAL LIVING EXPENSE COVERAGE

\$25 per day = \$6 per mobile home \$50 per day = \$16 per mobile home

#### WINDSTORM OR HAIL EXCLUSION

(Territories 110, 120, 130, 140, 150, 160)

	Territory	Territory
	Group 1	Group 2
Mobile Home Structures	64.3%	60.0%
Adjacent Structures	57.0%	53.9%
Comprehensive Personal Effects	45.3%	38.5%

#### STATED VALUE LOSS SETTLEMENT

When coverage is provided on a stated value basis, charge 3% of the premium from the premium rate table.

# North Carolina Mobile Homeowners MH(C) Program

**Proposed Rate Pages - Year 2** 

COMPREHENSIVE MOBILE HOME STRUCTURES TERRITORY GROUP 3; \$100 DEDUCTIBLE		
Premiums		
Amount of Insurance	Primary Residence	Rental
1 - 3,999	\$549.23	\$940.87
4,000 - 4,999	585.99	1,003.82
5,000 - 5,999	616.27	1,055.68
6,000 - 6,999	648.36	1,110.6
7,000 - 7,999	680.86	1,166.3
8,000 - 8,999	713.49	1,222.2
9,000 - 9,999	747.90	1,281.1
10,000 - 10,999	780.48	1,336.9
11,000 - 11,999	808.01	1,384.1
12,000 - 12,999	835.56	1,431.3
13,000 - 13,999	862.23	1,477.0
14,000 - 14,999	888.90	1,522.7
15,000 - 15,999	919.12	1,574.4
16,000 - 16,999	951.74	1,630.3
17,000 - 17,999	983.62	1,684.9
18,000 - 18,999	1,015.34	1,739.2
19.000 - 19.999	1,050.07	1,798.7
20,000 - 20,999	1,082.73	1,854.7
21,000 - 21,999	1,108.82	1,899.4
22,000 - 22,999	1,134.92	1,944.1
23,000 - 23,999	1,162.50	1,991.3
24,000 - 24,999	1,190.47	2,039.2
25,000 - 25,999	1,220.59	2,090.8
26,000 - 26,999	1,252.35	2,145.3
27,000 - 27,999	1,283.63	2,198.8
28,000 - 28,999	1,314.70	2,252.0
29,000 - 29,999	1,349.58	2,311.8
30,000 - 30,999	1,385.72	2,373.7
31,000 - 31,999	1,412.85	2,420.2
32,000 - 32,999	1,439.23	2,465.4
33,000 - 33,999	1,465.59	2,510.5
34,000 - 34,999	1,495.44	2,561.7
35,000 - 35,999	1,062.29	1,819.7
36,000 - 36,999	1,083.36	1,855.8
37,000 - 37,999	1,104.44	1,891.9
38,000 - 38,999	1,125.51	1,928.0
39,000 - 39,999	1,146.58	1,964.1
40,000 - 40,999	1,167.67	2,000.2
41,000 - 41,999	1,188.74	2,036.3

	COMPREHENSIVE MOBILE HOME STRUCTURES		
TERRITORY GROUP	TERRITORY GROUP 3; \$100 DEDUCTIBLE		
	Premiums		
Amount of Insurance	Primary Residence	Rental	
42,000 - 42,999	\$1,737.62	\$2,976.57	
43,000 - 43,999	1,767.88	3,028.43	
44,000 - 44,999	1,798.17	3,080.29	
45,000 - 45,999	1,828.43	3,132.14	
	1,858.71	3,183.99	
46,000 - 46,999	1,888.97	3,235.84	
47,000 - 47,999	1,919.25	3,287.70	
48,000 - 48,999	1,949.51	3,339.57	
49,000 - 49,999	1,979.80	3,391.43	
50,000 - 50,999	2,010.06	3,443.27	
51,000 - 51,999	2,040.34	3,495.13	
52,000 - 52,999	2,040.34	3,546.98	
53,000 - 53,999	2,100.86	3,598.84	
54,000 - 54,999 55,000 - 55,999	2,131.15	3,650.69	
56,000 - 56,999	2,161.42	3,702.54	
	2,191.69	3,754.40	
57,000 - 57,999 58,000 - 58,999	2,221.95	3,806.27	
59,000 - 59,999	2,252.25	3,858.13	
60,000 - 60,999	2,282.51	3,909.96	
61,000 - 61,999	2,312.78	3,961.83	
62,000 - 62,999	2,343.05	4,013.68	
63,000 - 63,999	2,373.32	4,065.54	
64,000 - 64,999	2,403.58	4,117.40	
65,000 - 65,999	2,433.88	4,169.24	
66,000 - 66,999	2,464.14	4,221.10	
67,000 - 67,999	2,494.41	4,272.97	
68,000 - 68,999	2,524.68	4,324.83	
69,000 - 69,999	2,554.94	4,376.68	
70,000 - 70,999	2,585.23	4,428.53	
71,000 - 71,999	2,615.49	4,480.38	
72,000 - 72,999	2,645.77	4,532.24	
73,000 - 73,999	2,676.03	4,584.10	
74,000 - 74,999	2,706.32	4,635.97	
75,000 - 75,999	2,736.58	4,687.80	
76,000 - 76,999	2,766.86	4,739.66	
77,000 - 77,999	2,797.12	4,791.53	
78,000 - 78,999	2,827.40	4,843.38	
79,000 - 79,999	2,857.66	4,895.24	
Each Add'l \$1,000	\$30.26	\$51.86	

Territory Group 1	Surcharge	64.2%
Territory Group 2	Surcharge	15.4%
Territory Group 4	Discount	-18.0%
Territory Group 5	Discount	-34.1%
Territory Group 6	Discount	-49.9%

NAMED PERILS MOBILE HOME STRUCTURES			
TERRITORY GROUP 3; \$0 DEDUCTIBLE			
	Premiums		
Amount of Insurance	Primary Residence	Rental	
1 - 3,999	\$489.54	\$881.16	
4,000 - 4,999	522.30	940.15	
5,000 - 5,999	549.27	988.71	
	577.88	1,040.20	
6,000 - 6,999	606.85	1,040.20	
7,000 - 7,999	635.93	1,144.70	
8,000 - 8,999	666.61		
9,000 - 9,999	695.65	1,199.88 1,252.18	
10,000 - 10,999		<u> </u>	
11,000 - 11,999	720.18	1,296.34	
12,000 - 12,999	744.73	1,340.52 1,383.32	
13,000 - 13,999	768.52		
14,000 - 14,999	792.29	1,426.11	
15,000 - 15,999	819.22	1,474.58	
16,000 - 16,999	848.29	1,526.92	
17,000 - 17,999	876.71	1,578.09	
18,000 - 18,999	904.97	1,628.95	
19,000 - 19,999	935.91	1,684.66	
20,000 - 20,999	965.04	1,737.06	
21,000 - 21,999	988.29	1,778.94	
22,000 - 22,999	1,011.56	1,820.79	
23,000 - 23,999	1,036.15	1,865.06	
24,000 - 24,999	1,061.07	1,909.93	
25,000 - 25,999	1,087.91	1,958.21	
26,000 - 26,999	1,116.23	2,009.22	
27,000 - 27,999	1,144.10	2,059.38	
28,000 - 28,999	1,171.77	2,109.22	
29,000 - 29,999	1,202.87	2,165.16	
30,000 - 30,999	1,235.08	2,223.18	
31,000 - 31,999	1,259.27	2,266.68	
32,000 - 32,999	1,282.78	2,309.01	
33,000 - 33,999	1,306.28	2,351.32	
34,000 - 34,999	1,332.89	2,399.19	
35,000 - 35,999	1,359.87	2,447.78	
36,000 - 36,999	1,386.85	2,496.34	
37,000 - 37,999	1,413.84	2,544.90	
38,000 - 38,999	1,440.81	2,593.47	
39,000 - 39,999	1,467.80	2,642.03	
40,000 - 40,999	1,494.78	2,690.59	
41,000 - 41,999	1,521.76	2,739.17	

NAMED PERILS MOB	NAMED PERILS MOBILE HOME STRUCTURES		
TERRITORY GROU	TERRITORY GROUP 3; \$0 DEDUCTIBLE		
	Premiums		
	Primary	D	
Amount of Insurance	Residence	Rental	
42,000 - 42,999	\$1,548.75	\$2,787.73	
43,000 - 43,999	1,575.72	2,836.29	
44,000 - 44,999	1,602.71	2,884.88	
45,000 - 45,999	1,629.70	2,933.44	
46,000 - 46,999	1,656.67	2,982.00	
47,000 - 47,999	1,683.66	3,030.57	
48,000 - 48,999	1,710.62	3,079.13	
49,000 - 49,999	1,737.60	3,127.69	
50,000 - 50,999	1,764.58	3,176.25	
51,000 - 51,999	1,791.56	3,224.82	
52,000 - 52,999	1,818.55	3,273.38	
53,000 - 53,999	1,845.52	3,321.94	
54,000 - 54,999	1,872.51	3,370.53	
55,000 - 55,999	1,899.49	3,419.09	
56,000 - 56,999	1,926.47	3,467.65	
57,000 - 57,999	1,953.46	3,516.23	
58,000 - 58,999	1,980.43	3,564.79	
59,000 - 59,999	2,007.42	3,613.35	
60,000 - 60,999	2,034.41	3,661.92	
61,000 - 61,999	2,061.38	3,710.48	
62,000 - 62,999	2,088.37	3,759.04	
63,000 - 63,999	2,115.34	3,807.63	
64,000 - 64,999	2,142.33	3,856.19	
65,000 - 65,999	2,169.32	3,904.75	
66,000 - 66,999	2,196.29	3,953.33	
67,000 - 67,999	2,223.28	4,001.89	
68,000 - 68,999	2,250.26	4,050.45	
69,000 - 69,999	2,277.24	4,099.02	
70,000 - 70,999	2,304.19	4,147.58	
71,000 - 71,999	2,331.18	4,196.14	
72,000 - 72,999	2,358.17	4,244.70	
73,000 - 73,999	2,385.14	4,293.29	
74,000 - 74,999	2,412.13	4,341.85	
75,000 - 75,999	2,439.12	4,390.39	
76,000 - 76,999	2,466.09	4,438.98	
77,000 - 77,999	2,493.08	4,487.54	
78,000 - 78,999	2,520.07	4,536.10	
79,000 - 79,999	2,547.04	4,584.68	
Each Add'I \$1,000	\$26.99	\$48.57	

<b>Territory Group 1</b>	Surcharge	64.2%
Territory Group 2	Surcharge	15.4%
Territory Group 4	Discount	-18.0%
Territory Group 5	Discount	-34.1%
Territory Group 6	Discount	-49.9%

SEASONAL/VACATION MOBILE HOME STRUCTURES			
IERKIIORY GRO	TERRITORY GROUP 3; \$250 DEDUCTIBLE Premiums		
	Premu	Named	
Amount of Insurance	Comprehensive	Perils	
1 - 3,999	\$549.23	\$489.54	
4,000 - 4,999	585.99	522.30	
5,000 - 5,999	616.27	549.27	
6,000 - 6,999	648.36	577.88	
7,000 - 7,999	680.86	606.85	
8,000 - 8,999	713.49	635.93	
9,000 - 9,999	747.90	666.61	
10,000 - 10,999	780.48	695.65	
11,000 - 11,999	808.01	720.18	
12,000 - 12,999	835.56	744.73	
13,000 - 13,999	862.23	768.52	
14,000 - 14,999	888.90	792.29	
15,000 - 15,999	919.12	819.22	
16,000 - 16,999	951.74	848.29	
17,000 - 17,999	983.62	876.71	
18,000 - 18,999	1,015.34	904.97	
19,000 - 19,999	1,050.07	935.91	
20,000 - 20,999	1,082.73	965.04	
21,000 - 21,999	1,108.82	988.29	
22,000 - 22,999	1,134.92	1,011.56	
23,000 - 23,999	1,162.50	1,036.15	
24,000 - 24,999	1,190.47	1,061.07	
25,000 - 25,999	1,220.59	1,087.91	
26,000 - 26,999	1,252.35	1,116.23	
27,000 - 27,999	1,283.63	1,144.10	
28,000 - 28,999	1,314.70	1,171.77	
29,000 - 29,999	1,349.58	1,202.87	
30,000 - 30,999	1,385.72	1,235.08	
31,000 - 31,999	1,412.85	1,259.27	
32,000 - 32,999	1,439.23	1,282.78	
33,000 - 33,999	1,465.59	1,306.28	
34,000 - 34,999	1,495.44	1,332.89	
35,000 - 35,999	1,525.73	1,359.87	
36,000 - 36,999	1,555.99	1,386.85	
37,000 - 37,999	1,586.27	1,413.84	
38,000 - 38,999	1,616.53	1,440.81	
39,000 - 39,999	1,646.79	1,467.80	
40,000 - 40,999	1,677.08	1,494.78	
41,000 - 41,999	1,707.34	1,521.76	

SEASONAL/VACATION MOBILE HOME STRUCTURES			
TERRITORY GROUP 3; \$250 DEDUCTIBLE			
	Premiums		
0	0	Named	
Amount of Insurance	Comprehensive	Perils	
42,000 - 42,999	\$1,737.62	\$1,548.75	
43,000 - 43,999	1,767.88	1,575.72	
44,000 - 44,999	1,798.17	1,602.71	
45,000 - 45,999	1,828.43	1,629.70	
46,000 - 46,999	1,858.71	1,656.67	
47,000 - 47,999	1,888.97	1,683.66	
48,000 - 48,999	1,919.25	1,710.62	
49,000 - 49,999	1,949.51	1,737.60	
50,000 - 50,999	1,979.80	1,764.58	
51,000 - 51,999	2,010.06	1,791.56	
52,000 - 52,999	2,040.34	1,818.55	
53,000 - 53,999	2,070.60	1,845.52	
54,000 - 54,999	2,100.86	1,872.51	
55,000 - 55,999	2,131.15	1,899.49	
56,000 - 56,999	2,161.42	1,926.47	
57,000 - 57,999	2,191.69	1,953.46	
58,000 - 58,999	2,221.95	1,980.43	
59,000 - 59,999	2,252.25	2,007.42	
60,000 - 60,999	2,282.51 2,312.78	2,034.41	
61,000 - 61,999	2,343.05	2,061.38 2,088.37	
62,000 - 62,999			
63,000 - 63,999	2,373.32 2,403.58	2,115.34 2,142.33	
64,000 - 64,999	2,433.88	2,142.33	
65,000 - 65,999 66,000 - 66,999	2,464.14	2,196.29	
67,000 - 67,999	2,494.41	2,223.28	
68,000 - 68,999	2,524.68	2,250.26	
69,000 - 69,999	2,554.94	2,277.24	
70,000 - 70,999	2,585.23	2,304.19	
71,000 - 71,999	2,615.49	2,331.18	
72,000 - 72,999	2,645.77	2,358.17	
73,000 - 73,999	2,676.03	2,385.14	
74,000 - 74,999	2,706.32	2,412.13	
75,000 - 75,999	2,736.58	2,439.12	
76,000 - 76,999	2,766.86	2,466.09	
77,000 - 77,999	2,797.12	2,493.08	
78,000 - 78,999	2,827.40	2,520.07	
79,000 - 79,999	2,857.66	2,547.04	
Each Add'I \$1,000	\$30.26	\$26.99	
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, <i>-</i>	

Territory Group 1	Surcharge	64.2%
Territory Group 2	Surcharge	15.4%
Territory Group 4	Discount	-18.0%
Territory Group 5	Discount	-34.1%
Territory Group 6	Discount	-49.9%

#### **NORTH CAROLINA**

	ENT STRUCTURES	
IEKR	RITORY GROUP 3 Premi	ums
A	0	Named Barile
Amount of Insurance	Comprehensive N/A	Named Perils
100 - 199	N/A N/A	\$4.47
200 - 299		7.08
300 - 399	\$11.21	9.67
400 - 499	14.23	12.28
500 - 599	17.24	14.87
600 - 699	20.25	17.48
700 - 799	23.27	20.07
800 - 899	26.28	22.67
900 - 999	29.30	25.27
1,000 - 1,099	32.31	27.86
1,100 - 1,199	35.32	30.47
1,200 - 1,299	38.34	33.06
1,300 - 1,399	41.35	35.67
1,400 - 1,499	44.36	38.26
1,500 - 1,599	47.39	40.87
1,600 - 1,699	50.40	43.46
1,700 - 1,799	53.42	46.07
1,800 - 1,899	56.43	48.66
1,900 - 1,999	59.44	51.27
2,000 - 2,099	62.46	53.86
2,100 - 2,199	65.47	56.47
2,200 - 2,299	68.48	59.06
2,300 - 2,399	71.50	61.67
2,400 - 2,499	74.51	64.26
2,500 - 2,599	77.52	66.85
2,600 - 2,699	80.55	69.46
2,700 - 2,799	83.55	72.05
2,800 - 2,899	86.58	74.66
2,900 - 2,999	89.59	77.25
3,000 - 3,099	92.60	79.86
3,100 - 3,199	95.62	82.45
3,200 - 3,299	98.63	85.06
3,300 - 3,399	101.64	87.65
3,400 - 3,499	104.66	90.26
3,500 - 3,599	107.67	92.85

	ORY GROUP 3	
	Premium	ıs
		Named
Amount of Insurance	Comprehensive	Perils
3,600 - 3,699	\$110.69	\$95.46
3,700 - 3,799	113.70	98.05
3,800 - 3,899	116.71	100.66
3,900 - 3,999	119.74	103.25
4,000 - 4,099	122.75	105.86
4,100 - 4,199	125.76	108.45
4,200 - 4,299	128.78	111.04
4,300 - 4,399	131.79	113.65
4,400 - 4,499	134.81	116.24
4,500 - 4,599	137.82	118.85
4,600 - 4,699	140.83	121.44
4,700 - 4,799	143.85	124.05
4,800 - 4,899	146.86	126.64
4,900 - 4,999	149.87	129.25
5,000 - 5,099	152.89	131.84
5,100 - 5,199	155.90	134.45
5,200 - 5,299	158.93	137.04
5,300 - 5,399	161.94	139.65
5,400 - 5,499	164.95	142.24
5,500 - 5,599	167.97	144.85
5,600 - 5,699	170.98	147.44
5,700 - 5,799	173.99	150.03
5,800 - 5,899	177.01	152.64
5,900 - 5,999	180.02	155.23
6,000 - 6,099	183.03	157.84
6,100 - 6,199	186.05	160.43
6,200 - 6,299	189.06	163.04
6,300 - 6,399	192.09	165.63
6,400 - 6,499	195.10	168.24
6,500 - 6,599	198.10	170.83
6,600 - 6,699	201.13	173.44
6,700 - 6,799	204.14	176.03
6,800 - 6,899	207.15	178.64
6,900 - 6,999	210.17	181.23
Each Add'I \$100	\$3.01	\$2.59

**ADJACENT STRUCTURES** 

	Base Deductible		
	Comprehensive	Named Perils	
Primary Residence	\$100 Deductible	No Deductible	
Seasonal/Vacation	\$250 Deductible	\$250 Deductible	
Tenants	\$100 Deductible	No Deductible	

<b>Territory Group 2</b>	Surcharge	19.5%
Territory Group 4	Discount	-30.8%
Territory Group 5	Discount	-43.0%
Territory Group 6	Discount	-56.3%

**Territory Group 1** 

Surcharge

Note: Rates shown applicable to all occupancy types

86.9%

#### **NORTH CAROLINA**

COMPREHENSIVE PERSO	
TERRITORY GRO	OUP 3 Premium
	\$25.29
500 - 599	26.29
600 - 699	
700 - 799	27.29
800 - 899	28.28
900 - 999	29.28
1,000 - 1,099	30.28
1,100 - 1,199	31.28
1,200 - 1,299	32.28
1,300 - 1,399	33.28
1,400 - 1,499	34.27
1,500 - 1,599	35.27
1,600 - 1,699	36.27
1,700 - 1,799	37.28
1,800 - 1,899	38.28
1,900 - 1,999	39.28
2,000 - 2,099	40.27
2,100 - 2,199	41.27
2,200 - 2,299	42.27
2,300 - 2,399	43.27
2,400 - 2,499	44.27
2,500 - 2,599	45.27
2,600 - 2,699	46.26
2,700 - 2,799	47.26
2,800 - 2,899	48.26
	49.26
2,900 - 2,999	50.26
3,000 - 3,099	51.26
3,100 - 3,199	
3,200 - 3,299	52.25
3,300 - 3,399	53.25
3,400 - 3,499	54.26
3,500 - 3,599	55.26
3,600 - 3,699	56.26
3,700 - 3,799	57.26

	Base Deductible
Primary Residence	\$100 Deductible
Seasonal/Vacation	\$250 Deductible
Tenants	\$100 Deductible

Note: Rates shown applicable to all occupancy types

COMPREHENSIVE PERSO	ONAL EFFECTS				
TERRITORY GROUP 3					
Amount of Insurance	Premium				
3,800 - 3,899	\$58.25				
3,900 - 3,999	59.25				
4,000 - 4,099	60.25				
4,100 - 4,199	61.25				
4,200 - 4,299	62.25				
4,300 - 4,399	63.25				
4,400 - 4,499	64.24				
4,500 - 4,599	65.24				
4,600 - 4,699	66.24				
4,700 - 4,799	67.24				
4,800 - 4,899	68.24				
4,900 - 4,999	69.24				
5,000 - 5,099	70.23				
5,100 - 5,199	71.23				
5,200 - 5,299	72.24				
5,200 - 5,399	73.24				
	74.24				
5,400 - 5,499	75.24				
5,500 - 5,599	76.23				
5,600 - 5,699					
5,700 - 5,799	77.23				
5,800 - 5,899	78.23				
5,900 - 5,999	79.23				
6,000 - 6,099	80.23				
6,100 - 6,199	81.23				
6,200 - 6,299	82.22				
6,300 - 6,399	83.22				
6,400 - 6,499	84.22				
6,500 - 6,599	85.22				
6,600 - 6,699	86.22				
6,700 - 6,799	87.21				
6,800 - 6,899	88.21				
6,900 - 6,999	89.21				
Each Add'l \$100	\$1.00				

Territory Group 1	Surcharge	181.7%
Territory Group 2	Surcharge	68.5%
Territory Group 4	Discount	-28.7%
Territory Group 5	Discount	-40.1%
Territory Group 6	Discount	-47.6%

#### M NORTH CAROLINA

## MOBILE HOMEOWNERS POLICY: MH(C) PROGRAM RATE PAGES

#### **DEDUCTIBLE - COMPREHENSIVE COVERAGE**

#### **Primary Residence:**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Add	\$58.55	\$41.10	\$39.24	\$31.78	\$25.59	\$19.48
None	Adjacent Structures	Add	3.59	2.28	2.09	1.46	1.20	0.92
•	Personal Effects	Add	19.12	11.41	7.43	5.27	4.44	3.88
	Mobile Home Structures	Add	\$26.63	\$18.70	\$17.88	\$14.49	\$11.64	\$8.86
\$50	Adjacent Structures	Add	1.78	1.15	1.05	0.71	0.59	0.45
•	Personal Effects	Add	9.57	5.71	3.72	2.63	2.21	1.95
	Mobile Home Structures	Included						
\$100	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$47.91	\$33.64	\$32.12	\$26.03	\$20.95	\$15.94
\$250	Adjacent Structures	Subtract	3.59	2.28	2.09	1.46	1.20	0.92
	Personal Effects	Subtract	19.12	11.41	7.43	5.27	4.44	3.88
	<b>Mobile Home Structures</b>	Subtract	\$122.46	\$85.94	\$82.10	\$66.49	\$53.52	\$40.75
\$500	Adjacent Structures	Subtract	28.62	18.24	16.75	11.58	9.52	7.31
	Personal Effects	Subtract	28.69	17.12	11.14	7.91	6.65	5.83
	<b>Mobile Home Structures</b>	Subtract	\$187.13	\$131.32	\$125.50	\$101.63	\$81.81	\$62.28
\$750	Adjacent Structures	Subtract	48.29	30.78	28.27	19.53	16.06	12.33
•	Personal Effects	Subtract	36.34	21.69	14.10	10.02	8.42	7.38
	<b>Mobile Home Structures</b>	Subtract	\$239.22	\$167.88	\$160.43	\$129.92	\$104.59	\$79.62
\$1,000	Adjacent Structures	Subtract	61.16	38.98	35.81	24.74	20.33	15.63
	Personal Effects	Subtract	41.79	24.95	16.21	11.52	9.69	8.48
	Mobile Home Structures	Subtract	\$402.83	\$282.67	\$270.21	\$218.79	\$176.17	\$134.10
\$2,000	Adjacent Structures	Subtract	101.38	64.61	59.35	40.99	33.69	25.92
	Personal Effects	Subtract	60.42	36.08	23.42	16.67	14.01	12.27
	Mobile Home Structures	Subtract	\$804.29	\$564.33	\$539.56	\$436.89	\$351.80	\$267.79
\$5,000	Adjacent Structures	Subtract	199.86	127.34	116.97	80.78	66.37	51.13
, -,	Personal Effects	Subtract	110.47	66.00	42.79	30.50	25.63	22.43

#### **NORTH CAROLINA**

#### **Seasonal/Vacation Residence:**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Included						
\$250	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$74.56	\$52.34	\$49.96	\$40.45	\$32.56	\$24.79
\$500	Adjacent Structures	Subtract	25.03	15.95	14.68	10.13	8.35	6.39
	Personal Effects	Subtract	9.57	5.71	3.72	2.63	2.21	1.95
	<b>Mobile Home Structures</b>	Subtract	\$139.21	\$97.68	\$93.36	\$75.60	\$60.88	\$46.34
\$750	Adjacent Structures	Subtract	44.71	28.50	26.17	18.07	14.85	11.41
	Personal Effects	Subtract	17.22	10.28	6.66	4.75	3.99	3.50
	Mobile Home Structures	Subtract	\$191.30	\$134.24	\$128.31	\$103.89	\$83.66	\$63.68
\$1,000	Adjacent Structures	Subtract	57.57	36.70	33.72	23.27	19.13	14.71
	Personal Effects	Subtract	22.68	13.55	8.77	6.26	5.26	4.60
	Mobile Home Structures	Subtract	\$354.92	\$249.03	\$238.07	\$192.76	\$155.23	\$118.16
\$2,000	Adjacent Structures	Subtract	97.79	62.33	57.26	39.53	32.48	25.01
	Personal Effects	Subtract	41.30	24.67	15.98	11.40	9.57	8.38
\$5,000	Mobile Home Structures	Subtract	\$756.37	\$530.71	\$507.44	\$410.86	\$330.85	\$251.85
	Adjacent Structures	Subtract	196.27	125.06	114.88	79.34	65.17	50.21
	Personal Effects	Subtract	91.35	54.59	35.35	25.22	21.19	18.54

**NORTH CAROLINA** 

### MOBILE HOMEOWNERS POLICY: MH(C) PROGRAM

RATE PAGES

#### **DEDUCTIBLE - NAMED PERILS COVERAGE**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Included						
None	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$26.63	\$18.70	\$17.88	\$14.49	\$11.64	\$8.86
\$50	Adjacent Structures	Subtract	1.78	1.15	1.04	0.71	0.59	0.45
	Personal Effects	Subtract	7.96	4.77	3.10	2.20	1.85	1.62
	Mobile Home Structures	Subtract	\$50.59	\$35.51	\$33.87	\$27.45	\$22.09	\$16.83
\$100	Adjacent Structures	Subtract	3.59	2.28	2.10	1.46	1.20	0.91
	Personal Effects	Subtract	15.94	9.51	6.20	4.40	3.70	3.25
	Mobile Home Structures	Subtract	\$90.49	\$63.51	\$60.69	\$49.15	\$39.56	\$30.11
\$250	Adjacent Structures	Subtract	5.37	3.42	3.16	2.17	1.79	1.37
	Personal Effects	Subtract	31.87	19.02	12.39	8.79	7.40	6.47
	Mobile Home Structures	Subtract	\$149.16	\$104.71	\$100.09	\$81.07	\$65.23	\$49.64
\$500	Adjacent Structures	Subtract	8.16	5.23	4.82	3.28	2.72	2.07
	Personal Effects	Subtract	55.50	33.13	21.56	15.30	12.88	11.26
	Mobile Home Structures	Subtract	\$197.43	\$138.59	\$132.52	\$107.33	\$86.35	\$65.72
\$750	Adjacent Structures	Subtract	10.73	6.90	6.35	4.31	3.57	2.72
	Personal Effects	Subtract	75.18	44.88	29.20	20.72	17.44	15.25
	Mobile Home Structures	Subtract	\$233.41	\$163.85	\$156.69	\$126.92	\$102.10	\$77.71
\$1,000	Adjacent Structures	Subtract	13.03	8.41	7.72	5.23	4.32	3.29
	Personal Effects	Subtract	90.12	53.79	34.99	24.83	20.90	18.27
	Mobile Home Structures	Subtract	\$339.62	\$238.43	\$228.05	\$184.78	\$148.59	\$113.10
\$2,000	Adjacent Structures	Subtract	21.80	14.14	12.93	8.74	7.21	5.48
	Personal Effects	Subtract	142.38	84.97	55.23	39.21	33.00	28.86
	Mobile Home Structures	Subtract	\$592.44	\$415.92	\$397.90	\$322.51	\$259.27	\$197.35
\$5,000	Adjacent Structures	Subtract	47.14	30.71	27.98	18.87	15.56	11.78
-	Personal Effects	Subtract	284.18	169.57	110.17	78.25	65.84	57.56

## OPTIONAL NAMED STORM PERCENTAGE DEDUCTIBLE TERRITORY GROUPS 1 AND 2 ONLY

#### **DEDUCTIBLE COMPREHENSIVE COVERAGE**

The surcharges/credits displayed incorporate the surcharges/credits for the All Perils Deductibles. Do not use the surcharges/credits for the All Perils Deductibles when rating a policy with a higher Named Storm Percentage Deductible. For Comprehensive Coverage Primary Residence, the 1%, 2%, or 5% Named Storm Deductible surcharge/credit applies to the \$100 deductible rate. For Comprehensive Coverage Seasonal/Vacation Residence, the 1%, 2%, or 5% Named Storm Deductible credit applies to the \$250 deductible rate.

#### **1% Named Storm Deductible**

			<b>Primary Residence</b>		Seasonal/Vacatior Residence	
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 1	Territory Group 2
	Mobile Home Structures	Add	\$41.12	\$28.87		
None	Adjacent Structures	Add	2.40	1.53		
	Personal Effects	Add	17.04	10.17		
	Mobile Home Structures	Add	\$9.53	\$6.70		
\$50	Adjacent Structures	Add	0.63	0.40		
	Personal Effects	Add	7.59	4.52		
\$100	Mobile Home Structures	Subtract	\$16.81	\$11.82		
	Adjacent Structures	Subtract	1.14	0.73		
	Personal Effects	Subtract	1.90	1.13		
	Mobile Home Structures	Subtract	\$64.29	\$45.13	\$16.81	\$11.82
\$250	Adjacent Structures	Subtract	4.67	2.98	1.14	0.73
	Personal Effects	Subtract	20.82	12.43	1.90	1.13
	Mobile Home Structures	Subtract	\$138.05	\$96.89	\$90.66	\$63.64
\$500	Adjacent Structures	Subtract	29.48	18.79	25.91	16.51
	Personal Effects	Subtract	30.27	18.08	11.38	6.80

#### **2% Named Storm Deductible**

			Primary Residence		Seasonal/Vacation Residence	
<b>All Other Perils</b>			Territory	Territory	Territory	Territory
<b>Deductible Amount</b>	Coverage		Group 1	Group 2	Group 1	Group 2
	Mobile Home Structures	Add	\$23.72	\$16.64		
None	Adjacent Structures	Add	1.22	0.78		
	Personal Effects	Add	14.96	8.93		
\$50	Mobile Home Structures	Subtract	\$7.56	\$5.30		
	Adjacent Structures	Subtract	0.54	0.35		
	Personal Effects	Add	5.57	3.32		
	Mobile Home Structures	Subtract	\$33.65	\$23.64		
\$100	Adjacent Structures	Subtract	2.28	1.47		
	Personal Effects	Subtract	3.78	2.24		
	Mobile Home Structures	Subtract	\$80.62	\$56.60	\$33.65	\$23.6
\$250	Adjacent Structures	Subtract	5.75	3.69	2.28	1.4
	Personal Effects	Subtract	22.51	13.45	3.78	2.2
	Mobile Home Structures	Subtract	\$0.00	\$0.00	\$0.00	\$0.0
\$500	Adjacent Structures	Subtract	0.00	0.00	0.00	0.0
	Personal Effects	Subtract	0.00	0.00	0.00	0.0

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#### **NORTH CAROLINA**

#### **RATE PAGES**

	Mobile Home Structures	Subtract	\$219.92	\$154.32	\$174.49	\$122.45
\$750	Adjacent Structures	Subtract	51.56	32.84	47.69	30.42
	Personal Effects	Subtract	39.21	23.42	21.47	12.83
	Mobile Home Structures	Subtract	\$277.57	\$194.78	\$234.92	\$164.88
\$1,000	Adjacent Structures	Subtract	69.45	44.22	65.70	41.90
	Personal Effects	Subtract	44.15	26.39	28.27	16.88
	Mobile Home Structures	Subtract	\$492.97	\$345.89	\$462.43	\$324.53
\$2,000	Adjacent Structures	Subtract	133.93	85.24	130.77	83.40
	Personal Effects	Subtract	60.85	36.42	52.71	31.47

			Primary R	esidence	0000011017	al/Vacation sidence	
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 1	Territory Group 2	
	Mobile Home Structures	Subtract	<b>\$28.53</b>	\$20.04	-		
None	Adjacent Structures	Subtract	2.32	1.45			
	Personal Effects	Add	8.72	5.20			
	Mobile Home Structures	Subtract	\$58.87	\$41.29			
\$50	Adjacent Structures	Subtract	4.01	2.57			
	Personal Effects	Subtract	0.42	0.27			
	Mobile Home Structures	Subtract	\$84.13	\$59.07			
\$100	Adjacent Structures	Subtract	5.69	3.66			
	Personal Effects	Subtract	9.45	5.62			
	Mobile Home Structures	Subtract	\$129.68	\$91.05	\$84.13	\$59.0	
\$250	Adjacent Structures	Subtract	8.98	5.80	5.69	3.6	
	Personal Effects	Subtract	27.64	16.53	9.45	5.6	
	Mobile Home Structures	Subtract	\$200.48	\$140.70	\$155.07	\$108.8	
\$500	Adjacent Structures	Subtract	32.98	21.00	29.38	18.7	
	Personal Effects	Subtract	36.70	21.94	18.61	11.1	
	Mobile Home Structures	Subtract	\$263.14	\$184.66	\$219.23	\$153.8	
\$750	Adjacent Structures	Subtract	54.12	34.41	50.42	32.2	
	Personal Effects	Subtract	43.46	25.99	26.37	15.7	
	Mobile Home Structures	Subtract	\$316.02	\$221.74	\$274.90	\$192.8	
\$1,000	Adjacent Structures	Subtract	71.52	45.40	67.88	43.3	
•	Personal Effects	Subtract	47.71	28.53	32.43	19.4	
	Mobile Home Structures	Subtract	\$522.28	\$366.43	\$492.60	\$345.5	
\$2,000	Adjacent Structures	Subtract	135.42	85.84	132.25	84.4	
-	Personal Effects	Subtract	63.39	37.93	55.52	33.2	
	Mobile Home Structures	Subtract	\$1,129.63	\$792.45	\$1,134.19	\$795.3	
\$5,000	Adjacent Structures	Subtract	314.06	198.90	309.07	197.1	
	Personal Effects	Subtract	108.23	64.79	122.30	73.4	

#### **NORTH CAROLINA**

MOBILE HOMEOWNERS POLICY: MH(C) PROGRAM
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#### **DEDUCTIBLE NAMED PERILS COVERAGE**

The surcharges/credits displayed incorporate the surcharges/credits for the All Perils Deductibles. Do not use the surcharges/credits for the All Perils Deductibles when rating a policy with a higher Named Storm Percentage Deductible. For Named Perils Coverage, the 1%, 2%, or 5% Named Storm Deductible credit applies to the \$0 deductible rate.

#### **1% Named Storm Deductible**

			Primary R	esidence
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2
	Mobile Home Structures	Subtract	\$30.02	\$21.05
None	Adjacent Structures	Subtract	1.95	1.24
	Personal Effects	Subtract	3.79	2.28
	Mobile Home Structures	Subtract	\$56.15	\$39.42
\$50	Adjacent Structures	Subtract	3.72	2.38
	Personal Effects	Subtract	11.61	6.91
	Mobile Home Structures	Subtract	\$79.58	\$55.86
\$100	Adjacent Structures	Subtract	5.49	3.49
	Personal Effects	Subtract	19.42	11.61
	Mobile Home Structures	Subtract	\$118.71	\$83.32
\$250	Adjacent Structures	Subtract	7.21	4.60
	Personal Effects	Subtract	35.00	20.91
	Mobile Home Structures	Subtract	\$183.94	\$129.10
\$500	Adjacent Structures	Subtract	10.07	6.43
	Personal Effects	Subtract	60.98	36.42

			Primary R	esidence
All Other Perils Deductible Amount	Coverage		Territory Group 1	Territory Group 2
	Mobile Home Structures	Subtract	\$60.02	\$42.13
None	Adjacent Structures	Subtract	3.89	2.50
	Personal Effects	Subtract	7.61	4.5
	<b>Mobile Home Structures</b>	Subtract	\$85.65	\$60.1
\$50	Adjacent Structures	Subtract	5.64	3.6
	Personal Effects	Subtract	15.25	9.0
	<b>Mobile Home Structures</b>	Subtract	\$108.58	\$76.2
\$100	Adjacent Structures	Subtract	7.41	4.7
	Personal Effects	Subtract	22.92	13.6
	<b>Mobile Home Structures</b>	Subtract	\$146.93	\$103.1
\$250	Adjacent Structures	Subtract	9.06	5.7
	Personal Effects	Subtract	37.51	22.4
	Mobile Home Structures	Subtract	\$0.00	\$0.0
\$500	Adjacent Structures	Subtract	0.00	0.0
	Personal Effects	Subtract	0.00	0.0
	Mobile Home Structures	Subtract	\$254.30	\$178.4
\$750	Adjacent Structures	Subtract	12.74	8.1
	Personal Effects	Subtract	76.00	45.4
	Mobile Home Structures	Subtract	\$294.93	\$206.9
\$1,000	Adjacent Structures	Subtract	13.54	8.6
	Personal Effects	Subtract	88.61	52.9°

### ${\bf MOBILE\ HOMEOWNERS\ POLICY:\ MH(C)\ PROGRAM}$

#### **NORTH CAROLINA**

#### RATE PAGES

	<b>Mobile Home Structures</b>	Subtract	\$443.74	\$311.28
\$2,000	Adjacent Structures	Subtract	15.96	10.15
	Personal Effects	Subtract	131.99	78.81

			Primary R	esidence
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2
	Mobile Home Structures	Subtract	\$150.05	\$105.31
None	Adjacent Structures	Subtract	9.75	6.21
	Personal Effects	Subtract	19.03	11.40
	Mobile Home Structures	Subtract	\$174.20	\$122.2
\$50	Adjacent Structures	Subtract	11.42	7.2
	Personal Effects	Subtract	26.17	15.58
	Mobile Home Structures	Subtract	\$195.54	\$137.2
\$100	Adjacent Structures	Subtract	13.12	8.3
	Personal Effects	Subtract	33.41	19.9
	Mobile Home Structures	Subtract	\$231.59	\$162.5
\$250	Adjacent Structures	Subtract	14.59	9.29
	Personal Effects	Subtract	47.57	28.4
	Mobile Home Structures	Subtract	\$282.94	\$198.5
\$500	Adjacent Structures	Subtract	16.18	10.3
	Personal Effects	Subtract	67.64	40.4
	<b>Mobile Home Structures</b>	Subtract	\$324.26	\$227.5
\$750	Adjacent Structures	Subtract	16.89	10.7
	Personal Effects	Subtract	83.29	49.8
	Mobile Home Structures	Subtract	\$354.61	\$248.8
\$1,000	Adjacent Structures	Subtract	17.09	10.89
	Personal Effects	Subtract	95.01	56.89
	Mobile Home Structures	Subtract	\$476.00	\$333.9°
\$2,000	Adjacent Structures	Subtract	17.83	11.2
-	Personal Effects	Subtract	137.59	82.4
	Mobile Home Structures	Subtract	\$840.17	\$589.2
\$5,000	Adjacent Structures	Subtract	20.06	12.3
• •	Personal Effects	Subtract	260.03	155.9

#### **NORTH CAROLINA**

#### TERRITORY GROUP SURCHARGE/DISCOUNT

Mobile Home Structures			
Territory Group 1	64.2%		
Territory Group 2	15.4%		
Territory Group 3	0.0%		
Territory Group 4	-18.0%		
Territory Group 5	-34.1%		
Territory Group 6	-49.9%		

Adjacent Structures			
Territory Group 1	86.9%		
Territory Group 2	19.5%		
Territory Group 3	0.0%		
Territory Group 4	-30.8%		
Territory Group 5	-43.0%		
Territory Group 6	-56.3%		

Comprehensive Personal Effects				
Territory Group 1	181.7%			
Territory Group 2	68.5%			
Territory Group 3	0.0%			
Territory Group 4	-28.7%			
Territory Group 5	-40.1%			
Territory Group 6	-47.6%			

#### TRIP COVERAGE

30 Day Trip; \$100 Deductible = \$25

#### NATURAL DISASTER PROTECTION COVERAGE

A \$3.00 premium charge per mobile home shall apply

#### FIRE DEPARTMENT SERVICE CHARGE

Additional Amounts of Insurance:

\$2.00 per \$100 of Insurance Maximum additional Amount of Insurance = \$400

#### RADIO AND TELEVISION ANTENNA COVERAGE

Additional Amounts of Insurance:

\$5.00 per \$100 of Insurance Maximum additional Amount of Insurance = \$2,500

#### **MEDICAL PAYMENTS TO OTHERS**

Additional Limit	Premium
\$1,000	\$3.00

#### **LIABILITY**

\$500 Medical Payments to Others Coverage and \$250 Damage to Property of Others automatically included.

Personal Liability Coverages				
Limits	Premium			
\$25,000	\$28.78			
50,000	32.82			
100,000	38.00			
200,000	38.86 41.14			
250,000				
300,000	49.24			

#### **INFLATION COVERAGE**

\$5.00 per mobile home

#### **DETERMINATION OF TERM PREMIUMS**

Multiply the 1 year unrounded premium for the specific coverage by the term factor then total and round total of all coverages.

#### **TERM FACTORS**

#### Apply to all Coverages:

Term	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year
Factor	1.00	2.00	3.00	3.85	4.65	5.35	6.00

#### PERSONAL EFFECTS REPLACEMENT COST ENDORSEMENT

\$0.30 per \$100 of Insurance

The Minimum Additional Premium is \$15.00

#### REPLACEMENT COST COVERAGE

When coverage is provided on a replacement cost basis, charge 5% of the premium from the premium rate table.

#### MOBILE HOME ADDITIONAL LIVING EXPENSE COVERAGE

\$25 per day = \$6 per mobile home

\$50 per day = \$16 per mobile home

#### WINDSTORM OR HAIL EXCLUSION

(Territories 110, 120, 130, 140, 150, 160)

	Territory	Territory
	Group 1	Group 2
Mobile Home Structures	64.3%	60.0%
Adjacent Structures	57.0%	53.9%
Comprehensive Personal Effects	45.3%	38.5%

#### STATED VALUE LOSS SETTLEMENT

When coverage is provided on a stated value basis, charge 3% of the premium from the premium rate table.

# North Carolina Mobile Homeowners MH(C) Program

**Section C** 

**Exhibits Supporting the Rate Indications** 

# North Carolina Mobile Homeowners MH(C) Program

## Exhibits Supporting the Rate Indications

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## North Carolina Mobile Homeowners MH(C)

## Determination of Statewide Indicated Rate Changes

		Mobile Home Structures	Adjacent Structures	Personal Effects	Liability
(1)	Total Base Class Loss Cost	\$257.81	\$10.88	\$14.77	\$14.69
(2)	<ul><li>(a) Fixed Expense per Policy</li><li>(b) Variable Expense per Policy</li><li>(c) Profit</li><li>(d) Contingencies</li><li>(e) Policyholder Dividends</li></ul>	\$81.25 19.80% 6.50% 1.00% 0.45%	\$4.70 19.80% 6.50% 1.00% 0.45%	\$8.04 19.80% 6.50% 1.00% 0.45%	\$5.20 19.80% 6.00% 1.00% 0.45%
(3)	Base Rate excl. Reinsurance Cost; = [(1) + (2a)] / [ 1 - (2b) - (2c) - (2d) - (2e) ]	\$469.29	\$21.57	\$31.57	\$27.35
(4)	Compensation for Assessment Risk per Policy	\$7.54	\$0.47	\$0.79	N/A
(5)	Net Cost of Reinsurance per Policy	\$111.12	\$7.51	\$6.56	N/A
(6)	Indicated Manual Base Rate; = (3) + (4) + (5)	\$587.95	\$29.55	\$38.92	\$27.35
(7)	Net Deviations	5.0%	5.0%	5.0%	5.0%
(8)	Required Base Rate; = (6) / [1 - (7)]	\$618.89	\$31.10	\$40.97	\$28.79
(9)	Average Current Base Rate	\$374.99	\$23.32	\$39.47	\$22.12
(10)	Indicated Rate Change; = (8) / (9) - 1	65.0%	33.4%	3.8%	30.1%
(11)	Proposed Rate Change - Year 1	28.2%	15.1%	1.4%	14.1%
(12)	Proposed Base Rate - Year 1; = (9) x [1 + (11)]	\$480.71	\$26.84	\$40.02	\$25.23
(13)	Proposed Rate Change - Year 2	28.7%	15.9%	2.4%	14.1%
(14)	Proposed Base Rate - Year 2; = (12) x [1 + (13)]	\$618.89	\$31.10	\$40.97	\$28.79

<sup>(1)</sup> From Section C, Pages 2, 4, 6, and 8

<sup>(2</sup>a), (9) From Section C, Page 70

<sup>(2</sup>b) From Section C, Page 71

<sup>(2</sup>c) See pre-filed testimony from G. Zanjani for support of the Profit provision

<sup>(2</sup>d) See pre-filed testimony from P. Anderson for support of the Contingencies provision

<sup>(2</sup>e) From Section C, Page 73

<sup>(4)</sup> From Section C, Page 74

<sup>(5)</sup> From Section C, Pages 75, 76, and 77

<sup>(7)</sup> From Section C, Page 78

<sup>(11), (13)</sup> Reflect selections by the North Carolina Rate Bureau

#### **Determination of Base Class Loss Cost**

	(1)	(2)	(3)	(4)	(5) = [(1) x (2)] / [(3) x (4	(6)	(7) = (5) / (6)	(8)
Accident Year	Non-Hurricane Ultimate Loss and LAE	Loss Trend Factor	Earned House Years	Premium Trend Factor	Trended Average Loss Cost	Average Rating Factor	Trended Base Class Loss Cost	Accident Year Weights
2017 2018 2019 2020 2021	\$20,646,962 25,977,110 21,081,794 28,740,170 27,070,402	1.726 1.628 1.536 1.449 1.367	83,438 81,149 79,096 81,762 82,585	1.229 1.194 1.160 1.128 1.096	\$347.52 436.42 352.74 451.60 408.81	1.862 1.905 1.959 2.019 2.087	\$186.62 229.07 180.05 223.64 195.86	10.0% 15.0% 20.0% 25.0% 30.0%
			(9) Weighted Average Non-Hurricane Base Class Loss Cost:					
					(11) Complemer	nt of Credibility:	\$125.75	
				(12	2) Credibility-Weigh	nted Loss Cost:	\$203.70	
				(13) Modeled	Hurricane Base Cl	ass Loss Cost:	\$54.11	
					(14) Total Base Cl	ass Loss Cost:	\$257.81	

<sup>(1)</sup> From Section C, Page 3

<sup>(2)</sup> From Section C, Page 55

<sup>(3)</sup> Based on data provided by member companies

<sup>(4)</sup> From Section C, Page 63

<sup>(6)</sup> From Section C, Page 64

<sup>(9)</sup> Average of (7) based on the weights in (8)

<sup>(10)</sup> Based on the Square Root Rule using a Full-Credibility Standard of 30,000 earned house years

<sup>(11)</sup> From Section C, Page 67

 $<sup>(12) = (9) \</sup>times (10) + (11) \times [1 - (10)]$ 

<sup>(13)</sup> From Section C, Page 68

<sup>(14) = (12) + (13)</sup> 

Determination of Non-Hurricane Ultimate Loss & LAE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017	\$18,182,387	\$1,222,490	\$0	1.075	1.043	\$18,962,584	1.000	\$18,962,584	1.089	\$20,646,962
2018	27,498,467	2,796,504	3,363,759	1.075	1.043	23,857,899	1.000	23,857,899	1.089	25,977,110
2019	18,485,958	1,186,180	0	1.075	1.043	19,342,600	1.001	19,361,943	1.089	21,081,794
2020	28,917,982	5,520,897	0	1.075	1.043	26,159,900	1.009	26,395,549	1.089	28,740,170
2021	21,425,845	0	276,378	1.075	1.043	23,646,874	1.051	24,862,001	1.089	27,070,402

<sup>(1)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 44

<sup>(3)</sup> From Section C, Page 46

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 47

<sup>(9)</sup> From Section C, Page 72

#### **Determination of Base Class Loss Cost**

	(1)	(2)	(3)	(4)	(5) = [(1) x (2)] / [(3) x (4)]	(6)	(7) = (5) / (6)	(8)
Accident Year	Non-Hurricane Ultimate Loss and LAE	Loss Trend Factor	Earned House Years	Premium Trend Factor	Trended Average Loss Cost	Average Rating Factor	Trended Base Class Loss Cost	Accident Year Weights
2017 2018 2019 2020 2021	\$920,384 1,758,855 1,069,806 1,695,433 1,700,622	1.441 1.372 1.307 1.245 1.185	73,871 71,938 70,003 71,719 72,369	1.394 1.330 1.269 1.211 1.155	\$12.88 25.23 15.74 24.30 24.11	2.632 2.735 2.873 3.015 3.165	\$4.89 9.22 5.48 8.06 7.62	10.0% 15.0% 20.0% 25.0% 30.0%
			(9) Weighte	d Average Non	-Hurricane Base Cla	ass Loss Cost:	\$7.27 100.0%	
					(11) Complement	,	\$9.02	
				`	2) Credibility-Weight		\$7.27	
				(13) Modeled	Hurricane Base Cla (14) Total Base Cla		\$3.61 \$10.88	

<sup>(1)</sup> From Section C, Page 5

<sup>(2)</sup> From Section C, Page 55

<sup>(3)</sup> Based on data provided by member companies

<sup>(4)</sup> From Section C, Page 63

<sup>(6)</sup> From Section C, Page 64

<sup>(9)</sup> Average of (7) based on the weights in (8)

<sup>(10)</sup> Based on the Square Root Rule using a Full-Credibility Standard of 80,000 earned house years

<sup>(11)</sup> From Section C, Page 67

 $<sup>(12) = (9) \</sup>times (10) + (11) \times [1 - (10)]$ 

<sup>(13)</sup> From Section C, Page 68

<sup>(14) = (12) + (13)</sup> 

#### Determination of Non-Hurricane Ultimate Loss & LAE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017	\$852,168	\$96,143	\$0	1.075	1.043	\$845,299	1.000	\$845,299	1.089	\$920,384
2018	1,998,028	263,649	291,058	1.075	1.043	1,613,754	1.001	1,615,368	1.089	1,758,855
2019	979,542	101,656	0	1.075	1.043	981,550	1.001	982,531	1.089	1,069,806
2020	1,888,143	505,164	0	1.075	1.043	1,546,287	1.007	1,557,120	1.089	1,695,433
2021	1,455,222	0	121,365	1.075	1.043	1,491,364	1.047	1,561,885	1.089	1,700,622

<sup>(1)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 44

<sup>(3)</sup> From Section C, Page 46

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 49

<sup>(9)</sup> From Section C, Page 72

#### **Determination of Base Class Loss Cost**

	(1)	(2)	(3)	(4)	(5) = [(1) x (2)] / [(3) x (4)]	(6)	(7) = (5) / (6)	(8)
Accident Year	Non-Hurricane Ultimate Loss and LAE	Loss Trend Factor	Earned House Years	Premium Trend Factor	Trended Average Loss Cost	Average Rating Factor	Trended Base Class Loss Cost	Accident Year Weights
2017 2018 2019 2020 2021	\$3,687,997 4,444,837 3,304,902 4,247,983 3,419,108	1.005 1.020 1.034 1.049 1.064	82,172 80,378 78,477 81,322 82,313	1.369 1.310 1.253 1.199 1.148	\$32.96 43.05 34.75 45.70 38.52	3.064 3.187 3.331 3.485 3.658	\$10.76 13.51 10.43 13.11 10.53	10.0% 15.0% 20.0% 25.0% 30.0%
			(9) Weighte	d Average Non	-Hurricane Base Clas	ss Loss Cost:  0) Credibility:	\$11.63 100.0%	
					(11) Complement	of Credibility:	\$9.66	
				(1	2) Credibility-Weighte	ed Loss Cost:	\$11.63	
				(13) Modelec	l Hurricane Base Clas	ss Loss Cost:	\$3.14	
					(14) Total Base Clas	ss Loss Cost:	\$14.77	

<sup>(1)</sup> From Section C, Page 7

<sup>(2)</sup> From Section C, Page 55

<sup>(3)</sup> Based on data provided by member companies

<sup>(4)</sup> From Section C, Page 63

<sup>(6)</sup> From Section C, Page 64

<sup>(9)</sup> Average of (7) based on the weights in (8)

<sup>(10)</sup> Based on the Square Root Rule using a Full-Credibility Standard of 100,000 earned house years

<sup>(11)</sup> From Section C, Page 67

 $<sup>(12) = (9) \</sup>times (10) + (11) \times [1 - (10)]$ 

<sup>(13)</sup> From Section C, Page 68

<sup>(14) = (12) + (13)</sup> 

#### Determination of Non-Hurricane Ultimate Loss & LAE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017	\$3,065,692	\$36,286	\$0	1.075	1.043	\$3,387,130	1.000	\$3,387,130	1.089	\$3,687,997
2018	4,974,043	228,087	1,094,863	1.075	1.043	4,082,227	1.000	4,082,227	1.089	4,444,837
2019	2,731,441	19,430	0	1.075	1.043	3,032,256	1.001	3,035,288	1.089	3,304,902
2020	3,689,788	207,364	0	1.075	1.043	3,893,641	1.002	3,901,433	1.089	4,247,983
2021	2,886,920	0	106,239	1.075	1.043	3,109,034	1.010	3,140,178	1.089	3,419,108

<sup>(1)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 44

<sup>(3)</sup> From Section C, Page 46

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 51

<sup>(9)</sup> From Section C, Page 72

## North Carolina Mobile Homeowners MH(C) - Liability

#### **Determination of Base Class Loss Cost**

	(1)	(2)	(3)	(4)	(5) = [(1) x (2)] / [(3) x (4	(6)	(7) = (5) / (6)	(8)
Accident Year	Ultimate Loss and LAE	Loss Trend Factor	Earned House Years	Premium Trend Factor	Trended Average Loss Cost	Average Rating Factor	Trended Basic Limits Loss Cost	Accident Year Weights
2017 2018 2019 2020 2021	\$867,849 1,209,177 1,269,691 1,190,016 1,323,370	1.714 1.587 1.469 1.360 1.260	81,778 79,908 77,894 80,700 81,935	1.067 1.057 1.048 1.039 1.029	\$17.05 22.71 22.86 19.32 19.77	1.317 1.326 1.337 1.352 1.363	\$12.94 17.13 17.09 14.28 14.50	10.0% 15.0% 20.0% 25.0% 30.0%
				(9) Weighte	d Average Base C	lass Loss Cost:	\$15.20 45.2%	
				(12	(11) Complemen  2) Credibility-Weigh	ŕ	\$14.27 \$14.69	

<sup>(1)</sup> From Section C, Page 9

<sup>(2)</sup> From Section C, Page 56

<sup>(3)</sup> Based on data provided by member companies

<sup>(4)</sup> From Section C, Page 63

<sup>(6)</sup> From Section C, Page 65

<sup>(9)</sup> Average of (7) based on the weights in (8)

<sup>(10)</sup> Based on the Square Root Rule using a Full-Credibility Standard of 1,970,000 earned house years

<sup>(11)</sup> From Section C, Page 67

 $<sup>(12) = (9) \</sup>times (10) + (11) \times [1 - (10)]$ 

## North Carolina Mobile Homeowners MH(C) - Liability

#### Determination of Ultimate Loss & LAE

	(1)	(2)	(3) = (1) x (2)	(4)	(5) = (3) $\times$ (4)
Accident Year	Incurred Loss & ALAE	Loss & ALAE Development Factor	Ultimate Loss & ALAE	ULAE Factor	Ultimate Loss and LAE
2017	\$797,050	1.000	\$797,050	1.089	\$867,849
2018	1,135,513	0.978	1,110,532	1.089	1,209,177
2019	1,219,163	0.956	1,166,110	1.089	1,269,691
2020	1,047,350	1.044	1,092,935	1.089	1,190,016

1,215,409

1.089

1.140

1,323,370

1,066,590

2021

<sup>(1)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 53

<sup>(4)</sup> From Section C, Page 72

Determination of Indicated Rate Change by Territory Group

	(1)	(2)	(3) = (2)(Statewide) / (2)	(4)	(5)	(6) = [(1) + (3)] / [1 - (4)	(7)	(8)	(9) = (6) + (7) + (8)	(10)	(11) = (9) + (10)	(12) = (11) / (5) - 1	(13)	(14)	(15)
			x (3)(Statewide)												
		2021							Indicated		Indicated		Balanced	Proposed	Proposed
	Indicated	Average	Trended		Average		Compensation		Base Rate		Required	Indicated	Indicated	Year 1	Year 2
Territory	Base Class	Rating	Fixed	Variable	Current	Indicated Net	for Assessment	Net Cost of	Excluding	Net Deviation	Base Class	Rate	Rate	Rate	Rate
Group	Loss Cost	Factor	Expenses	Expenses	Base Rate	Base Rate	Risk	Reinsurance	Deviation	Per Exposure	Rate	Change	Change	Change	Change
1	\$535.34	1.847	\$91.82	27.8%	\$758.70	\$868.04	\$15.25	\$533.45	\$1,416.75	\$74.57	\$1,491.31	96.6%	96.9%	40.3%	40.3%
2	394.21	1.884	90.01	27.8%	673.20	670.20	13.54	312.63	996.36	52.44	1,048.80	55.8%	56.1%	24.9%	24.9%
3	340.34	1.816	93.39	27.8%	438.37	600.32	8.81	248.31	857.44	45.13	902.57	105.9%	106.3%	43.6%	43.6%
4	309.94	2.218	76.45	27.8%	422.92	534.79	8.50	160.08	703.37	37.02	740.39	75.1%	75.4%	32.4%	32.4%
5	249.14	2.200	77.10	27.8%	380.39	451.55	7.65	106.74	565.93	29.79	595.72	56.6%	56.9%	25.3%	25.3%
6	202.00	2.184	77.64	27.8%	307.51	387.04	6.18	36.79	430.02	22.63	452.65	47.2%	47.5%	21.4%	21.4%
Statewide	\$257.81	2.087	\$81.25	27.8%	\$374.99	\$469.29	\$7.54	\$111.12	\$587.95	\$30.94	\$618.89	64.7%	65.0%	28.2%	28.7%

<sup>(1)</sup> From Section C, Page 11

<sup>(2), (5)</sup> From Section C, Page 66

<sup>(3)</sup> Statewide from Section C, Page 1

<sup>(4)</sup> From Section C, Page 71. Includes Commission and Brokerage expense; Taxes, Licenses, and Fees; Profit; Contingencies; and Policyholder Dividends

<sup>(7) = (5)</sup> x 0.020; Reflects 2.0% Compensation for Assessment Risk from Section C, Page 74, Row (5)

<sup>(8)</sup> From Section C, Page 75

<sup>(10) = (9) / [ 1 - 0.05 ] - (9);</sup> Reflects 5% Net Deviation selected on Section C, Page 78

<sup>(12)</sup> Statewide based on premium-weighted average using the 2021 earned premium at current manual level

<sup>(13) = [1 + (12)]/[1 + (12)</sup> Statewide] x [1 + (13) Statewide]; Statewide (13) from Section C, Page 1

<sup>(14), (15)</sup> From Section A, Page 2

Determination of Indicated Base Class Loss Cost by Territory Group

	(1)	(2)	(3)	(4)	(5)	(6) = (4) / (4) Statewid	(7)	(8)	(9)	(10) = (9) / (9) Statewide	(11)
						= (4) / (4) Statewid	e		= (7) + (8)	= (9) / (9) Statewide	
Territory	Non-Hurricane Base Class	Five Year Earned		Credibility Weighted Non-Hurricane Base Class	2021 Earned	Indicated	Indicated Non-Hurricane Base Class	Modeled Hurricane Base Class	Total	Indicated	Indicated Base Class
Group	Loss Cost	House Years	Credibility	Loss Cost	House Years	Relativity	Loss Cost	Loss Cost	Loss Cost	Relativity	Loss Cost
Oroup		110000 10010	Orodibility		110000 10010						
1	\$179.97	10,301	58.6%	\$189.80	1,972	0.943	\$192.15	\$348.71	\$540.87	2.076	\$535.34
2	226.79	15,694	72.3%	220.40	2,749	1.095	223.14	175.14	398.28	1.529	394.21
3	225.22	66,795	100.0%	225.22	13,320	1.119	228.02	115.83	343.86	1.320	340.34
4	240.00	49,288	100.0%	240.00	9,888	1.193	242.98	70.16	313.14	1.202	309.94
5	204.05	53,612	100.0%	204.05	10,891	1.014	206.59	45.13	251.71	0.966	249.14
6	183.72	212,326	100.0%	183.72	43,762	0.913	186.01	18.08	204.09	0.784	202.00
Statewide	\$203.70	408,016		\$201.20	82,583	1.000	\$203.70	\$54.11	\$260.48	1.000	\$257.81

<sup>(1)</sup> From Section C, Pages 13 through 18; Statewide from Section C, Page 2

<sup>(2), (5)</sup> Based on data provided by member companies

<sup>(3)</sup> Based on the Square Root Rule using a Full-Credibility Standard of 30,000 earned house years

<sup>(4) = (1)</sup> x (3) + (1) Statewide x [ 1 - (3) ]

<sup>(7) = (6)</sup> x (7) Statewide; (7) Statewide From Section C, Page 2

<sup>(8)</sup> From Section C, Page 12

<sup>(11) = (10)</sup> x (11) Statewide; (11) Statewide From Section C, Page 2

Determination of Modeled Hurricane Base Class Lost Cost by Territory Group

	(1)	(2)	(3)	(4)	(5) = (1) / [(2) x (3) x (4)]
Territory	Trended Modeled Hurricane	2021 Earned	2021 Premium Trend	2021 Average Rating	Modeled Hurricane Base Class
Group	Loss & LAE	House Years	Factor	Factor	Loss Cost
1	\$1,391,898	1,972	1.096	1.847	\$348.71
2	994,209	2,749	1.096	1.884	175.14
3	3,070,392	13,319	1.096	1.816	115.83
4	1,686,293	9,887	1.096	2.218	70.16
5	1,184,676	10,891	1.096	2.200	45.13
6	1,893,776	43,761	1.096	2.184	18.08
Statewide	\$10,221,245	82,580	1.096	2.087	\$54.11

<sup>(1)</sup> Provided by Aon

<sup>(2)</sup> Based on data provided by member companies; excludes exposure where amount of insurance is unavailable

<sup>(3)</sup> From Section C, Page 63

<sup>(4)</sup> From Section C, Page 66

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$257,291 985,349 283,818 470,804 278,149	\$8,336 170,613 12,203 30,726	\$0 4,492 0 0	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$278,353 905,921 303,688 492,044 310,994	1.000 1.000 1.001 1.009 1.051	\$278,353 905,921 303,992 496,476 326,975	1.089 1.089 1.089 1.089 1.089	\$303,078 986,390 330,995 540,576 356,019
	(11)	(12)	(13) = [(	(14) (10) x (11)] / [(12) x	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.726 1.628 1.536 1.449 1.367	Earned House Years 2,215 2,111 2,018 1,984 1,972	Premium Trend Factor 1.229 1.194 1.160 1.128 1.096	Trended Average Loss Cost \$192.13 637.01 217.06 350.06 225.15	Earned Premium at Current Manual Level \$2,740,637 2,661,124 2,621,311 2,668,371 2,752,109	Earned Premium at Current Base \$1,672,825 1,594,669 1,523,734 1,499,431 1,490,134	Average Rating Factor  1.638 1.669 1.720 1.780 1.847	Trended Base Class Loss Cost \$117.27 381.72 126.17 196.71 121.91	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	-

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$179.97

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 19

<sup>(3)</sup> From Section C, Page 20

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [ (1) - (2) - (3) ] \</sup>times [ (4) + (5) - 1 ]$ 

<sup>(7)</sup> From Section C, Page 47

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$559,928 2,012,694 686,369 851,383 619,566	\$24,186 427,552 45,646 174,536	\$0 4,297 0 0	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$599,005 1,767,518 716,382 756,772 692,727	1.000 1.000 1.001 1.009 1.051	\$599,005 1,767,518 717,099 763,589 728,323	1.089 1.089 1.089 1.089 1.089	\$652,212 1,924,520 780,796 831,416 793,018
	(11)	(12)	(13) = [(	(14) 10) x (11)] / [(12) x	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.726 1.628 1.536 1.449 1.367	Earned House Years 3,627 3,366 3,061 2,890 2,749	Premium Trend Factor  1.229 1.194 1.160 1.128 1.096	Trended Average Loss Cost \$252.52 779.48 337.53 369.64 359.75	Earned Premium at Current Manual Level \$4,200,016 3,955,942 3,679,615 3,558,694 3,478,215	Earned Premium at Current Base \$2,434,023 2,260,229 2,054,372 1,940,253 1,846,020	Average Rating Factor 1.726 1.750 1.791 1.834 1.884	Trended Base Class Loss Cost \$146.34 445.36 188.45 201.53 190.93	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$226.79

(1), (12) Based on data provided by member companies

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

<sup>(2)</sup> From Section C, Page 19

<sup>(3)</sup> From Section C, Page 20

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 47

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017	\$2,983,096	\$150,955	\$0	1.075	1.043	\$3,166,571	1.000	\$3,166,571	1.089	\$3,447,846
2018	6,849,319	555,969	2,771,367	1.075	1.043	3,937,872	1.000	3,937,872	1.089	4,287,659
2019	2,682,599	169,916	0	1.075	1.043	2,809,389	1.001	2,812,199	1.089	3,061,996
2020	4,603,771	904,667	0	1.075	1.043	4,135,907	1.009	4,173,163	1.089	4,543,850
2021	3,336,738	0	0	1.075	1.043	3,730,753	1.051	3,922,463	1.089	4,270,881
	(11)	(12)	(13) = [(	(14) (10) x (11)] / [(12) x (	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year	Loss Trend Factor	Earned House Years	Premium Trend Factor	Trended Average Loss Cost	Earned Premium at Current Manual Level	Earned Premium at Current Base	Average Rating Factor	Trended Base Class Loss Cost	Accident Year Weights	_
2017	1.726	13,929	1.229	\$347.63	\$9,985,521	\$6,085,908	1.641	\$211.87	10.0%	
2018	1.628	13,365	1.194	437.38	9,783,866	5,847,035	1.673	261.39	15.0%	
2019	1.536	12,840	1.160	315.61	9,593,825	5,616,623	1.708	184.77	20.0%	
2020	1.449	13,342	1.128	437.55	10,335,444	5,840,371	1.770	247.25	25.0%	
	1.367	13,320	1.096	399.88	10,591,276	5,832,432	1.816	220.21	30.0%	

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$225.22

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 19

<sup>(3)</sup> From Section C, Page 20

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 47

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident	Non-Hurricane Incurred	Excess Wind	Excess Flood	Excess Wind	Excess Flood	Adjusted Non-Hurricane Incurred	Loss & ALAE Development	Non-Hurricane Ultimate	ULAE	Non-Hurricane Ultimate Loss
Year	Loss & ALAE	Loss & ALAE	Loss & ALAE	Loss Factor	Loss Factor	Loss & ALAE	Factor	Loss & ALAE	Factor	and LAE
2017	\$2,564,224	\$138,125	\$0	1.075	1.043	\$2,712,582	1.000	\$2,712,582	1.089	\$2,953,531
2018	3,868,248	359,132	313,925	1.075	1.043	3,572,492	1.000	3,572,492	1.089	3,889,823
2019	3,485,942	295,538	0	1.075	1.043	3,567,139	1.001	3,570,707	1.089	3,887,880
2020	4,588,638	870,596	0	1.075	1.043	4,157,082	1.009	4,194,529	1.089	4,567,114
2021	2,758,958	0	0	1.075	1.043	3,084,746	1.051	3,243,259	1.089	3,531,346
	(11)	(12)	(13)	(14) (10) x (11)] / [(12) x (	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year	Loss Trend Factor	Earned House Years	Premium Trend Factor	Trended Average Loss Cost	Earned Premium at Current Manual Level	Earned Premium at Current Base	Average Rating Factor	Trended Base Class Loss Cost	Accident Year Weights	-
2017	1.726	10,027	1.229	\$413.67	\$8,473,033	\$4,232,025	2.002	\$206.62	10.0%	
2018	1.628	9,835	1.194	539.19	8,485,454	4,150,670	2.044	263.74	15.0%	
2019	1.536	9,644	1.160	533.51	8,540,898	4,069,686	2.099	254.22	20.0%	
2020	1.449	9,893	1.128	593.08	9,014,376	4,176,492	2.158	274.78	25.0%	
	1.367	9,888	1.096	445.39	9,261,992	4,175,349	2.218	200.78	30.0%	

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$240.00

(1), (12) Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 19

<sup>(3)</sup> From Section C, Page 20

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 47

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident	Non-Hurricane Incurred	Excess Wind	Excess Flood	Excess Wind	Excess Flood	Adjusted Non-Hurricane Incurred	Loss & ALAE Development	Non-Hurricane Ultimate	ULAE	Non-Hurricane Ultimate Loss
Year	Loss & ALAE	Loss & ALAE	Loss & ALAE	Loss Factor	Loss Factor	Loss & ALAE	Factor	Loss & ALAE	Factor	and LAE
2017	\$2,629,042	\$264,783	\$0	1.075	1.043	\$2,643,440	1.000	\$2,643,440	1.089	\$2,878,247
2018	3,003,250	354,175	165,477	1.075	1.043	2,776,870	1.000	2.776.870	1.089	3,023,529
2019	3,065,246	264,583	0	1.075	1.043	3,131,376	1.001	3,134,508	1.089	3,412,935
2020	3,948,649	838,719	0	1.075	1.043	3,477,162	1.009	3,508,484	1.089	3,820,130
2021	3,085,933	0	0	1.075	1.043	3,450,331	1.051	3,627,631	1.089	3,949,860
	(11)	(12)	(13) = [(	(14) (10) x (11)] / [(12) x (	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
					Earned	Earned				
	Loss	Earned	Premium	Trended	Premium	Premium	Average	Trended	Accident	
Accident	Trend	House	Trend	Average	at Current	at Current	Rating	Base Class	Year	
Year	Factor	Years	Factor	Loss Cost	Manual Level	Base	Factor	Loss Cost	Weights	_
2017	1.726	10,983	1.229	\$368.02	\$8,273,783	\$4,164,487	1.987	\$185.24	10.0%	
2018	1.628	10,657	1.194	386.77	8,213,864	4,040,821	2.033	190.27	15.0%	
2019	1.536	10,348	1.160	436.50	8,183,487	3,924,121	2.085	209.31	20.0%	
2020	1.449	10,733	1.128	457.29	8,712,563	4,072,030	2.140	213.72	25.0%	
2021	1.367	10,891	1.096	452.32	9,093,374	4,134,224	2.200	205.64	30.0%	

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$204.05

(1), (12) Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 19

<sup>(3)</sup> From Section C, Page 20

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 47

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates. See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$9,188,253 10,746,107 8,270,089 14,449,827 11,313,559	\$636,106 929,063 398,294 2,701,653 0	\$0 104,201 0 0 276,378	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$9,562,016 10,859,772 8,801,326 13,135,442 12,340,492	1.000 1.000 1.001 1.009 1.051	\$9,562,016 10,859,772 8,810,127 13,253,766 12,974,625	1.089 1.089 1.089 1.089 1.089	\$10,411,376 11,824,406 9,592,699 14,431,050 14,127,114
	(11)	(12)	(13) = [(	(14) 10) x (11)] / [(12) x	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.726 1.628 1.536 1.449 1.367	Earned House Years 42,653 41,811 41,182 42,919 43,762	Premium Trend Factor  1.229 1.194 1.160 1.128 1.096	Trended Average Loss Cost \$342.80 385.55 308.28 431.98 402.60	Earned Premium at Current Manual Level \$25,297,129 25,416,575 25,797,335 27,696,386 29,333,993	Earned Premium at Current Base \$13,078,924 12,821,382 12,629,505 13,168,620 13,429,444	Average Rating Factor 1.934 1.982 2.043 2.103 2.184	Trended Base Class Loss Cost \$177.23 194.49 150.92 205.39 184.32	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	-

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$183.72

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 19

<sup>(3)</sup> From Section C, Page 20

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 47

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

Allocation of Excess Wind Loss & ALAE to Territory Group

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Distribution of	Wind & Hail Los	s by Territory G	roup by Year		
Accident	Territory	Territory	Territory	Territory	Territory	Territory	
Year	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Statewide
2017	0.682%	1.978%	12.348%	11.299%	21.659%	52.034%	100.000%
2018	6.101%	15.289%	19.881%	12.842%	12.665%	33.222%	100.000%
2019	1.029%	3.848%	14.325%	24.915%	22.305%	33.578%	100.000%
2020	0.557%	3.161%	16.386%	15.769%	15.192%	48.935%	100.000%
2021	1.091%	1.537%	14.995%	16.101%	19.441%	46.835%	100.000%
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
		= (1) x (8)	= (2) x (8)	= (3) x (8)	$= (4) \times (8)$	= (5) x (8)	= (6) x (8)
			Exces	s Wind Loss & A	LAE		
Accident		Territory	Territory	Territory	Territory	Territory	Territory
Year	Statewide	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
2017	\$1,222,490	\$8,336	\$24,186	\$150,955	\$138,125	\$264,783	\$636,106
2018	2,796,504	170,613	427,552	555,969	359,132	354,175	929,063
2019	1,186,180	12,203	45,646	169,916	295,538	264,583	398,294
2020	5,520,897	30,726	174,536	904,667	870,596	838,719	2,701,653
2021	0	0	0	0	0	0	0

<sup>(1) - (6)</sup> Based on data provided by member companies

<sup>(7) =</sup> Sum of (1) through (6)

<sup>(8)</sup> From Section C, Page 44

Allocation of Excess Flood Loss & ALAE to Territory Group

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Distribution	of Flood Loss b	y Territory Grou	p by Year		
Accident	Territory	Territory	Territory	Territory	Territory	Territory	
Year	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Statewide
2017	29.954%	0.000%	14.249%	0.000%	0.000%	55.797%	100.000%
2018	0.134%	0.128%	82.389%	9.333%	4.919%	3.098%	100.000%
2019	0.000%	0.000%	0.000%	0.000%	5.303%	94.697%	100.000%
2020	0.000%	0.000%	10.119%	39.335%	2.094%	48.452%	100.000%
2021	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	100.000%
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	(0)	$= (1) \times (8)$	$= (2) \times (8)$	$= (3) \times (8)$	$= (4) \times (8)$	$= (5) \times (8)$	$= (6) \times (8)$
			Exces	s Flood Loss & A	ALAE		
Accident		Territory	Territory	Territory	Territory	Territory	Territory
Year	Statewide	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
2017	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	3,363,759	4,492	4,297	2,771,367	313,925	165,477	104,201
2019	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0
2021	276,378	0	0	0	0	0	276,378

<sup>(1) - (6)</sup> Based on data provided by member companies

<sup>(7) =</sup> Sum of (1) through (6)

<sup>(8)</sup> From Section C, Page 46

#### Determination of Indicated Rate Change by Territory Group

	(1)	(2)	(3) = (2)(Statewide) / (2)	(4)	(5)	(6) = [(1) + (3)] / [1 - (4)	(7)	(8)	(9) = (6) + (7) + (8)	(10)	(11) = (9) + (10)	(12) = (11) / (5) - 1	(13)	(14)	(15)
			x (3)(Statewide)												
		2021							Indicated		Indicated		Balanced	Proposed	Proposed
	Indicated	Average	Trended		Average		Compensation		Base Rate		Required	Indicated	Indicated	Year 1	Year 2
Territory	Base Class	Rating	Fixed	Variable	Current	Indicated Net	for Assessment	Net Cost of	Excluding	Net Deviation	Base Class	Rate	Rate	Rate	Rate
Group	Loss Cost	Factor	Expenses	Expenses	Base Rate	Base Rate	Risk	Reinsurance	Deviation	Per Exposure	Rate	Change	Change	Change	Change
1	\$30.55	2.294	\$6.49	27.8%	\$52.88	\$51.27	\$1.06	\$37.72	\$90.06	\$4.74	\$94.80	79.3%	80.2%	34.2%	34.2%
2	19.42	2.653	5.61	27.8%	48.64	34.64	0.98	21.93	57.55	3.03	60.58	24.5%	25.2%	11.9%	11.9%
3	15.69	2.744	5.43	27.8%	28.09	29.23	0.56	18.13	47.92	2.52	50.44	79.6%	80.5%	34.4%	34.4%
4	11.43	3.552	4.19	27.8%	27.15	21.63	0.55	10.98	33.16	1.75	34.90	28.6%	29.2%	13.7%	13.7%
5	9.89	3.481	4.28	27.8%	24.39	19.61	0.49	7.21	27.31	1.44	28.74	17.8%	18.5%	8.8%	8.8%
6	8.43	3.292	4.52	27.8%	18.33	17.93	0.37	2.62	20.92	1.10	22.02	20.2%	20.8%	9.9%	9.9%
Statewide	\$10.88	3.165	\$4.70	27.8%	\$23.32	\$21.57	\$0.47	\$7.51	\$29.55	\$1.56	\$31.10	32.7%	33.4%	15.1%	15.9%

<sup>(1)</sup> From Section C, Page 22

<sup>(2), (5)</sup> From Section C, Page 66

<sup>(3)</sup> Statewide from Section C, Page 1

<sup>(4)</sup> From Section C, Page 71. Includes Commission and Brokerage expense; Taxes, Licenses, and Fees; Profit; Contingencies; and Policyholder Dividends

<sup>(7) = (5)</sup> x 0.020; Reflects 2.0% Compensation for Assessment Risk from Section C, Page 74, Row (5)

<sup>(8)</sup> From Section C, Page 76

<sup>(10) = (9) / [ 1 - 0.05 ] - (9);</sup> Reflects 5% Net Deviation selected on Section C, Page 78

<sup>(12)</sup> Statewide based on premium-weighted average using the 2021 earned premium at current manual level

<sup>(13) = [1 + (12)]/[1 + (12)</sup> Statewide] x [1 + (13) Statewide]; Statewide (13) from Section C, Page 1

<sup>(14), (15)</sup> From Section A, Page 2

Determination of Indicated Base Class Loss Cost by Territory Group

	(1)	(2)	(3)	(4)	(5)	(6) = (4) / (4) Statewide	(7)	(8)	(9) = (7) + (8)	(10) = (9) / (9) Statewide	(11)
Territory Group	Non-Hurricane Base Class Loss Cost	Five Year Earned House Years	Credibility	Credibility Weighted Non-Hurricane Base Class Loss Cost	2021 Earned House Years	Indicated Relativity	Indicated Non-Hurricane Base Class Loss Cost	Modeled Hurricane Base Class Loss Cost	Total Loss Cost	Indicated Relativity	Indicated Base Class Loss Cost
1	\$4.97	7,961	31.5%	\$6.54	1,489	0.912	\$6.63	\$24.58	\$31.21	2.808	\$30.55
2	7.85	13,520	41.1%	7.51	2,318	1.046	7.60	12.23	19.84	1.785	19.42
3	7.49	54,689	82.7%	7.45	10,886	1.038	7.55	8.48	16.03	1.442	15.69
4	6.62	43,703	73.9%	6.79	8,731	0.946	6.88	4.81	11.68	1.051	11.43
5	6.86	45,793	75.7%	6.96	9,266	0.970	7.05	3.05	10.10	0.909	9.89
6	7.24	194,220	100.0%	7.24	39,679	1.009	7.33	1.28	8.61	0.775	8.43
Statewide	\$7.27	359,887		\$7.18	72,368	1.000	\$7.27	\$3.61	\$11.11	1.000	\$10.88

<sup>(1)</sup> From Section C, Pages 24 through 29; Statewide from Section C, Page 4

<sup>(2), (5)</sup> Based on data provided by member companies

<sup>(3)</sup> Based on the Square Root Rule using a Full-Credibility Standard of 80,000 earned house years

<sup>(4) = (1)</sup> x (3) + (1) Statewide x [ 1 - (3) ]

<sup>(7) = (6)</sup> x (7) Statewide; (7) Statewide From Section C, Page 4

<sup>(8)</sup> From Section C, Page 23

<sup>(11) = (10)</sup> x (11) Statewide; (11) Statewide From Section C, Page 4

Determination of Modeled Hurricane Base Class Lost Cost by Territory Group

	(1)	(2)	(3)	(4)	(5) = (1) / [(2) x (3) x (4)]
Territory	Trended Modeled Hurricane	2021 Earned	2021 Premium Trend	2021 Average Rating	Modeled Hurricane Base Class
Group	Loss & LAE	House Years	Factor	Factor	Loss Cost
1	\$97,048	1,489	1.155	2.294	\$24.58
2	86,918	2,318	1.155	2.653	12.23
3	292,754	10,885	1.155	2.744	8.48
4	172,174	8,731	1.155	3.552	4.81
5	113,788	9,266	1.155	3.481	3.05
6	193,047	39,678	1.155	3.292	1.28
Statewide	\$955,728	72,367	1.155	3.165	\$3.61

<sup>(1)</sup> Provided by Aon

<sup>(2)</sup> Based on data provided by member companies; excludes exposure where amount of insurance is unavailable

<sup>(3)</sup> From Section C, Page 63

<sup>(4)</sup> From Section C, Page 66

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$4,641 78,009 1,710 5,927 7,804	\$644 17,343 0 1,643	\$0 0 0 0	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$4,468 67,829 1,912 4,790 8,725	1.000 1.001 1.001 1.007 1.047	\$4,468 67,897 1,914 4,823 9,138	1.089 1.089 1.089 1.089 1.089	\$4,865 73,928 2,084 5,252 9,949
	(11)	(12)	(13) = [(	(14) (10) x (11)] / [(12) x	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020	Loss Trend Factor  1.441 1.372 1.307 1.245	Earned House Years 1,757 1,660 1,551	Premium Trend Factor  1.394 1.330 1.269 1.211	Trended Average Loss Cost \$2.86 45.96 1.38 3.59	Earned Premium at Current Manual Level \$183,002 177,821 171,256 175,937	Earned Premium at Current Base \$92,721 87,581 81,738	Average Rating Factor  1.974 2.030 2.095 2.217	Trended Base Class Loss Cost  \$1.45 22.64 0.66 1.62	Accident Year Weights 10.0% 15.0% 20.0% 25.0%	-
2020	1.245 1.185	1,505 1,489	1.211 1.155	6.85	175,937	79,341 78,458	2.217	1.62 2.99	30.0%	

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$4.97

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 30

<sup>(3)</sup> From Section C, Page 31

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 49

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$16,015 201,279 24,132 46,645 17,778	\$2,723 52,428 2,107 16,655 0	\$0 0 0 0	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$14,862 166,428 24,625 33,532 19,878	1.000 1.001 1.001 1.007 1.047	\$14,862 166,594 24,650 33,767 20,818	1.089 1.089 1.089 1.089 1.089	\$16,182 181,392 26,839 36,766 22,667
	(11)	(12)	(13) = [(	(14) (10) x (11)] / [(12) x	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.441 1.372 1.307 1.245 1.185	Earned House Years  3,162 2,929 2,643 2,469 2,318	Premium Trend Factor  1.394 1.330 1.269 1.211 1.155	Trended Average Loss Cost \$5.29 63.90 10.46 15.31 10.03	Earned Premium at Current Manual Level \$351,764 331,632 314,638 304,161 299,046	Earned Premium at Current Base \$153,744 142,481 128,563 120,086 112,727	Average Rating Factor  2.288 2.328 2.447 2.533 2.653	Trended Base Class Loss Cost  \$2.31 27.45 4.27 6.04 3.78	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	-

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$7.85

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 30

<sup>(3)</sup> From Section C, Page 31

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 49

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$104,949 546,446 134,169 252,133 163,224	\$9,828 65,389 12,824 64,781	\$0 251,500 0 0	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$106,354 256,664 135,674 209,475 182,499	1.000 1.001 1.001 1.007 1.047	\$106,354 256,920 135,810 210,943 191,128	1.089 1.089 1.089 1.089 1.089	\$115,801 279,742 147,874 229,680 208,106
	(11)	(12)	(13) = [(	(14) 10) x (11)] / [(12) x	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.441 1.372 1.307 1.245 1.185	Earned House Years 11,385 10,977 10,534 10,907 10,886	Premium Trend Factor  1.394 1.330 1.269 1.211 1.155	Trended Average Loss Cost \$10.51 26.30 14.46 21.65 19.61	Earned Premium at Current Manual Level \$729,182 732,102 734,594 804,944 838,950	Earned Premium at Current Base \$319,752 308,258 295,816 306,297 305,701	Average Rating Factor  2.280 2.375 2.483 2.628 2.744	Trended Base Class Loss Cost  \$4.61 11.07 5.82 8.24 7.15	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	-

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$7.49

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 30

<sup>(3)</sup> From Section C, Page 31

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 49

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$97,474 165,407 205,672 226,317 160,575	\$6,607 26,767 29,586 60,432 0	\$0 16,394 0 0	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$101,597 136,681 196,879 185,473 179,536	1.000 1.001 1.001 1.007 1.047	\$101,597 136,818 197,075 186,773 188,025	1.089 1.089 1.089 1.089 1.089	\$110,622 148,971 214,581 203,363 204,727
	(11)	(12)	(13) = [(	(14) 10) x (11)] / [(12) x (	(15) [13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.441 1.372 1.307 1.245 1.185	Earned House Years 8,922 8,736 8,572 8,742 8,731	Premium Trend Factor 1.394 1.330 1.269 1.211 1.155	Trended Average Loss Cost \$12.82 17.60 25.78 23.91 24.06	Earned Premium at Current Manual Level \$729,792 741,631 761,873 812,294 841,130	Earned Premium at Current Base \$242,124 237,029 232,605 237,159 236,800	Average Rating Factor 3.014 3.129 3.275 3.425 3.552	Trended Base Class Loss Cost \$4.25 5.62 7.87 6.98 6.77	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	-

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$6.62

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 30

<sup>(3)</sup> From Section C, Page 31

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 49

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$154,348 184,292 154,320 169,034 226,407	\$22,635 27,245 16,373 40,196	\$0 10,187 0 0	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$147,266 164,202 154,236 144,052 253,142	1.000 1.001 1.001 1.007 1.047	\$147,266 164,366 154,391 145,061 265,112	1.089 1.089 1.089 1.089 1.089	\$160,347 178,966 168,105 157,946 288,661
	(11)	(12)	(13) = [(	(14) [10) x (11)] / [(12) x	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.441 1.372 1.307 1.245 1.185	Earned House Years 9,384 9,138 8,881 9,124 9,266	Premium Trend Factor 1.394 1.330 1.269 1.211 1.155	Trended Average Loss Cost \$17.66 20.21 19.49 17.79 31.96	Earned Premium at Current Manual Level \$685,300 688,467 697,820 746,101 786,106	Earned Premium at Current Base \$228,747 222,748 216,490 222,419 225,851	Average Rating Factor 2.996 3.091 3.223 3.354 3.481	Trended Base Class Loss Cost  \$5.90 6.54 6.05 5.30 9.18	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	-

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$6.86

(1), (12) Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 30

<sup>(3)</sup> From Section C, Page 31

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 49

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$474,742 820,034 459,539 1,188,087 879,434	\$53,707 74,477 40,766 321,457 0	\$0 12,977 0 0 121,365	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$470,752 819,086 468,223 968,965 847,585	1.000 1.001 1.001 1.007 1.047	\$470,752 819,905 468,692 975,754 887,664	1.089 1.089 1.089 1.089 1.089	\$512,568 892,734 510,324 1,062,426 966,512
	(11)	(12)	(13) = [(	(14) 10) x (11)] / [(12) x	(15) (13)]	(16)	(17) = (15) / (16)	(18) = (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.441 1.372 1.307 1.245 1.185	Earned House Years 39,258 38,494 37,820 38,969 39,679	Premium Trend Factor  1.394 1.330 1.269 1.211 1.155	Trended Average Loss Cost \$13.50 23.93 13.90 28.02 24.99	Earned Premium at Current Manual Level \$1,943,174 1,986,969 2,053,987 2,219,623 2,392,729	Earned Premium at Current Base  \$719,124 705,120 692,760 713,839 726,834	Average Rating Factor 2.702 2.818 2.965 3.109 3.292	Trended Base Class Loss Cost \$5.00 8.49 4.69 9.01 7.59	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	-

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$7.24

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 30

<sup>(3)</sup> From Section C, Page 31

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 49

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

Allocation of Excess Wind Loss & ALAE to Territory Group

(4)

Group 3

\$9,828

65,389

12,824

64,781

0

(5)

Group 4

\$6,607

26,767

29,586

60,432

(6)

Group 5

\$22,635

27,245

16,373

40,196

(7)

Group 6

\$53,707

74,477

40,766

321,457

(3)

Group 2

\$2,723

52,428

2,107

16,655

0

		Distribution o	f Wind & Hail Lo	ss by Territory G	Group by Year		
Accident	Territory	Territory	Territory	Territory	Territory	Territory	
Year	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Statewide
2017	0.670%	2.832%	10.222%	6.872%	23.543%	55.861%	100.000%
2018	6.578%	19.885%	24.802%	10.153%	10.334%	28.249%	100.000%
2019	0.000%	2.073%	12.615%	29.104%	16.106%	40.101%	100.000%
2020	0.325%	3.297%	12.824%	11.963%	7.957%	63.634%	100.000%
2021	1.240%	0.534%	13.427%	13.951%	15.291%	55.557%	100.000%
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
		$= (1) \times (8)$	$= (2) \times (8)$	$= (3) \times (8)$	$= (4) \times (8)$	$= (5) \times (8)$	$= (6) \times (8)$
			Exces	ss Wind Loss &	ALAE		
Accident		Territory	Territory	Territory	Territory	Territory	Territory

0

Statewide

\$96,143

263,649

101,656

505,164

(1)

(2)

Group 1

\$644

0

0

17,343

1,643

Year

2017

2018

2019

2020

2021

<sup>(1) - (6)</sup> Based on data provided by member companies

<sup>(7) =</sup> Sum of (1) through (6)(8) From Section C, Page 44

Allocation of Excess Flood Loss & ALAE to Territory Group

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Dietribution	of Flood Loop b	v Torritory Crow	n hy Voor		
Accident	Territory	Territory	of Flood Loss b Territory	Territory Grou	Territory	Territory	
	,	•	,	,	,	,	Statowida
Year	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Statewide
2017	0.000%	0.000%	19.733%	0.000%	0.000%	80.267%	100.000%
2018	0.000%	0.000%	86.409%	5.633%	3.500%	4.458%	100.000%
2019	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	100.000%
2020	0.000%	0.000%	12.583%	17.923%	0.000%	69.494%	100.000%
2021	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	100.000%
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
		$= (1) \times (8)$	= (2) x (8)	$= (3) \times (8)$	$= (4) \times (8)$	$= (5) \times (8)$	$= (6) \times (8)$
			Excess	s Flood Loss & A	ALAE		
Accident		Territory	Territory	Territory	Territory	Territory	Territory
Year	Statewide	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
2017	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	291,058	0	0	251,500	16,394	10,187	12,977
2019	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0
2021	121,365	0	0	0	0	0	121,365

<sup>(1) - (6)</sup> Based on data provided by member companies

<sup>(7) =</sup> Sum of (1) through (6)

<sup>(8)</sup> From Section C, Page 46

#### Determination of Indicated Rate Change by Territory Group

	(1)	(2)	(3) = (2)(Statewide) / (2)	(4)	(5)	(6) = [(1) + (3)] / [1 - (4)	(7)	(8)	(9) = (6) + (7) + (8)	(10)	(11) = (9) + (10)	(12) = (11) / (5) - 1	(13)	(14)	(15)
			x (3)(Statewide)												
		2021							Indicated		Indicated		Balanced	Proposed	Proposed
	Indicated	Average	Trended		Average		Compensation		Base Rate		Required	Indicated	Indicated	Year 1	Year 2
Territory	Base Class	Rating	Fixed	Variable	Current	Indicated Net	for Assessment	Net Cost of	Excluding	Net Deviation	Base Class	Rate	Rate	Rate	Rate
Group	_Loss Cost_	Factor	Expenses	Expenses	Base Rate	_Base Rate_	Risk	Reinsurance	Deviation	Per Exposure	Rate	Change	Change	Change	Change
1	\$50.71	2.663	\$11.05	27.8%	\$91.81	\$85.47	\$1.85	\$69.20	\$156.52	\$8.24	\$164.75	79.4%	80.9%	34.5%	34.5%
2	30.02	2.930	10.04	27.8%	72.14	55.45	1.45	36.80	93.70	4.93	98.63	36.7%	37.8%	17.4%	17.4%
3	19.31	3.189	9.22	27.8%	45.75	39.49	0.92	14.10	54.52	2.87	57.38	25.4%	26.4%	12.4%	12.4%
4	14.96	4.056	7.25	27.8%	39.85	30.74	0.80	7.37	38.92	2.05	40.97	2.8%	3.6%	1.8%	1.8%
5	12.23	3.854	7.63	27.8%	37.19	27.49	0.75	4.49	32.73	1.72	34.45	-7.4%	-6.6%	-3.4%	-3.4%
6	11.51	3.900	7.54	27.8%	33.83	26.37	0.68	1.54	28.59	1.50	30.09	-11.0%	-10.3%	-5.3%	-5.3%
Statewide	\$14.77	3.658	\$8.04	27.8%	\$39.47	\$31.57	\$0.79	\$6.56	\$38.92	\$2.05	\$40.97	3.0%	3.8%	1.4%	2.4%

<sup>(1)</sup> From Section C, Page 33

<sup>(2), (5)</sup> From Section C, Page 66

<sup>(3)</sup> Statewide from Section C, Page 1

<sup>(4)</sup> From Section C, Page 71. Includes Commission and Brokerage expense; Taxes, Licenses, and Fees; Profit; Contingencies; and Policyholder Dividends

<sup>(7) = (5)</sup> x 0.020; Reflects 2.0% Compensation for Assessment Risk from Section C, Page 74, Row (5)

<sup>(8)</sup> From Section C, Page 77

<sup>(10) = (9) / [ 1 - 0.05 ] - (9);</sup> Reflects 5% Net Deviation selected on Section C, Page 78

<sup>(12)</sup> Statewide based on premium-weighted average using the 2021 earned premium at current manual level

<sup>(13) = [1 + (12)]/[1 + (12)</sup> Statewide] x [1 + (13) Statewide]; Statewide (13) from Section C, Page 1

<sup>(14), (15)</sup> From Section A, Page 2

#### Determination of Indicated Base Class Loss Cost by Territory Group

	(1)	(2)	(3)	(4)	(5)	(6) = (4) / (4) Statewide	(7)	(8)	(9) = (7) + (8)	(10) = (9) / (9) Statewide	(11)
Territory Group	Non-Hurricane Base Class Loss Cost	Five Year Earned House Years	Credibility	Credibility Weighted Non-Hurricane Base Class Loss Cost	2021 Earned House Years	Indicated Relativity	Indicated Non-Hurricane Base Class Loss Cost	Modeled Hurricane Base Class Loss Cost	Total Loss Cost	Indicated Relativity	Indicated Base Class Loss Cost
1	\$9.50	9,937	31.5%	\$10.96	1,905	0.962	\$11.18	\$40.99	\$52.17	3.434	\$50.71
2	12.88	15,471	39.3%	12.12	2,704	1.064	12.37	18.52	30.89	2.033	30.02
3	13.76	65,052	80.7%	13.35	13,054	1.172	13.63	6.24	19.87	1.308	19.31
4	12.12	48,756	69.8%	11.97	9,826	1.051	12.22	3.17	15.39	1.013	14.96
5	10.02	52,432	72.4%	10.46	10,729	0.919	10.68	1.90	12.58	0.828	12.23
6	10.88	213,001	100.0%	10.88	44,093	0.955	11.10	0.74	11.84	0.779	11.51
Statewide	\$11.63	404,650		\$11.39	82,312	1.000	\$11.63	\$3.14	\$15.19	1.000	\$14.77

<sup>(1)</sup> From Section C, Pages 35 through 40; Statewide from Section C, Page 6

<sup>(2), (5)</sup> Based on data provided by member companies

 $<sup>(3) \</sup> Based \ on \ the \ Square \ Root \ Rule \ using \ a \ Full-Credibility \ Standard \ of \ 100,000 \ earned \ house \ years$ 

<sup>(4) = (1)</sup> x (3) + (1) Statewide x [ 1 - (3) ]

<sup>(7) = (6)</sup> x (7) Statewide; (7) Statewide From Section C, Page 6

<sup>(8)</sup> From Section C, Page 34

<sup>(11) = (10)</sup> x (11) Statewide; (11) Statewide From Section C, Page 6

Determination of Modeled Hurricane Base Class Lost Cost by Territory Group

	(1)	(2)	(3)	(4)	(5) = (1) / [(2) x (3) x (4)]
	Trended Modeled	2021	2021 Premium	2021 Average	Modeled Hurricane
Territory	Hurricane	Earned	Trend	Rating	Base Class
Group	Loss & LAE	House Years	Factor	Factor	Loss Cost
1	\$238,707	1,905	1.148	2.663	\$40.99
2	168,348	2,704	1.148	2.930	18.52
3	298,152	13,054	1.148	3.189	6.24
4	144,974	9,826	1.148	4.056	3.17
5	90,146	10,729	1.148	3.854	1.90
6	145,788	44,093	1.148	3.900	0.74
Statewide	\$1,086,116	82,312	1.148	3.658	\$3.14

<sup>(1)</sup> Provided by Aon

<sup>(2)</sup> Based on data provided by member companies; excludes exposure where amount of insurance is unavailable

<sup>(3)</sup> From Section C, Page 63

<sup>(4)</sup> From Section C, Page 66

## North Carolina Mobile Homeowners MH(C) - Personal Effects Territory Group 1

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017	\$32,072	\$0	\$0	1.075	1.043	\$35,859	1.000	\$35,859	1.089	\$39,044
2018	179,570	32,311	0	1.075	1.043	164,648	1.000	164,648	1.089	179,273
2019	17,411	164	0	1.075	1.043	19,284	1.001	19,303	1.089	21,018
2020	77,099	2,195	0	1.075	1.043	83,750	1.002	83,917	1.089	91,371
2021	1,383	0	0	1.075	1.043	1,546	1.010	1,562	1.089	1,700
	(11)	(12)	(13)	(14) 10) x (11)] / [(12) x (	(15) (13)]	(16)	(17) (15) / (16)	(18) (14) / (17)	(19)	
					Earned	Earned				
	Loss	Earned	Premium	Trended	Premium	Premium	Average	Trended	Accident	
Accident	Trend	House	Trend	Average	at Current	at Current	Rating	Base Class	Year	
Year	Factor	Years	Factor	Loss Cost	Manual Level	Base	Factor	Loss Cost	Weights	-
2017	1.005	2,130	1.369	\$13.46	\$479,548	\$194,831	2.461	\$5.47	10.0%	
2018	1.020	2,039	1.310	68.44	465,221	186,569	2.494	27.45	15.0%	
2019	1.034	1,948	1.253	8.90	450,781	178,097	2.531	3.52	20.0%	
2020	1.049	1,915	1.199	41.75	452,396	175,085	2.584	16.16	25.0%	
2021	1.064	1,905	1.148	0.83	463,938	174,209	2.663	0.31	30.0%	

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$9.50

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 41

<sup>(3)</sup> From Section C, Page 42

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 51

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$74,466 335,484 49,788 67,922 112,700	\$700 65,868 2,924 8,574	\$0 1,565 0 0	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$82,477 299,704 52,397 66,356 126,008	1.000 1.000 1.001 1.002 1.010	\$82,477 299,704 52,450 66,489 127,270	1.089 1.089 1.089 1.089 1.089	\$89,803 326,326 57,109 72,395 138,575
	(11)	(12)	(13) = [(	(14) (10) x (11)] / [(12) x	(15)	(16)	(17) (15) / (16)	(18) (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.005 1.020 1.034 1.049 1.064	Earned House Years 3,566 3,331 3,021 2,849 2,704	Premium Trend Factor  1.369 1.310 1.253 1.199 1.148	Trended Average Loss Cost \$18.49 76.26 15.60 22.23 47.52	Earned Premium at Current Manual Level \$680,642 646,677 604,265 585,167 570,202	Earned Premium at Current Base \$256,893 239,997 217,599 205,145 194,635	Average Rating Factor 2.650 2.695 2.777 2.852 2.930	Trended Base Class Loss Cost \$6.98 28.30 5.62 7.79 16.22	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	-

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$12.88

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 41

<sup>(3)</sup> From Section C, Page 42

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 51

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019 2020 2021	\$579,053 1,639,713 454,520 525,825 492,616	\$7,398 59,740 5,114 19,941 0	\$0 912,662 0 0	1.075 1.075 1.075 1.075 1.075	1.043 1.043 1.043 1.043 1.043	\$639,158 746,109 502,474 565,620 550,786	1.000 1.000 1.001 1.002 1.010	\$639,158 746,109 502,977 566,752 556,303	1.089 1.089 1.089 1.089 1.089	\$695,932 812,383 547,654 617,094 605,718
	(11)	(12)	(13) = [(	(14) 10) x (11)] / [(12) x	(15) (13)]	(16)	(17) (15) / (16)	(18) (14) / (17)	(19)	
Accident Year 2017 2018 2019 2020 2021	Loss Trend Factor  1.005 1.020 1.034 1.049 1.064	Earned House Years  13,433 12,997 12,505 13,063 13,054	Premium Trend Factor  1.369 1.310 1.253 1.199 1.148	Trended Average Loss Cost \$38.05 48.66 36.14 41.33 43.03	Earned Premium at Current Manual Level \$1,705,609 1,702,232 1,688,951 1,842,324 1,903,362	Earned Premium at Current Base \$614,214 594,301 571,772 597,277 596,850	Average Rating Factor 2.777 2.864 2.954 3.085 3.189	Trended Base Class Loss Cost \$13.70 16.99 12.24 13.40 13.49	Accident Year Weights 10.0% 15.0% 20.0% 25.0% 30.0%	-

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$13.76

(1), (12) Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 41

<sup>(3)</sup> From Section C, Page 42

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 51

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates. See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018	\$558,992 639,221	\$433 17.419	\$0 49,531	1.075 1.075	1.043	\$624,516 639,847	1.000	\$624,516 639.847	1.089 1.089	\$679,989 696,682
2019 2020	362,339 580,962	1,706 24,265	49,531 0 0	1.075 1.075 1.075	1.043 1.043 1.043	403,218 622,434	1.000 1.001 1.002	403,621 623.679	1.089	439,473 679.079
2021	278,696	0	0	1.075	1.043	311,605	1.010	314,726	1.089	342,682
	(11)	(12)	(13)	(14) (10) x (11)] / [(12) x	(15) (13)]	(16)	(17) (15) / (16)	(18) (14) / (17)	(19)	
Accident Year	Loss Trend Factor	Earned House Years	Premium Trend Factor	Trended Average Loss Cost	Earned Premium at Current Manual Level	Earned Premium at Current Base	Average Rating Factor	Trended Base Class Loss Cost	Accident Year Weights	_
2017	1.005	9,856	1.369	\$50.67	\$1,351,036	\$392,513	3.442	\$14.72	10.0%	
2018	1.020	9,713	1.310	55.84	1,383,727	386,813	3.577	15.61	15.0%	
2019 2020	1.034	9,553	1.253	37.97	1,419,213	380,464	3.730	10.18	20.0%	
	1.049	9,809	1.199	60.56 32.34	1,523,720	390,622 391,240	3.901 4.056	15.53 7.97	25.0% 30.0%	

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$12.12

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 41

<sup>(3)</sup> From Section C, Page 42

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 51

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
Accident Year	Non-Hurricane Incurred Loss & ALAE	Excess Wind Loss & ALAE	Excess Flood Loss & ALAE	Excess Wind Loss Factor	Excess Flood Loss Factor	Adjusted Non-Hurricane Incurred Loss & ALAE	Loss & ALAE Development Factor	Non-Hurricane Ultimate Loss & ALAE	ULAE Factor	Non-Hurricane Ultimate Loss and LAE
2017 2018 2019	\$255,614 491,022 329,326	\$1,211 9,173 2,662	\$0 104,468 0	1.075 1.075 1.075	1.043 1.043 1.043	\$284,444 421,943 365,238	1.000 1.000 1.001	\$284,444 421,943 365,603	1.089 1.089 1.089	\$309,711 459,423 398,078
2020 2021	416,444 409,015	28,931 0	0	1.075 1.075	1.043 1.043	433,272 457,313	1.002 1.010	434,139 461,894	1.089 1.089	472,702 502,922
	(11)	(12)	(13) = [(	(14) 10) x (11)] / [(12) x (	(15) [13)]	(16)	(17) (15) / (16)	(18) (14) / (17)	(19)	
Accident Year	Loss Trend Factor	Earned House Years	Premium Trend Factor	Trended Average Loss Cost	Earned Premium at Current Manual Level	Earned Premium at Current Base	Average Rating Factor	Trended Base Class Loss Cost	Accident Year Weights	_
2017 2018	1.005 1.020	10,637 10,391	1.369 1.310	\$21.38 34.42	\$1,302,826 1,319,136	\$395,260 386,082	3.296 3.417	\$6.49 10.07	10.0% 15.0%	
2019 2020 2021	1.034 1.049 1.064	10,134 10,541 10,729	1.253 1.199 1.148	32.42 39.23 43.47	1,339,288 1,446,348 1,536,256	376,516 391,603 398,637	3.557 3.693 3.854	9.11 10.62 11.28	20.0% 25.0% 30.0%	

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$10.02

<sup>(1), (12)</sup> Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 41

<sup>(3)</sup> From Section C, Page 42

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 51

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

#### Determination of Non-Hurricane Base Class Loss Cost

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (6) x (7)	(9)	(10) = (8) x (9)
	Non-Hurricane					Adjusted Non-Hurricane	Loss & ALAE	Non-Hurricane		Non-Hurricane
Accident	Incurred	Excess Wind	Excess Flood	Excess Wind	Excess Flood	Incurred	Development	Ultimate	ULAE	Ultimate Loss
Year	Loss & ALAE	Loss & ALAE	Loss & ALAE	Loss Factor	Loss Factor	Loss & ALAE	Factor	Loss & ALAE	Factor	and LAE
2017	\$1,564,008	\$26,543	\$0	1.075	1.043	\$1,719,015	1.000	\$1,719,015	1.089	\$1,871,709
2018	1,670,571	43,576	26,637	1.075	1.043	1,789,335	1.000	1,789,335	1.089	1,948,275
2019	1,518,057	6,860	0	1.075	1.043	1,689,645	1.001	1,691,334	1.089	1,841,569
2020	2,021,204	123,458	0	1.075	1.043	2,121,839	1.002	2,126,085	1.089	2,314,937
2021	1,584,242	0	106,239	1.075	1.043	1,652,531	1.010	1,669,084	1.089	1,817,343
	(11)	(12)	(13)	(14) 10) x (11)] / [(12) x (	(15) 13)]	(16)	(17) (15) / (16)	(18) (14) / (17)	(19)	
Accident Year	Loss Trend Factor	Earned House Years	Premium Trend Factor	Trended Average Loss Cost	Earned Premium at Current Manual Level	Earned Premium at Current Base	Average Rating Factor	Trended Base Class Loss Cost	Accident Year Weights	_
2017	1.005	42,548	1.369	\$32.31	\$4,567,509	\$1,437,927	3.176	\$10.17	10.0%	
2018	1.020	41,904	1.310	36.20	4,714,322	1,416,198	3.329	10.87	15.0%	
2019	1.034	41,313	1.253	36.79	4,892,224	1,396,151	3.504	10.50	20.0%	
2020	1.049	43,143	1.199	46.94	5,365,429	1,458,094	3.680	12.76	25.0%	
2021	1.064	44,093	1.148	38.22	5,811,580	1,490,182	3.900	9.80	30.0%	

(20) Weighted Average Non-Hurricane Base Class Loss Cost:

\$10.88

(1), (12) Based on data provided by member companies

<sup>(2)</sup> From Section C, Page 41

<sup>(3)</sup> From Section C, Page 42

<sup>(4)</sup> From Section C, Page 43

<sup>(5)</sup> From Section C, Page 45

 $<sup>(6) = [(1) - (2) - (3)] \</sup>times [(4) + (5) - 1]$ 

<sup>(7)</sup> From Section C, Page 51

<sup>(9)</sup> From Section C, Page 72

<sup>(11)</sup> From Section C, Page 55

<sup>(13)</sup> From Section C, Page 63

<sup>(15), (16)</sup> Based on data provided by member companies and the extension of exposures method

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(20)</sup> Average of (18) based on the weights in (19)

# North Carolina Mobile Homeowners MH(C) - Personal Effects

Allocation of Excess Wind Loss & ALAE to Territory Group

(4)

(5)

(6)

(7)

Distribution of Wind & Hail Loss by Territony Group by Year

(3)

Distribution of Wind & Hail Loss by Territory Group by Year									
Accident	Territory	Territory	Territory	Territory	Territory	Territory			
Year	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Statewide		
2017	0.000%	1.930%	20.389%	1.193%	3.337%	73.151%	100.000%		
2018	14.166%	28.878%	26.192%	7.637%	4.022%	19.105%	100.000%		
2019	0.843%	15.051%	26.318%	8.778%	13.702%	35.308%	100.000%		
2020	1.058%	4.135%	9.617%	11.702%	13.952%	59.537%	100.000%		
2021	0.000%	6.607%	3.846%	11.994%	11.518%	66.035%	100.000%		
	(8)	(9) = (1) x (8)	(10) = (2) x (8)	(11) = (3) x (8)	(12) = (4) x (8)	(13) = (5) x (8)	(14) = (6) x (8)		

	Excess Wind Loss & ALAE											
Accident		Territory	Territory	Territory	Territory	Territory	Territory					
Year	Statewide	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6					
2017	\$36,286	\$0	\$700	\$7,398	\$433	\$1,211	\$26,543					
2018	228,087	32,311	65,868	59,740	17,419	9,173	43,576					
2019	19,430	164	2,924	5,114	1,706	2,662	6,860					
2020	207,364	2,195	8,574	19,941	24,265	28,931	123,458					
2021	0	0	0	0	0	0	0					

<sup>(1) - (6)</sup> Based on data provided by member companies

(1)

(2)

<sup>(7) =</sup> Sum of (1) through (6)

<sup>(8)</sup> From Section C, Page 44

# North Carolina Mobile Homeowners MH(C) - Personal Effects

Allocation of Excess Flood Loss & ALAE to Territory Group

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Distribution	of Flood Loss by	y Territory Grou	p by Year		
Accident	Territory	Territory	Territory	Territory	Territory	Territory	
Year	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Statewide
2017	23.712%	0.000%	66.885%	0.000%	0.000%	9.403%	100.000%
2018	0.000%	0.143%	83.359%	4.524%	9.542%	2.433%	100.000%
2019	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	100.000%
2020	0.000%	0.000%	7.266%	15.650%	0.000%	77.084%	100.000%
2021	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	100.000%
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	, ,	$= (1) \times (8)$	= (2) x (8)	= (3) x (8)	$= (4) \times (8)$	$= (5) \times (8)$	$= (6) \times (8)$
			Excess	s Flood Loss & A	LAE		
Accident		Territory	Territory	Territory	Territory	Territory	Territory
Year	Statewide	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
2017	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	1,094,863	0	1,565	912,662	49,531	104,468	26,637
2019	0	0	0	0	0	0	0

0

0

0

0

0

0

0

0

0

106,239

106,239

2020

2021

<sup>(1) - (6)</sup> Based on data provided by member companies

<sup>(7) =</sup> Sum of (1) through (6)

<sup>(8)</sup> From Section C, Page 46

Derivation of Excess Wind Loss Factor (Excluding Hurricane)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
				= (1) - (2) - (3)	= (2) / (4)	= Min [ (5),	= (6) - Avg (6)	$= (4) \times (7)$	= (5) - (6)	$= (4) \times (9)$	= (8) + (10)
						5 x Median (5)					
	Total			Total	Wind Losses /				_	_	Total
	Incurred	Incurred	Incurred	Losses	Total Losses		Capped	Capped	Excess	Excess	Non-Hurricane
Accident	Losses	Wind	Flood	Excl Wind	Excl Wind	Capped	Excess	Excess	Wind Ratio	Wind Losses	Excess Wind
Year	Excl Liability	Losses	Losses	& Flood	& Flood	Wind Ratio	Wind Ratio	Wind Losses	Above Cap	Above Cap	Losses
2004	\$21,994,189	\$5,717,246	\$400,177	\$15,876,766	0.360	0.360	0.000	\$0	0.000	\$0	\$0
2005	14,884,753	2,200,881	123,350	12,560,522	0.175	0.175	0.000	0	0.000	0	0
2006	14,847,200	1,908,553	109,405	12,829,241	0.149	0.149	0.000	0	0.000	0	0
2007	17,149,469	3,051,562	60,372	14,037,535	0.217	0.217	0.000	0	0.000	0	0
2008	20,610,416	5,211,614	50,725	15,348,077	0.340	0.340	0.000	0	0.000	0	0
2009	21,475,822	5,048,405	78,870	16,348,547	0.309	0.309	0.000	0	0.000	0	0
2010	20,149,390	4,373,515	612,421	15,163,454	0.288	0.288	0.000	0	0.000	0	0
2011	34,053,302	18,092,295	272,375	15,688,632	1.153	1.153	0.655	10,276,054	0.000	0	10,276,054
2012	24,098,406	8,442,937	34,345	15,621,124	0.540	0.540	0.042	656,087	0.000	0	656,087
2013	22,528,121	6,957,160	503,488	15,067,473	0.462	0.462	0.000	0	0.000	0	0
2014	23,231,413	6,353,558	35,923	16,841,932	0.377	0.377	0.000	0	0.000	0	0
2015	23,379,659	8,478,127	28,725	14,872,807	0.570	0.570	0.072	1,070,842	0.000	0	1,070,842
2016	31,666,613	11,938,312	6,318,619	13,409,682	0.890	0.890	0.392	5,256,595	0.000	0	5,256,595
2017	18,941,629	7,056,782	34,863	11,849,984	0.596	0.596	0.098	1,161,298	0.000	0	1,161,298
2018	29,429,359	10,203,612	4,371,905	14,853,842	0.687	0.687	0.189	2,807,376	0.000	0	2,807,376
2019	18,978,296	6,982,652	229,748	11,765,896	0.593	0.593	0.095	1,117,760	0.000	0	1,117,760
2020	29,360,388	13,212,313	262,385	15,885,690	0.832	0.832	0.334	5,305,820	0.000	0	5,305,820
2021	22,645,836	6,606,293	765,557	15,273,986	0.433	0.433	0.000	0	0.000	0	0
Total	\$409,424,262	\$131,835,818	\$14,293,254	\$263,295,190	0.501			\$27,651,834		\$0	\$27,651,834
				Average:	0.498	0.498	0.104		0.000		
				ŭ							
			Medi	an of Column (5):	0.448						
			Median o	of Column (5) x 5:	2.240						
<b>-</b>	Wind Lass <b>-</b>	.to= 4 . [ / A/7\		\(C) \(7\\ 1	4.075						
EXC	cess Wind Loss Fac	S(O) = 1 + [(Avg(7) - (Avg(7) - (A	+ Avg(9)) / (1.0 + A	4vg(0) - Avg(1)) ]:	1.075						

(1), (2), (3) Based on data provided by member companies

Derivation of Excess Wind Loss & ALAE by Coverage (Excluding Hurricane)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					= (2) + (3) + (4)	= (2) / (5)	= (3) / (5)	= (4) / (5)			= (10) / (9)	= (1) x (6) x (11)	= (1) x (7) x (11)	= (1) x (8) x (11)
	Total						Distribution of		Total	Total		Alloc	cated Non-Hurric	ane
	Non-Hurricane		Incurred W	ind Losses		Wind	Losses by Cove	erage	Incurred	Incurred		Excess Wind	d Loss & ALAE b	y Coverage
Accident	Excess Wind	Mobile Home	Adjacent	Personal		Mobile	Adjacent	Personal	Losses	Loss & ALAE	Non-Hurricane	Mobile Home	Adjacent	Personal
Year	Losses	Structures	Structures	Effects	Total	Homes	Structures	Effects	Excl Liability	Excl Liability	ALAE Factor	Structures	Structures	Effects
2017	\$1,161,298	\$6,367,058	\$500,740	\$188,985	\$7,056,782	90.2%	7.1%	2.7%	\$18,941,629	\$22,099,722	1.167	\$1,222,490	\$96,143	\$36,286
2018	2,807,376	8,677,725	818,119	707,769	10,203,612	85.0%	8.0%	6.9%	29,429,359	34,470,188	1.171	2,796,504	263,649	228,087
2019	1,117,760	6,335,881	542,990	103,782	6,982,652	90.7%	7.8%	1.5%	18,978,296	22,195,892	1.170	1,186,180	101,656	19,430
2020	5,305,820	11,702,044	1,070,741	439,528	13,212,313	88.6%	8.1%	3.3%	29,360,388	34,493,399	1.175	5,520,897	505,164	207,364
2021	0	5,947,199	544,868	114,226	6,606,293	90.0%	8.2%	1.7%	22,645,836	25,766,337	1.138	0	0	0
Total	\$10,392,255	\$39,029,906	\$3,477,457	\$1,554,289	\$44,061,652				\$119,355,509	\$139,025,538		\$10,726,071	\$966,612	\$491,167

<sup>(1)</sup> From Section C, Page 43, Column (11)

<sup>(2), (3), (4), (9), (10)</sup> Based on data provided by member companies

Derivation of Excess Flood Loss Factor (Excluding Hurricane)

	(1)	(2)	(3)	(4) = (1) - (2) - (3)	(5) = (3) / (4)	(6) = Min [ (5), 5 x Median (5) ]	(7) = (6) - Avg (6)	(8) = (4) x (7)	(9) = (5) - (6)	(10) = (4) x (9)	(11) = (8) + (10)
Accident Year	Total Incurred Losses Excl Liability	Incurred Wind Losses	Incurred Flood Losses	Total Losses Excl Wind & Flood	Flood Losses / Total Losses Excl Wind & Flood	Capped Flood Ratio	Capped Excess Flood Ratio	Capped Excess Flood Losses	Excess Flood Ratio Above Cap	Excess Flood Losses Above Cap	Total Non-Hurricane Excess Flood Losses
2004	\$21,994,189	\$5,717,246	\$400,177	\$15,876,766	0.025	0.025	0.004	\$63,507	0.000	\$0	\$63,507
2005	14,884,753	2,200,881	123,350	12,560,522	0.010	0.010	0.000	0	0.000	0	0
2006	14,847,200	1,908,553	109,405	12,829,241	0.009	0.009	0.000	0	0.000	0	0
2007	17,149,469	3,051,562	60,372	14,037,535	0.004	0.004	0.000	0	0.000	0	0
2008	20,610,416	5,211,614	50,725	15,348,077	0.003	0.003	0.000	0	0.000	0	0
2009	21,475,822	5,048,405	78,870	16,348,547	0.005	0.005	0.000	0	0.000	0	0
2010	20,149,390	4,373,515	612,421	15,163,454	0.040	0.040	0.019	288,106	0.000	0	288,106
2011	34,053,302	18,092,295	272,375	15,688,632	0.017	0.017	0.000	0	0.000	0	0
2012	24,098,406	8,442,937	34,345	15,621,124	0.002	0.002	0.000	0	0.000	0	0
2013	22,528,121	6,957,160	503,488	15,067,473	0.033	0.033	0.012	180,810	0.000	0	180,810
2014	23,231,413	6,353,558	35,923	16,841,932	0.002	0.002	0.000	0	0.000	0	0
2015	23,379,659	8,478,127	28,725	14,872,807	0.002	0.002	0.000	0	0.000	0	0
2016	31,666,613	11,938,312	6,318,619	13,409,682	0.471	0.070	0.049	657,074	0.401	5,377,283	6,034,357
2017	18,941,629	7,056,782	34,863	11,849,984	0.003	0.003	0.000	0	0.000	0	0
2018	29,429,359	10,203,612	4,371,905	14,853,842	0.294	0.070	0.049	727,838	0.224	3,327,261	4,055,099
2019	18,978,296	6,982,652	229,748	11,765,896	0.020	0.020	0.000	0	0.000	0	0
2020	29,360,388	13,212,313	262,385	15,885,690	0.017	0.017	0.000	0	0.000	0	0
2021	22,645,836	6,606,293	765,557	15,273,986	0.050	0.050	0.029	442,946	0.000	0	442,946
Total	\$409,424,262	\$131,835,818	\$14,293,254	\$263,295,190	0.054			\$2,360,281		\$8,704,543	\$11,064,824
				Average:	0.056	0.021	0.009		0.035		
			Medi	an of Column (5):	0.014						
				of Column (5) x 5:	0.070						
			Modian	,, Column (0, x 0.	0.070						
Exce	ess Flood Loss Fac	tor = 1 + [(Avg(7) - (Avg(7) - (Av	+ Avg(9)) / (1.0 + A	Avg(6) - Avg(7)) ]:	1.043						

(1), (2), (3) Based on data provided by member companies

Derivation of Excess Flood Loss & ALAE by Coverage (Excluding Hurricane)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					= (2) + (3) + (4)	= (2) / (5)	= (3) / (5)	= (4) / (5)			= (10) / (9)	= (1) x (6) x (11)	= (1) x (7) x (11)	= (1) x (8) x (11)
	Total						Distribution of		Total	Total		Alloc	cated Non-Hurric	ane
	Non-Hurricane		Incurred Flo	ood Losses		Floor	d Losses by Cove	erage	Incurred	Incurred		Excess Floo	d Loss & ALAE I	by Coverage
Accident	Excess Flood	Mobile Home	Adjacent	Personal		Mobile	Adjacent	Personal	Losses	Loss & ALAE	Non-Hurricane	Mobile Home	Adjacent	Personal
Year	Losses	Structures	Structures	Effects	Total	Homes	Structures	Effects	Excl Liability	Excl Liability	ALAE Factor	Structures	Structures	Effects
2017	\$0	\$27,227	\$4,049	\$3,587	\$34,863	78.1%	11.6%	10.3%	\$18,941,629	\$22,099,722	1.167	\$0	\$0	\$0
2018	4,055,099	3,096,216	267,908	1,007,781	4,371,905	70.8%	6.1%	23.1%	29,429,359	34,470,188	1.171	3,363,759	291,058	1,094,863
2019	0	161,152	16,228	52,368	229,748	70.1%	7.1%	22.8%	18,978,296	22,195,892	1.170	0	0	0
2020	0	121,087	57,141	84,157	262,385	46.1%	21.8%	32.1%	29,360,388	34,493,399	1.175	0	0	0
2021	442,946_	419,823	184,356	161,379	765,557	54.8%	24.1%	21.1%	22,645,836	25,766,337	1.138	276,378	121,365	106,239
Total	\$4,498,044	\$3,825,506	\$529,682	\$1,309,271	\$5,664,458				\$119,355,509	\$139,025,538		\$3,640,137	\$412,422	\$1,201,102

<sup>(1)</sup> From Section C, Page 45, Column (11)

<sup>(2), (3), (4), (9), (10)</sup> Based on data provided by member companies

# North Carolina Mobile Homeowners MH(C) - Mobile Home Structures

Derivation of Non-Catastrophe Incurred Loss and ALAE Development Factors - All Companies Combined

						Months of D	evelopment					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	87	<u>99</u>	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>
2010	15,269,345	15,426,187	15,462,852	15,526,813	15,537,307	15,577,609	15,583,131	15,585,415	15,586,015	15,586,015	15,586,015	15,586,015
2011	19,390,365	19,577,956	19,645,414	19,668,950	19,720,253	19,744,944	19,760,702	19,764,852	19,766,857	19,766,857	19,766,857	
2012	18,924,318	19,444,536	19,477,721	19,514,351	19,530,241	19,545,904	19,548,552	19,548,452	19,548,452	19,549,030		
2013	18,464,460	18,865,279	18,966,072	18,972,217	18,978,651	18,983,391	18,984,453	18,984,453	18,984,453			
2014	19,503,324	19,997,632	20,014,543	20,030,123	20,037,145	20,044,480	20,045,436	20,045,436				
2015	18,286,068	18,788,937	18,810,237	18,821,342	18,821,612	18,819,386	18,817,817					
2016	17,043,313	17,538,165	17,657,270	17,718,711	17,718,711	17,721,105						
2017	13,563,225	14,199,035	14,382,963	14,355,801	14,359,889							
2018	15,898,444	16,615,238	16,749,555	16,787,607								
2019	15,881,339	16,436,275	16,576,791									
2020	19,158,275	20,227,889										
2021	17,930,129											
					Loss D	Development F	actors					
	15-27	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	63-75	75-87	87-99	99-111	111-123	<u>123-135</u>	135-147	
2010	1.010	1.002	1.004	1.001	1.003	1.000	1.000	1.000	1.000	1.000	1.000	
2011	1.010	1.003	1.001	1.003	1.001	1.001	1.000	1.000	1.000	1.000		
2012	1.027	1.002	1.002	1.001	1.001	1.000	1.000	1.000	1.000			
2013	1.022	1.005	1.000	1.000	1.000	1.000	1.000	1.000				
2014	1.025	1.001	1.001	1.000	1.000	1.000	1.000					
2015	1.028	1.001	1.001	1.000	1.000	1.000						
2016	1.029	1.007	1.003	1.000	1.000							
2017	1.047	1.013	0.998	1.000								
2018	1.045	1.008	1.002									
2019	1.035	1.009										
2020	1.056											
Avg	1.030	1.005	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd Avg	1.030	1.005	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	
5-Yr Avg	1.042	1.008	1.001	1.000	1.000	1.000	1.000	-	-	-	-	
5-Yr Wtd Avg	1.043	1.007	1.001	1.000	1.000	1.000	1.000	-	-	-	-	
5-Yr Excl Hi/Lo	1.042	1.008	1.001	1.000	1.000	1.000	1.000	-	-	-	-	
Selected	1.042	1.008	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.051	1.009	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

# North Carolina Mobile Homeowners MH(C) - Mobile Home Structures

Derivation of Non-Catastrophe Reported Claims Development Factors - All Companies Combined

						Months of De	velopment					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>
2010	5,994	6,092	6,110	6,111	6,115	6,115	6,120	6,120	6,121	6,121	6,121	6,121
2011	6,273	6,468	6,495	6,504	6,507	6,515	6,519	6,520	6,520	6,520	6,520	
2012	5,878	6,081	6,105	6,115	6,119	6,120	6,121	6,121	6,122	6,122		
2013	5,363	5,492	5,523	5,528	5,530	5,530	5,531	5,531	5,531			
2014	5,222	5,358	5,383	5,390	5,396	5,397	5,397	5,397				
2015	5,085	5,202	5,218	5,225	5,226	5,227	5,227					
2016	4,398	4,516	4,547	4,560	4,560	4,560						
2017	3,448	3,614	3,649	3,618	3,619							
2018	4,070	4,208	4,131	4,139								
2019	3,573	3,652	3,682									
2020	3,908	4,045										
2021	3,108											
					Claim De	evelopment Fa	actors					
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>	<u>111-123</u>	<u>123-135</u>	<u>135-147</u>	
2010	1.016	1.003	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	
2011	1.031	1.004	1.001	1.000	1.001	1.001	1.000	1.000	1.000	1.000		
2012	1.035	1.004	1.002	1.001	1.000	1.000	1.000	1.000	1.000			
2013	1.024	1.006	1.001	1.000	1.000	1.000	1.000	1.000				
2014	1.026	1.005	1.001	1.001	1.000	1.000	1.000					
2015	1.023	1.003	1.001	1.000	1.000	1.000						
2016	1.027	1.007	1.003	1.000	1.000							
2017	1.048	1.010	0.992	1.000								
2018	1.034	0.982	1.002									
2019	1.022	1.008										
2020	1.035											
Avg	1.029	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd Avg	1.028	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
5-Yr Avg	1.033	1.002	1.000	1.000	1.000	1.000	1.000	-	-	-	-	
5-Yr Wtd Avg	1.033	1.002	1.000	1.000	1.000	1.000	1.000	-	-	-	-	
5-Yr Excl Hi/Lo	1.032	1.006	1.002	1.000	1.000	1.000	1.000	-	-	-	-	
Selected	1.032	1.006	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.040	1.008	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

# North Carolina Mobile Homeowners MH(C) - Adjacent Structures

Derivation of Non-Catastrophe Incurred Loss and ALAE Development Factors - All Companies Combined

						Months of De	velopment					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>
2010	558,607	564,958	564,958	564,958	564,958	564,958	564,958	564,958	564,958	564,958	564,958	564,9
2011	784,303	785,442	785,442	788,759	788,759	788,759	788,759	788,759	788,759	788,759	788,759	
2012	336,412	344,692	344,912	344,912	344,912	345,757	345,757	345,757	345,757	345,757		
2013	386,236	379,465	382,341	382,341	382,341	382,341	382,341	382,341	382,341			
2014	579,409	588,717	437,138	439,741	441,544	441,719	441,719	441,719				
2015	383,425	394,706	394,706	394,706	394,706	394,706	395,036					
2016	521,290	472,055	475,064	475,064	475,064	475,064						
2017	455,440	472,516	476,641	476,641	478,715							
2018	520,247	547,238	564,241	564,241								
2019	779,377	808,378	810,002									
2020	723,335	756,373										
2021	900,388											
					Loss De	velopment Fa	ctors					
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	63-75	75-87	87-99	<u>99-111</u>	111-123	<u>123-135</u>	<u>135-147</u>	
2010	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2011	1.001	1.000	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2012	1.025	1.001	1.000	1.000	1.002	1.000	1.000	1.000	1.000			
2013	0.982	1.008	1.000	1.000	1.000	1.000	1.000	1.000				
2014	1.016	0.743	1.006	1.004	1.000	1.000	1.000					
2015	1.029	1.000	1.000	1.000	1.000	1.001						
2016	0.906	1.006	1.000	1.000	1.000							
2017	1.037	1.009	1.000	1.004								
2018	1.052	1.031	1.000									
2019	1.037	1.002										
2020	1.046											
Avg	1.013	0.980	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd Avg	1.014	0.977	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
5-Yr Avg	1.016	1.010	1.001	1.002	1.001	1.000	1.000	-	-	-	-	
5-Yr Wtd Avg	1.019	1.010	1.001	1.002	1.001	1.000	1.000	-	-	-	-	
5-Yr Excl Hi/Lo	1.040	1.006	1.000	1.001	1.000	1.000	1.000	-	-	-	-	
Selected	1.040	1.006	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.047	1.007	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

# North Carolina Mobile Homeowners MH(C) - Adjacent Structures

Derivation of Non-Catastrophe Reported Claims Development Factors - All Companies Combined

						Months of De	velopment					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>	<u>123</u>	<u>135</u>	<u>14</u>
2010	355	362	362	362	362	362	363	363	363	363	363	
2011	471	474	474	475	475	475	475	475	475	475	475	
2012	200	210	210	210	210	211	211	211	212	212		
2013	223	227	229	229	229	229	229	229	229			
2014	317	325	325	326	326	326	326	326				
2015	245	249	250	250	250	250	250					
2016	260	266	269	269	269	269						
2017	224	233	235	235	236							
2018	273	286	274	274								
2019	307	318	321									
2020	331	340										
2021	299											
					<u>C</u> laim D	evelopment Fa	actors					
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	63-75	75-87	87-99	<u>99-111</u>	<u>111-123</u>	<u>123-135</u>	<u>135-147</u>	
2010	1.020	1.000	1.000	1.000	1.000	1.003	1.000	1.000	1.000	1.000	1.000	
2011	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2012	1.050	1.000	1.000	1.000	1.005	1.000	1.000	1.005	1.000			
2013	1.018	1.009	1.000	1.000	1.000	1.000	1.000	1.000				
2014	1.025	1.000	1.003	1.000	1.000	1.000	1.000					
2015	1.016	1.004	1.000	1.000	1.000	1.000						
2016	1.023	1.011	1.000	1.000	1.000							
2017	1.040	1.009	1.000	1.004								
2018	1.048	0.958	1.000									
2019	1.036	1.009										
2020	1.027											
Avg	1.028	1.000	1.001	1.001	1.001	1.000	1.000	1.001	1.000	1.000	1.000	
Wtd Avg	1.026	1.000	1.001	1.000	1.000	1.001	1.000	1.001	1.000	1.000	1.000	
5-Yr Avg	1.035	0.998	1.001	1.001	1.001	1.000	1.000	-	-	-	-	
5-Yr Wtd Avg	1.034	0.998	1.001	1.001	1.001	1.000	1.000	-	-	-	-	
5-Yr Excl Hi/Lo	1.034	1.007	1.000	1.000	1.000	1.000	1.000	-	-	-	-	
Selected	1.034	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.041	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

# North Carolina Mobile Homeowners MH(C) - Personal Effects

Derivation of Non-Catastrophe Incurred Loss and ALAE Development Factors - All Companies Combined

						Months of De	ovelenment					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	75	<u>87</u>	99	111	123	135	147
2010	3,331,383	3,365,505	3,379,358	3,378,507	3,378,573	3,378,573	3,378,748	3,378,748	3,378,748	3,378,748	3,378,748	3,378,748
2011	3,935,281	4,010,494	3,966,342	3,965,499	3,966,483	3,966,483	3,966,861	3,966,861	3,966,861	3,966,861	3,966,861	0,0.0,
2012	3,822,715	3,901,985	3,903,442	3,906,777	3,925,215	3,925,329	3,925,329	3,925,329	3,925,329	3,925,329	-,,	
2013	3,681,581	3,754,675	3,757,429	3,758,494	3,759,646	3,759,946	3,759,946	3,759,946	3,759,946	-,,-		
2014	3,918,330	3,964,516	3,930,236	3,934,637	3,944,515	3,944,515	3,944,893	3,944,893	-,,,,,,,,,			
2015	3,446,950	3,553,966	3,557,844	3,558,410	3,558,410	3,558,410	3,558,410	-,- ,				
2016	3,550,163	3,594,176	3,606,448	3,608,328	3,608,660	3,608,660						
2017	2,874,154	2,875,818	2,877,028	2,874,933	2,874,933							
2018	2,837,887	2,865,706	2,857,963	2,895,852								
2019	2,654,977	2,636,369	2,642,487									
2020	2,853,929	3,009,233										
2021	2,559,196											
					Loss De	evelopment F	actors					
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>	<u>111-123</u>	<u>123-135</u>	<u>135-147</u>	
2010	1.010	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2011	1.019	0.989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2012	1.021	1.000	1.001	1.005	1.000	1.000	1.000	1.000	1.000			
2013	1.020	1.001	1.000	1.000	1.000	1.000	1.000	1.000				
2014	1.012	0.991	1.001	1.003	1.000	1.000	1.000					
2015	1.031	1.001	1.000	1.000	1.000	1.000						
2016	1.012	1.003	1.001	1.000	1.000							
2017	1.001	1.000	0.999	1.000								
2018	1.010	0.997	1.013									
2019	0.993	1.002										
2020	1.054											
Avg	1.017	0.999	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd Avg	1.017	0.999	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
5-Yr Avg	1.014	1.001	1.003	1.001	1.000	1.000	1.000	-	-	-	-	
5-Yr Wtd Avg	1.014	1.001	1.003	1.001	1.000	1.000	1.000	-	-	-	-	
5-Yr Excl Hi/Lo	1.008	1.001	1.001	1.000	1.000	1.000	1.000	-	-	-	-	
Selected	1.008	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.010	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

# North Carolina Mobile Homeowners MH(C) - Personal Effects

Derivation of Non-Catastrophe Reported Claims Development Factors - All Companies Combined

						Months of De	velopment					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>
2010	1,452	1,467	1,471	1,471	1,470	1,470	1,471	1,471	1,471	1,471	1,471	1
2011	1,531	1,558	1,560	1,559	1,560	1,561	1,561	1,561	1,561	1,561	1,561	
2012	1,424	1,449	1,451	1,452	1,452	1,452	1,452	1,452	1,452	1,452		
2013	1,280	1,290	1,290	1,292	1,292	1,292	1,292	1,292	1,292			
2014	1,299	1,310	1,311	1,311	1,311	1,311	1,311	1,311				
2015	1,156	1,165	1,166	1,167	1,167	1,167	1,167					
2016	1,013	1,021	1,021	1,023	1,023	1,023						
2017	800	817	819	814	814							
2018	827	835	829	829								
2019	699	697	698									
2020	626	636										
2021	508											
					Claim Do	evelopment Fa	actors					
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	63-75	75-87	87-99	99-111	<u>111-123</u>	123-135	<u>135-147</u>	
2010	1.010	1.003	1.000	0.999	1.000	1.001	1.000	1.000	1.000	1.000	1.000	
2011	1.018	1.001	0.999	1.001	1.001	1.000	1.000	1.000	1.000	1.000		
2012	1.018	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000			
2013	1.008	1.000	1.002	1.000	1.000	1.000	1.000	1.000				
2014	1.008	1.001	1.000	1.000	1.000	1.000	1.000					
2015	1.008	1.001	1.001	1.000	1.000	1.000						
2016	1.008	1.000	1.002	1.000	1.000							
2017	1.021	1.002	0.994	1.000								
2018	1.010	0.993	1.000									
2019	0.997	1.001										
2020	1.016											
Avg	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd Avg	1.011	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
5-Yr Avg	1.010	1.000	0.999	1.000	1.000	1.000	1.000	-	-	-	-	
5-Yr Wtd Avg	1.010	1.000	1.000	1.000	1.000	1.000	1.000	-	-	-	-	
5-Yr Excl Hi/Lo	1.011	1.001	1.000	1.000	1.000	1.000	1.000	-	-	-	-	
Selected	1.011	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.012	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

# North Carolina Mobile Homeowners MH(C) - Liability

Derivation of Non-Catastrophe Incurred Loss and ALAE Development Factors - All Companies Combined

						Months of De	evelonment					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	75	<u>87</u>	99	111	123	135	<u>147</u>
2010	978,172	1,080,211	1,268,088	1,263,536	1,274,142	1,274,142	1,274,142	1,274,142	1,274,142	1,274,142	1,274,142	1,274,142
2011	1,069,498	1,007,951	1,108,729	1,029,357	1,031,039	1,031,039	1,031,039	1,031,039	1,031,039	1,031,039	1,031,039	.,,
2012	1,063,304	1,227,666	1,180,192	1,202,319	1,131,462	1,134,094	1,134,262	1,134,262	1,134,262	1,134,262	, ,	
2013	639,982	759,394	752,140	755,861	757,469	755,273	755,273	755,273	755,273			
2014	1,032,628	905,292	932,649	1,022,407	1,024,505	1,024,505	1,024,505	1,024,505				
2015	690,984	633,604	716,320	723,227	629,655	629,655	629,655					
2016	561,014	488,727	529,491	526,625	526,625	526,625						
2017	451,668	711,858	877,923	780,492	781,076							
2018	975,596	1,082,323	1,357,419	1,171,891								
2019	1,091,551	1,212,780	1,159,176									
2020	919,161	1,071,727										
2021	1,067,332											
						evelopment F						
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>	<u>111-123</u>	<u>123-135</u>	<u>135-147</u>	
2010	1.104	1.174	0.996	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2011	0.942	1.100	0.928	1.002	1.000	1.000	1.000	1.000	1.000	1.000		
2012	1.155	0.961	1.019	0.941	1.002	1.000	1.000	1.000	1.000			
2013	1.187	0.990	1.005	1.002	0.997	1.000	1.000	1.000				
2014	0.877	1.030	1.096	1.002	1.000	1.000	1.000					
2015	0.917	1.131	1.010	0.871	1.000	1.000						
2016	0.871	1.083	0.995	1.000	1.000							
2017	1.576	1.233	0.889	1.001								
2018	1.109	1.254	0.863									
2019	1.111	0.956										
2020	1.166											
Avg	1.092	1.091	0.978	0.978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd Avg	1.075	1.085	0.972	0.980	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
5-Yr Avg	1.167	1.131	0.971	0.975	1.000	1.000	1.000	-	-	-	-	
5-Yr Wtd Avg	1.142	1.124	0.957	0.977	1.000	1.000	1.000	-	-	-	-	
5-Yr Excl Hi/Lo	1.129	1.149	0.964	1.001	1.000	1.000	1.000	-	-	-	-	
Selected	1.092	1.091	0.978	0.978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.140	1.044	0.956	0.978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

# North Carolina Mobile Homeowners MH(C) - Liability

Derivation of Non-Catastrophe Reported Claims Development Factors - All Companies Combined

						Months of De	velopment					
	<u>15</u>	<u>27</u>	<u>39</u>	<u>51</u>	<u>63</u>	<u>75</u>	<u>87</u>	<u>99</u>	<u>111</u>	<u>123</u>	<u>135</u>	<u>147</u>
2010	183	187	190	192	192	192	192	192	192	192	192	1
2011	152	156	157	157	157	157	157	157	157	157	157	
2012	131	141	144	143	143	144	144	144	144	144		
2013	106	106	106	106	106	105	105	105	105			
2014	133	129	131	130	130	130	130	130				
2015	117	119	119	119	119	119	119					
2016	87	88	89	89	89	89						
2017	86	90	92	92	92							
2018	86	91	93	93								
2019	64	67	68									
2020	61	66										
2021	69											
					Claim Do	evelopment Fa	actors					
	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	63-75	<u>75-87</u>	87-99	<u>99-111</u>	<u>111-123</u>	<u>123-135</u>	<u>135-147</u>	
2010	1.022	1.016	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2011	1.026	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2012	1.076	1.021	0.993	1.000	1.007	1.000	1.000	1.000	1.000			
2013	1.000	1.000	1.000	1.000	0.991	1.000	1.000	1.000				
2014	0.970	1.016	0.992	1.000	1.000	1.000	1.000					
2015	1.017	1.000	1.000	1.000	1.000	1.000						
2016	1.011	1.011	1.000	1.000	1.000							
2017	1.047	1.022	1.000	1.000								
2018	1.058	1.022	1.000									
2019	1.047	1.015										
2020	1.082											
Avg	1.032	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd Avg	1.028	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
5-Yr Avg	1.049	1.014	0.998	1.000	1.000	1.000	1.000	-	-	-	-	
5-Yr Wtd Avg	1.047	1.013	0.998	1.000	1.000	1.000	1.000	-	-	-	-	
5-Yr Excl Hi/Lo	1.051	1.016	1.000	1.000	1.000	1.000	1.000	-	-	-	-	
Selected	1.032	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.045	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

Derivation of Loss Trend Factors

#### **Mobile Home Structures**

	(1)	(2)	(3) = (2) - (1), in years	(4)	(5) = (4) - (2), in years	(6)	(7)	(8)
	Average	End Date				Selected	Selected	Loss
Accident	Date of	of Experience	Experience		Projection	Experience Period	Projection Period	Trend
Year	Accident	Period	Period	Trend-to Date	Period	Loss Cost Trend	Loss Cost Trend	Factor
2017	7/1/2017	12/31/2021	4.50	7/1/2024	2.50	6.0%	12.0%	1.726
2018	7/1/2018	12/31/2021	3.50	7/1/2024	2.50	6.0%	12.0%	1.628
2019	7/1/2019	12/31/2021	2.50	7/1/2024	2.50	6.0%	12.0%	1.536
2020	7/1/2020	12/31/2021	1.50	7/1/2024	2.50	6.0%	12.0%	1.449
2021	7/1/2021	12/31/2021	0.50	7/1/2024	2.50	6.0%	12.0%	1.367
				Adjacent St	ructures			
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
			= (10) - (9), in years		= (12) - (10), in years			
	Average	End Date				Selected	Selected	Loss
Accident	Date of	of Experience	Experience		Projection	Experience Period	Projection Period	Trend
Year	Accident	Period	Period	Trend-to Date	Period	Loss Cost Trend	Loss Cost Trend	Factor
2017	7/1/2017	12/31/2021	4.50	7/1/2024	2.50	5.0%	6.0%	1.441
2018	7/1/2018	12/31/2021	3.50	7/1/2024	2.50	5.0%	6.0%	1.372
2019	7/1/2019	12/31/2021	2.50	7/1/2024	2.50	5.0%	6.0%	1.307
2020	7/1/2020	12/31/2021	1.50	7/1/2024	2.50	5.0%	6.0%	1.245
2021	7/1/2021	12/31/2021	0.50	7/1/2024	2.50	5.0%	6.0%	1.185
				Personal E	Effects			
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
			= (18) - (17), in years		= (20) - (18), in years			
	Average	End Date				Selected	Selected	Loss
Accident	Date of	of Experience	Experience		Projection	Experience Period	Projection Period	Trend
Year	Accident	Period	Period	Trend-to Date	Period	Loss Cost Trend	Loss Cost Trend	Factor
2017	7/1/2017	12/31/2021	4.50	7/1/2024	2.50	-1.4%	2.8%	1.005
2018	7/1/2018	12/31/2021	3.50	7/1/2024	2.50	-1.4%	2.8%	1.020
2019	7/1/2019	12/31/2021	2.50	7/1/2024	2.50	-1.4%	2.8%	1.034
2020	7/1/2020	12/31/2021	1.50	7/1/2024	2.50	-1.4%	2.8%	1.049
2021	7/1/2021	12/31/2021	0.50	7/1/2024	2.50	-1.4%	2.8%	1.064

<sup>(4), (12), (20)</sup> Based on a proposed effective date of July 1, 2023; rates assumed to be in effect for 1 year

<sup>(6), (7), (14), (15), (22), (23)</sup> From Section C, Pages 57, 58, and 59

 $<sup>(8) = [1 + (6)] ^ (3) \</sup>times [1 + (7)] ^ (5)$ 

 $<sup>(16) = [1 + (14)] ^ (11)</sup> x [1 + (15)] ^ (13)$ 

 $<sup>(24) = [1 + (22)] ^ (19) \</sup>times [1 + (23)] ^ (21)$ 

Derivation of Loss Trend Factors

### Liability

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			= (2) - (1), in years		= (4) - (2), in years			
	Average	End Date				Selected	Selected	Loss
Accident	Date of	of Experience	Experience		Projection	Experience Period	Projection Period	Trend
Year	Accident	Period	Period	Trend-to Date	Period	Loss Cost Trend	Loss Cost Trend	Factor
2017	7/1/2017	12/31/2021	4.50	7/1/2024	2.50	8.0%	8.0%	1.714
2018	7/1/2018	12/31/2021	3.50	7/1/2024	2.50	8.0%	8.0%	1.587
2019	7/1/2019	12/31/2021	2.50	7/1/2024	2.50	8.0%	8.0%	1.469
2020	7/1/2020	12/31/2021	1.50	7/1/2024	2.50	8.0%	8.0%	1.360
2021	7/1/2021	12/31/2021	0.50	7/1/2024	2.50	8.0%	8.0%	1.260

<sup>(4)</sup> Based on a proposed effective date of July 1, 2023; rates assumed to be in effect for 1 year

<sup>(6), (7)</sup> From Section C, Page 60

 $<sup>(8) = [1 + (6)] ^ (3) \</sup>times [1 + (7)] ^ (5)$ 

### North Carolina Mobile Homeowners MH(C) - Mobile Home Structures

Determination of Non-Catastrophe Loss and ALAE Trends

	(1)	(2)	(3)	(4) = (2) x (3) / (1)	(5)	(6)	(7) = (5) x (6) / [ (2) x (3) ]	l
			D. d. de	( ) ( ) ( )		D	(-) (-) (-)	
Accident	Earned	Departed	Development	Liltimata	Incurred	Development Factor to	I litim ata	
Year Ending	Exposures	Reported Claims	Factor to Ultimate	Ultimate Frequency	Loss & ALAE	Ultimate	Ultimate Severity	
2016-4	86,182	6,246	1.000	7.25%	\$18,587,291	1.000	\$2,976	
2017-1	85,253	6,082	1.000	7.13%	18,363,214	1.000	3,019	
2017-2	84,589	6,002	1.000	7.10%	18,357,593	1.000	3,059	
2017-3	83,951	5,697	1.000	6.79%	17,630,482	1.000	3,095	
2017-4	83,392	5,627	1.000	6.75%	17,154,188	1.000	3,049	
2018-1	82,814	5,478	1.000	6.61%	16,714,047	1.000	3,051	
2018-2	82,244	5,221	1.000	6.35%	15,696,103	1.000	3,006	
2018-3	81,683	5,379	1.000	6.59%	16,061,852	1.000	2,986	
2018-4	81,110	5,657	1.000	6.97%	16,521,054	1.000	2,920	
2019-1	80,573	5,480	1.000	6.80%	15,598,244	1.000	2,846	
2019-2	80,000	5,466	1.001	6.84%	16,075,203	1.000	2,939	
2019-3	79,423	5,163	1.001	6.51%	15,785,758	1.001	3,055	
2019-4	79,056	4,903	1.002	6.21%	15,115,346	1.001	3,080	
2020-1	79,244	5,002	1.003	6.33%	16,348,212	1.003	3,267	
2020-2	79,755	5,184	1.005	6.53%	17,484,474	1.005	3,373	
2020-3	80,762	5,629	1.007	7.02%	20,360,661	1.007	3,619	
2020-4	81,755	5,917	1.008	7.30%	22,546,286	1.009	3,814	
2021-1	82,301	6,092	1.016	7.52%	23,634,447	1.019	3,893	
2021-2	82,711	5,720	1.024	7.08%	23,681,680	1.030	4,164	
2021-3	82,718	5,166	1.032	6.45%	22,342,256	1.041	4,361	
2021-4	82,581	4,721	1.040	5.95%	20,975,598	1.051	4,491	
				Annual			Annual	
				Exponential			Exponential	
				Trend			Trend	
			ars (2017 - 2021)	-0.6%		ears (2017 - 2021)	8.5%	
		4 Ye	ars (2018 - 2021)	0.4%		ars (2018 - 2021)	12.7%	
			ars (2019 - 2021)	0.0%		ears (2019 - 2021)	19.0%	
		2 Ye	ars (2020 - 2021)	-2.1%	2 Ye	ears (2020 - 2021)	20.7%	
			(8) Credibility:	100.0%		(9) Credibility:	100.0%	
				Selected			Selected	
				Frequency			Severity	Pure Premium
				Trend			Trend	Trend
		E	xperience Period:	0.0%	E	xperience Period:	6.0%	6.0%
		1	Projection Period:	0.0%		Projection Period:	12.0%	12.0%

<sup>(1), (2), (5)</sup> Based on data provided by member companies

<sup>(2), (5)</sup> Adjusted to exclude catastrophe losses

<sup>(3), (6)</sup> From Section C, Page 61

<sup>(8)</sup> Based on 494,077 exposures in the experience period, a full credibility standard of 20,000 exposures, and the square root rule

<sup>(9)</sup> Based on 33,071 claims during the experience period, a full credibility standard of 1,082 claims, and the square root rule

### North Carolina Mobile Homeowners MH(C) - Adjacent Structures

Determination of Non-Catastrophe Loss and ALAE Trends

	(1)	(2)	(3)	(4) = (2) x (3) / (1)	(5)	(6)	(7) = (5) x (6) / [ (2) x (3) ]	l
			Do alaman	( ) ( ) ( )		<b>5</b>	(-) (-) (-)	
Accident	Earned	Donortod	Development	Liltimata	lacurrad	Development	Liltimata	
Year Ending	Exposures	Reported Claims	Factor to Ultimate	Ultimate Frequency	Incurred Loss & ALAE	Factor to Ultimate	Ultimate Severity	
2016-4	76,317	343	1.000	0.45%	\$569,125	1.000	\$1,659	
2017-1	75,461	352	1.000	0.47%	591,886	1.000	1,681	
2017-2	74,868	360	1.000	0.48%	612,988	1.000	1,703	
2017-3	74,322	369	1.000	0.50%	685,588	1.000	1,858	
2017-4	73,870	353	1.000	0.48%	695,200	1.000	1,969	
2018-1	73,411	295	1.000	0.40%	596,495	1.000	2,023	
2018-2	72,947	253	1.000	0.35%	523,742	1.000	2,071	
2018-3	72,465	271	1.000	0.37%	545,546	1.001	2,015	
2018-4	71,936	318	1.000	0.44%	690,101	1.001	2,172	
2019-1	71,426	338	1.000	0.47%	727,131	1.001	2,153	
2019-2	70,902	357	1.000	0.50%	823,461	1.001	2,309	
2019-3	70,381	322	1.000	0.46%	757,471	1.001	2,355	
2019-4	70,001	266	1.000	0.38%	662,004	1.001	2,491	
2020-1	70,056	280	1.002	0.40%	714,447	1.002	2,554	
2020-2	70,336	318	1.003	0.45%	706,525	1.004	2,223	
2020-3	71,014	451	1.005	0.64%	896,088	1.006	1,987	
2020-4	71,718	550	1.007	0.77%	1,026,117	1.007	1,866	
2021-1	72,102	670	1.015	0.94%	1,290,607	1.017	1,929	
2021-2	72,426	692	1.024	0.98%	1,370,046	1.027	1,986	
2021-3	72,446	649	1.033	0.93%	1,331,112	1.037	2,060	
2021-4	72,369	595	1.041	0.86%	1,258,817	1.047	2,128	
				Annual			Annual	
				Exponential			Exponential	
				Trend			Trend	
		5 Ye	ars (2017 - 2021)	17.8%	5 Ye	ars (2017 - 2021)	2.8%	
			ars (2018 - 2021)	31.2%		ars (2018 - 2021)	-1.4%	
			ars (2019 - 2021)	40.2%		ars (2019 - 2021)	-6.3%	
		0.10	1 Year (2021)	-13.0%	0.10	1 Year (2021)	14.2%	
			, ,			, ,		
			(8) Credibility:	100.0%		(9) Credibility:	100.0%	
				Selected			Selected	
				Frequency			Severity	Pure Premium
				Trend			Trend	Trend
		E	xperience Period:	5.0%	E	xperience Period:	0.0%	5.0%
		F	Projection Period:	0.0%	I	Projection Period:	6.0%	6.0%

<sup>(1), (2), (5)</sup> Based on data provided by member companies

<sup>(2), (5)</sup> Adjusted to exclude catastrophe losses

<sup>(3), (6)</sup> From Section C, Page 61

<sup>(8)</sup> Based on 436,212 exposures in the experience period, a full credibility standard of 190,000 exposures, and the square root rule

<sup>(9)</sup> Based on 2,425 claims during the experience period, a full credibility standard of 1,082 claims, and the square root rule

### North Carolina Mobile Homeowners MH(C) - Personal Effects

### Determination of Non-Catastrophe Loss and ALAE Trends

	(1)	(2)	(3)	(4) = (2) x (3) / (1)	(5)	(6)	(7) = (5) x (6) / [ (2) x (3) ]	
			Development			Development		
Accident	Earned	Reported	Factor to	Ultimate	Incurred	Factor to	Ultimate	
Year Ending	Exposures	Claims	Ultimate	Frequency	Loss & ALAE	Ultimate	Severity	
2016-4	84,419	1,480	1.000	1.75%	\$3,586,138	1.000	\$2,423	
2017-1	83,598	1,429	1.000	1.71%	3,472,198	1.000	2,430	
2017-2	83,056	1,410	1.000	1.70%	3,444,686	1.000	2,443	
2017-3	82,559	1,296	1.000	1.57%	3,244,748	1.000	2,504	
2017-4	82,171	1,204	1.000	1.47%	2,966,349	1.000	2,464	
2018-1	81,763	1,167	1.000	1.43%	2,996,921	1.000	2,568	
2018-2	81,340	1,144	1.000	1.41%	3,066,198	1.000	2,680	
2018-3	80,892	1,221	1.000	1.51%	3,153,438	1.000	2,583	
2018-4	80,378	1,235	1.000	1.54%	2,873,876	1.000	2,327	
2019-1	79,879	1,220	1.000	1.53%	2,712,548	1.000	2,224	
2019-1	79,333	1,170	1.000	1.47%	2,712,346	1.000	2,331	
2019-3	78,797	1,060	1.000	1.35%	2,630,170	1.001	2,483	
2019-4	78,476	1,013	1.000	1.29%	2,636,702	1.001	2,605	
2020-1	78,706	998	1.000	1.27%	2,812,316	1.001	2,821	
2020-2	79,263	982	1.000	1.24%	2,689,043	1.002	2,741	
2020-3	80,304	1,033	1.001	1.29%	2,900,453	1.002	2,811	
2020-4	81,322	1,048	1.001	1.29%	3,182,174	1.002	3,039	
2021-1	81,901	1,049	1.004	1.29%	3,013,209	1.004	2,873	
2021-2	82,354	1,024	1.006	1.25%	3,022,002	1.006	2,950	
2021-3	82,416	928	1.009	1.14%	2,832,421	1.008	3,048	
2021-4	82,313	878	1.012	1.08%	2,713,247	1.010	3,084	
				Annual			Annual	
				Exponential			Exponential	
				Trend			Trend	
		5 Vo	ars (2017 - 2021)	-7.4%	5 Vo	ars (2017 - 2021)	5.2%	
			ars (2017 - 2021)	-7.4%		ars (2017 - 2021)	6.9%	
			,	-7.2% -8.8%		ars (2019 - 2021)	11.8%	
			ars (2019 - 2021)					
		2 Ye	ars (2020 - 2021)	-7.6%	2 Ye	ars (2020 - 2021)	6.1%	
			(8) Credibility:	100.0%		(9) Credibility:	100.0%	
				Selected			Selected	
				Frequency			Severity	Pure Premium
				Trend			Trend	Trend
		E	xperience Period:	-7.0%	E	xperience Period:	6.0%	-1.4%
		1	Projection Period:	-3.0%	1	Projection Period:	6.0%	2.8%

<sup>(1), (2), (5)</sup> Based on data provided by member companies

<sup>(2), (5)</sup> Adjusted to exclude catastrophe losses

<sup>(3), (6)</sup> From Section C, Page 61

<sup>(8)</sup> Based on 489,080 exposures in the experience period, a full credibility standard of 80,000 exposures, and the square root rule

<sup>(9)</sup> Based on 6,858 claims during the experience period, a full credibility standard of 1,082 claims, and the square root rule

### North Carolina Mobile Homeowners MH(C) - Liability

#### Determination of Loss and ALAE Trends

	(1)	(2)	(3)	(4) = (2) x (3) / (1)	(5)	(6)	(7) = (5) x (6) / [ (2) x (3) ]		(8)	
			Development			Development			CPI	
Accident	Earned	Reported	Factor to	Ultimate	Incurred	Factor to	Ultimate	Quarter	Medical	
Year Ending	Exposures	Claims	Ultimate	Frequency	Loss & ALAE	Ultimate	Severity	Ending	Care	
2016-4	84,198	162	1.000	0.19%	\$675,993	1.000	\$4,173	2016-4	105.1	
2017-1	83,327	156	1.000	0.19%	632,188	1.000	4,052	2017-1	106.0	
2017-2	82,737	171	1.000	0.21%	820,475	1.000	4,798	2017-2	106.1	
2017-3	82,198	175	1.000	0.21%	825,144	1.000	4,715	2017-3	106.7	
2017-4	81,778	156	1.000	0.19%	797,050	1.000	5,109	2017-4	106.9	
2018-1	81,340	164	1.000	0.20%	841,361	0.994	5,102	2018-1	108.0	
2018-2	80,896	168	1.000	0.21%	1,021,956	0.989	6,016	2018-2	108.6	
2018-3	80,434	174	1.000	0.22%	1,104,846	0.983	6,245	2018-3	108.5	
2018-4	79,908	163	1.000	0.20%	1,135,513	0.978	6,813	2018-4	108.9	
2019-1	79,389	150	1.000	0.19%	1,287,743	0.973	8,350	2019-1	110.0	
2019-2	78,817	130	1.000	0.16%	924,287	0.967	6,877	2019-2	110.7	
2019-3	78,251	113	1.000	0.14%	1,333,075	0.962	11,347	2019-3	111.9	
2019-4	77,894	106	1.000	0.14%	1,219,163	0.956	11,001	2019-4	113.7	
2020-1	78,094	101	1.003	0.13%	1,093,100	0.978	10,546	2020-1	115.0	
2020-2	78,633	110	1.006	0.14%	1,373,980	0.999	12,399	2020-2	116.2	
2020-3	79,673	110	1.010	0.14%	1,028,760	1.021	9,457	2020-3	117.0	
2020-4	80,700	113	1.013	0.14%	1,044,033	1.044	9,518	2020-4	116.3	
2021-1	81,292	130	1.021	0.16%	1,155,926	1.067	9,290	2021-1	117.2	
2021-2	81,778	118	1.029	0.15%	1,030,467	1.090	9,254	2021-2	117.3	
2021-3	81,915	112	1.037	0.14%	1,168,908	1.115	11,217	2021-3	117.5	
2021-4	81,935	110	1.045	0.14%	1,066,590	1.140	10,569	2021-4	118.4	
				Frequency				Se	everity	
				Annual			Annual		Annual	Credibility-
				Exponential			Exponential		Exponential	Weighted
				Trend			Trend		Trend	Trend
		5 Yea	ars (2017 - 2021)	-9.5%	5 Ye	ars (2017 - 2021)	23.4%		2.7%	20.6%
		4 Yea	ars (2018 - 2021)	-10.8%	4 Ye	ars (2018 - 2021)	18.5%		2.8%	16.4%
		3 Yea	ars (2019 - 2021)	-4.5%	3 Ye	ars (2019 - 2021)	6.0%		2.6%	5.5%
		2 Yea	ars (2020 - 2021)	4.5%	2 Ye	ars (2020 - 2021)	-2.7%		2.9%	-1.9%
			(9) Credibility:	86.5%		(10) Credibility:	86.5%			
				Selected					Selected	
				Frequency					Severity	Pure Premium
				Trend					Trend	Trend
		Ex	xperience Period:	0.0%			Exp	erience Period:	8.0%	8.0%
		F	Projection Period:	0.0%			Pro	ejection Period:	8.0%	8.0%

<sup>(1), (2), (5)</sup> Based on data provided by member companies

<sup>(3), (6)</sup> From Section C, Page 61

<sup>(8)</sup> From Bureau of Labor Statistics - Consumer Price Index for All Urban Consumers - U.S City Average; Medical Care indexed to 2012 (i.e., 2012 index = 100)

<sup>(9)</sup> Based on 486,413 exposures in the experience period, a full credibility standard of 650,000 exposures, and the square root rule

<sup>(10)</sup> Based on 810 claims during the experience period, a full credibility standard of 1,082 claims, and the square root rule

#### Interpolation of Cumulative Development Factors

(1) (2) (3) (4) (5) (7) (8) (9) (10)(11) (12)(13)(14)(15) (16)**Mobile Home Structures Adjacent Structures** Personal Effects Liability Cumulative Cumulative Cumulative Cumulative Cumulative Cumulative Cumulative Cumulative Incurred Loss & ALAE Accident Incurred Loss & ALAE Reported Claims Incurred Loss & ALAE Reported Claims Incurred Loss & ALAE Reported Claims Reported Claims Development Factor Development Factor Development Factor Development Factor Development Factor Development Factor Year Months of Development Factor Development Factor Selected Selected Ending Development Selected Interpolated Selected Interpolated Interpolated Selected Interpolated Selected Interpolated Interpolated Selected Interpolated Selected Interpolated 2016-4 75 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 72 1.000 1.000 2017-1 1.000 1.000 1.000 1.000 1.000 1.000 2017-2 69 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 2017-3 66 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 2017-4 63 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 2018-1 60 1.000 1.000 1.000 1.000 1.000 1.000 0.994 1.000 57 1.000 2018-2 1.000 1.000 1.000 1.000 1.000 0.989 1.000 2018-3 54 1.000 1.000 1.001 1.000 1.000 1.000 0.983 1.000 2018-4 51 1.000 1.000 1.000 1.001 1.001 1.000 1.000 1.000 1.000 1.000 1.000 0.978 0.978 1.000 1.000 1.000 2019-1 48 1.000 1.000 1.001 1.000 1.000 1.000 0.973 1.000 2019-2 45 1.000 1.001 1.001 1.000 1.000 1.000 0.967 1.000 2019-3 42 1.001 1.001 1.001 1.000 1.001 1.000 0.962 1.000 2019-4 39 1.001 1.001 1.002 1.002 1.001 1.001 1.000 1.000 1.001 1.001 1.000 1.000 0.956 0.956 1.000 1.000 2020-1 36 1.003 1.003 1.002 1.002 1.001 1.000 0.978 1.003 2020-2 33 1.005 1.005 1.004 1.003 1.002 1.000 0.999 1.006 30 1.006 1.005 1.002 2020-3 1.007 1.007 1.001 1.021 1.010 2020-4 27 1.009 1.009 1.008 1.008 1.007 1.007 1.007 1.007 1.002 1.002 1.001 1.001 1.044 1.044 1.013 1.013 2021-1 24 1.019 1.016 1.017 1.015 1.004 1.004 1.067 1.021 2021-2 21 1.030 1.024 1.027 1.024 1.006 1.006 1.090 1.029 2021-3 18 1.033 1.008 1.037 1.041 1.032 1.037 1.009 1.115 1.140 1.051 1.051 1.040 1.047 1.047 1.041 1.010 1.012 1.045 2021-4 15 1.040 1.041 1.010 1.012 1.140 1.045

(1), (3), (5), (7), (9), (11), (13), (15) From Section C, Pages 47 - 54 (2), (4), (6), (8), (10), (12), (14), (16) Exponentially interpolated

**Determination of Exposure Trends** 

11	\	2) (	3)
(1	) (4	2) (	၁)

Average Amount of Insurance per Policy Calendar Mobile Home Adjacent Personal Year Ending Structures Effects Structures 2016-1 \$46,636 \$4,997 \$17,419 2016-2 47,032 5,038 17,587 17,795 2016-3 47,450 5,086 2016-4 5,140 47,868 18,036 2017-1 18,275 48,266 5,193 2017-2 48,675 5,246 18,517 2017-3 5,296 49,077 18,753 2017-4 5,346 18,983 49,466 2018-1 49,845 5,396 19,199 2018-2 5,445 19,404 50,205 2018-3 50,577 5,498 19,612 2018-4 50,963 5,555 19,823 2019-1 51,367 5,614 20,041 2019-2 51,813 5,680 20,278 2019-3 52,297 5,752 20,533 2019-4 52,809 5,826 20,797 2020-1 53,325 5,900 21,059 2020-2 5,973 21,325 53,848 2020-3 54,349 6,041 21,579 2020-4 54,848 6,107 21,834 2021-1 55,339 6,172 22,088 2021-2 55,864 6,240 22,356 2021-3 56,471 6,319 22,660 2021-4 6,412 23,013 57,200 6-Year Trend: 2016-2021 3.5% 4.4% 4.9% 5-Year Trend: 2017-2021 3.6% 4.6% 4.9% 4-Year Trend: 2018-2021 3.7% 4.7% 4.9% 3-Year Trend: 2019-2021 3.9% 4.9% 5.1% 2-Year Trend: 2020-2021 4.0% 4.7% 5.1% Selected Exposure Trends Projection Period: 5.0% 5.0% 5.0%

Note: Selected Exposure Trends are used to project the latest year's exposure file for the development of modeled losses

<sup>(1), (2), (3)</sup> Based on data provided by member companies

Derivation of Premium Trend Factors

#### Mobile Home Structures

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			= (2) - (1), in years		= (4) - (2), in years			
	Average	End Date				Selected	Selected	Premium
Accident	Written	of Experience	Experience		Projection	Experience Period	Projection Period	Trend
Year	Date	Period	Period	Trend-to Date	Period	Premium Trend	Premium Trend	Factor
2017	1/1/2017	12/31/2021	5.00	1/1/2024	2.00	2.9%	3.2%	1.229
2018	1/1/2018	12/31/2021	4.00	1/1/2024	2.00	2.9%	3.2%	1.194
2019	1/1/2019	12/31/2021	3.00	1/1/2024	2.00	2.9%	3.2%	1.160
2020	1/1/2020	12/31/2021	2.00	1/1/2024	2.00	2.9%	3.2%	1.128
2021	1/1/2021	12/31/2021	1.00	1/1/2024	2.00	2.9%	3.2%	1.096
				Adjacent St	ructures			
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
			= (10) - (9), in years		= (12) - (10), in years			
	Average	End Date				Selected	Selected	Premium
Accident	Written	of Experience	Experience		Projection	Experience Period	Projection Period	Trend
Year	Date	Period	Period	Trend-to Date	Period	Premium Trend	Premium Trend	Factor
2017	1/1/2017	12/31/2021	5.00	1/1/2024	2.00	4.8%	5.0%	1.394
2018	1/1/2018	12/31/2021	4.00	1/1/2024	2.00	4.8%	5.0%	1.330
2019	1/1/2019	12/31/2021	3.00	1/1/2024	2.00	4.8%	5.0%	1.269
2020	1/1/2020	12/31/2021	2.00	1/1/2024	2.00	4.8%	5.0%	1.211
2021	1/1/2021	12/31/2021	1.00	1/1/2024	2.00	4.8%	5.0%	1.155
				Personal I	Effects			
	(47)	(40)	(40)	(00)	(04)	(00)	(00)	(0.1)
	(17)	(18)	(19) = (18) - (17), in years	(20)	(21) = (20) - (18), in years	(22)	(23)	(24)
			= (10) - (17), III years		= (20) - (10), III years			
	Average	End Date				Selected	Selected	Premium
Accident	Written	of Experience	Experience		Projection	Experience Period	Projection Period	Trend
Year	Date	Period	Period	Trend-to Date	Period	Premium Trend	Premium Trend	Factor
2017	1/1/2017	12/31/2021	5.00	1/1/2024	2.00	4.5%	4.8%	1.369
2018	1/1/2018	12/31/2021	4.00	1/1/2024	2.00	4.5%	4.8%	1.310
2019	1/1/2019	12/31/2021	3.00	1/1/2024	2.00	4.5%	4.8%	1.253
2020 2021	1/1/2020 1/1/2021	12/31/2021 12/31/2021	2.00 1.00	1/1/2024 1/1/2024	2.00 2.00	4.5% 4.5%	4.8% 4.8%	1.199 1.148
2021	1/1/2021	12/31/2021	1.00	1/1/2024	2.00	4.5%	4.0%	1.140
				Liabil	ity			
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
			= (26) - (25), in years		= (28) - (26), in years			
	Average	End Date				Selected	Selected	Premium
Accident	Written	of Experience	Experience		Projection	Experience Period	Projection Period	Trend
Year	Date	Period	Period	Trend-to Date	Period	Premium Trend	Premium Trend	Factor
2017	1/1/2017	12/31/2021	5.00	1/1/2024	2.00	0.9%	1.0%	1.067
2018	1/1/2018	12/31/2021	4.00	1/1/2024	2.00	0.9%	1.0%	1.057
2019	1/1/2019	12/31/2021	3.00	1/1/2024	2.00	0.9%	1.0%	1.048
2020	1/1/2020	12/31/2021	2.00	1/1/2024	2.00	0.9%	1.0%	1.039
2021	1/1/2021	12/31/2021	1.00	1/1/2024	2.00	0.9%	1.0%	1.029

<sup>(4), (12), (20), (28)</sup> Based on a proposed effective date of July 1, 2023; rates assumed to be in effect for 1 year

<sup>(6), (7), (14), (15), (22), (23), (30), (31)</sup> From Section C, Page 64

 $<sup>(8) = [1 + (6)] ^ (3) \</sup>times [1 + (7)] ^ (5)$ 

 $<sup>(16) = [1 + (14)] ^ (11) \</sup>times [1 + (15)] ^ (13)$ 

<sup>(24) = [1 + (22)] ^ (19)</sup> x [1 + (23)] ^ (21)

<sup>(32) = [1 + (30)] ^ (27)</sup> x [1 + (31)] ^ (29)

Determination of Statewide Average Rating Factors and Premium Trends

	(1)	(2)	(3) = (1) / (2)	(4)	(5)	(6) = (4) / (5)	(7)	(8)	(9) = (7) / (8)	(10)	(11)
	Mobi	ile Home Struct	ures	Ad	jacent Structur	es	P	ersonal Effects	<u> </u>	Lial	oility
Accident Year	Earned Premium at Current Manual Level	Earned Premium at Current Base	Average Rating Factor	Earned Premium at Current Manual Level	Earned Premium at Current Base	Average Rating Factor	Earned Premium at Current Manual Level	Earned Premium at Current Base	Average Rating Factor	Average Liability Limit	Average Rating Factor
2017 2018 2019 2020 2021	\$58,970,121 58,516,825 58,416,471 61,985,833 64,510,959	\$31,668,192 30,714,806 29,818,040 30,697,196 30,907,603	1.862 1.905 1.959 2.019 2.087	\$4,622,213 4,658,622 4,734,168 5,063,060 5,337,948	\$1,756,211 1,703,217 1,647,973 1,679,142 1,686,371	2.632 2.735 2.873 3.015 3.165	\$10,087,168 10,231,316 10,394,723 11,215,384 11,872,318	\$3,291,637 3,209,962 3,120,599 3,217,826 3,245,753	3.064 3.187 3.331 3.485 3.658	\$121,896 125,526 130,100 135,978 140,337	1.317 1.326 1.337 1.352 1.363
		5 Years: 4 Years: 3 Years:	Annual Exponential Trend 2.9% 3.1% 3.2%		5 Years: 4 Years: 3 Years:	Annual Exponential Trend 4.8% 5.0% 5.0%		5 Years: 4 Years: 3 Years:	Annual Exponential Trend 4.5% 4.7% 4.8%	5 Years: 4 Years: 3 Years:	Annual Exponential Trend 0.9% 0.9% 1.0%
Exp	erience Period:	F	Selected Premium Trends 2.9%			Selected Premium Trends 4.8%		F	Selected Premium Trends 4.5%		Selected Premium Trends 0.9%
Pro	ojection Period:		3.2%			5.0%			4.8%		1.0%

<sup>(1), (4)</sup> and (7) Calculated based on data provided by member companies and the extension of exposures method.

See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

<sup>(2), (5)</sup> and (8) Calculated based on data provided by member companies and the extension of exposures method.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(10)</sup> From Section C, Page 65; Sum product of the distribution in (3) through (8) and the corresponding liability limits above each column

<sup>(11)</sup> From Section C, Page 65

#### Determination of Statewide Average Liability Rating Factors

				Liabilit	y Limit			
		\$25,000	\$50,000	\$100,000	\$200,000	\$250,000	\$300,000	
(1)	Current Rate:	\$22.12	\$25.22	\$29.20	\$34.06	\$36.06	\$37.83	
(2) Current Increased	d Limit Factor:	1.000	1.140	1.320	1.540	1.630	1.710	
	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		D	istribution of Ea	rned House Yea	rs			Liability Average
Accident			Liabilit	y Limit				Rating
Year	\$25,000	\$50,000	\$100,000	\$200,000	\$250,000	\$300,000	Total	Factor
2017	10.5%	33.4%	32.9%	0.1%	0.0%	23.2%	100.0%	1.317
2018	10.0%	32.1%	33.3%	0.1%	0.0%	24.5%	100.0%	1.326
2019	9.2%	30.8%	33.8%	0.1%	0.0%	26.1%	100.0%	1.337
2020	8.3%	28.4%	35.0%	0.1%	0.0%	28.1%	100.0%	1.352
2021	7.7%	26.9%	35.5%	0.1%	0.0%	29.7%	100.0%	1.363

<sup>(1)</sup> From current MH(C) rate manual, page MHC-R-7

<sup>(2) = (1) / \$22.12</sup>, where \$22.12 is the current rate for \$25,000 of Liability coverage

<sup>(3)</sup> through (8) Based on data provided by member companies

<sup>(9) = (3) + (4) + (5) + (6) + (7) + (8)</sup> 

<sup>(10)</sup> Sum product of the distribution in (3) through (8) and the increased limit factors in (2)

Determination of Average Rating Factors and Average Current Base Rates by Territory Group

	(1)	(2)	(3)	(4) = (1) / (2)	(5) = (2) / (3)	(6)	(7)	(8)	(9) = (6) / (7)	(10) = (7) / (8)	(11)	(12)	(13)	(14) = (11) / (12)	(15) = (12) / (13)
		Mob	ile Home Structu	ıres			Ad	djacent Structure	es			ı	Personal Effects		
	2021 Earned	2021 Earned				2021 Earned	2021 Earned				2021 Earned	2021 Earned			
	Premium	Premium	2021 Earned	Average	Average	Premium	Premium	2021 Earned	Average	Average	Premium	Premium	2021 Earned	Average	Average
Territory	at Current	at Current	House	Rating	Current	at Current	at Current	House	Rating	Current	at Current	at Current	House	Rating	Current
Group	Manual Level	Base	Years	Factor	Base Rate	Manual Level	Base	Years	Factor	Base Rate	Manual Level	Base	Years	Factor	Base Rate
1	\$2,752,109	\$1,490,134	1,964	1.847	\$758.70	\$179,986	\$78,458	1,484	2.294	\$52.88	\$463,938	\$174,209	1,897	2.663	\$91.81
2	3,478,215	1,846,020	2,742	1.884	673.20	299,046	112,727	2,317	2.653	48.64	570,202	194,635	2,698	2.930	72.14
3	10,591,276	5,832,432	13,305	1.816	438.37	838,950	305,701	10,883	2.744	28.09	1,903,362	596,850	13,046	3.189	45.75
4	9,261,992	4,175,349	9,873	2.218	422.92	841,130	236,800	8,723	3.552	27.15	1,586,980	391,240	9,818	4.056	39.85
5	9,093,374	4,134,224	10,868	2.200	380.39	786,106	225,851	9,260	3.481	24.39	1,536,256	398,637	10,720	3.854	37.19
6	29,333,993	13,429,444	43,671	2.184	307.51	2,392,729	726,834	39,663	3.292	18.33	5,811,580	1,490,182	44,047	3.900	33.83
Total	\$64,510,959	\$30,907,603	82,423	2.087	\$374.99	\$5,337,948	\$1,686,371	72,330	3.165	\$23.32	\$11,872,318	\$3,245,753	82,227	3.658	\$39.47

<sup>(1), (6)</sup> and (11) Calculated based on data provided by member companies and the extension of exposures method; excludes exposure where amount of insurance is unavailable or deductible is invalid. See Section E, Page 9 for more details as well as an example related to the calculation of premium at present (manual) rates.

<sup>(2), (7)</sup> and (12) Calculated based on data provided by member companies and the extension of exposures method.

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class.

<sup>(3), (8)</sup> and (13) Based on data provided by member companies

# **Derivation of Complement of Credibility**

	Mobile Home Structures	Adjacent Structures	Personal Effects	Liability
(1) Credibility-Wtd Non-Hurricane Base-Class Loss Cost from Prior Filing	\$109.71	\$8.88	\$9.98	\$12.76
(2) Premium Trend Rate	3.2%	5.0%	4.8%	1.0%
(3) Premium Trend Factor	1.054	1.085	1.081	1.017
(4) Loss Trend Rate	12.0%	6.0%	2.8%	8.0%
(5) Loss Trend Factor	1.208	1.102	1.047	1.137
(6) Complement of Credibility	\$125.75	\$9.02	\$9.66	\$14.27

<sup>(1)</sup> From 2021 NCRB Mobile Homeowners MH(C) rate filing, Section C, Pages 2, 4, 6, and 8

<sup>(2)</sup> From Section C, Page 64

<sup>(3) = [1 + (2)] ^ [20 / 12];</sup> Trended 20 months from the trend-to date from the 2021 NCRB Mobile Homeowners MH(C) rate filing, Section C, Page 62 (5/1/2022) to the average written data for the period in which the rates are to be in effect (1/1/2024)

<sup>(4)</sup> From Section C, Pages 57 through 60

<sup>(5) = [1 + (4)] ^ [20 / 12];</sup> Trended 20 months from the trend-to date from the 2021 NCRB Mobile Homeowners MH(C) rate filing, Section C, Page 55 (11/1/2022) to the average accident date for the period in which the proposed rates are to be in effect (7/1/2024)

 $<sup>(6) = (1) \</sup>times (5) / (3)$ 

Derivation of Modeled Hurricane Base Class Lost Cost

	Mobile Home Structures	Adjacent Structures	Personal Effects
(1) Trended Modeled Hurricane Loss & LAE	\$10,221,245	\$955,728	\$1,086,116
(2) 2021 Earned House Years	82,580	72,367	82,312
(3) 2021 Average Rating Factor	2.087	3.165	3.658
(4) 2021 Premium Trend Factor	1.096	1.155	1.148
(5) Modeled Hurricane Base Class Loss Cost; = (1) / [ (2) x (3) x (4) ]	\$54.11	\$3.61	\$3.14

<sup>(1)</sup> Provided by Aon

<sup>(2)</sup> Based on data provided by member companies; excludes exposure where amount of insurance is unavailable

<sup>(3)</sup> From Section C, Page 64

<sup>(4)</sup> From Section C, Page 63

### Index-Based Expense Trend

	(1)	(2)	(3)	
Quarter Ending	Quarterly Avg CPI: All Items	Quarterly Avg CPI: All Items Less Energy	Quarterly Compensation Cost Index (CCI)	
3/31/2017	102.7	103.1	104.7	
6/30/2017	103.3	103.5	106.3	
9/30/2017	103.7	103.8	106.1	
12/31/2017	104.1	104.2	106.2	
3/31/2018	105.0	105.0	107.4	
6/30/2018	106.1	105.7	109.1	
9/30/2018	106.4	106.0	108.8	
12/31/2018	106.3	106.4	108.7	
3/31/2019	106.7	107.2	110.4	
6/30/2019	108.0	107.8	111.4	
9/30/2019	108.3	108.3	111.8	
12/31/2019	108.5	108.7	111.8	
3/31/2020	109.0	109.5	112.6	
6/30/2020	108.4	109.6	114.1	
9/30/2020	109.6	110.5	114.3	
12/31/2020	109.9	110.9	114.5	
3/31/2021	111.0	111.5	115.8	
6/30/2021	113.6	113.5	116.6	
9/30/2021	115.4	115.0	117.2	
12/31/2021	117.2	116.5	117.8	
3/31/2022	119.9	118.7	120.2	
				(4)
	F	Fitted Annual Trends (Exponentia	1)	Blended CPI and CCI Trends
21-point (2017-2022):	2.6%	2.5%	2.5%	2.5%
17-point (2018-2022):	2.8%	2.8%	2.6%	2.7%
13-point (2019-2022):	3.5%	3.2%	2.6%	3.0%
9-point (2020-2022):	5.2%	4.2%	2.9%	3.8%
5-point (2021-2022):	7.6%	6.3%	3.5%	5.2%
		Selected	Experience Period Trend:	4.0%
		Selected	l Projection Period Trend:	4.0%

<sup>(1), (2)</sup> From Bureau of Labor Statistics - Consumer Price Index for All Urban Consumers - U.S. City Average; each expenditure indexed to 2015 (i.e., 2015 index = 100)

<sup>(3)</sup> From Bureau of Labor Statistics - Employment Cost Index for Insurance Carriers and Related Activities

<sup>(4) = (1)</sup> x 25% + (2) x 25% + (3) x 50%

#### Derivation of Fixed Expense Per Policy

		Mobile Home Structures	Adjacent Structures	Personal Effects	Liability
(1)	Experience Period Expense Trend	4.0%	4.0%	4.0%	4.0%
(2)	Projection Period Expense Trend	4.0%	4.0%	4.0%	4.0%
(3)	<ul> <li>(a) Average Date of Expenses</li> <li>(b) End Date of Experience Period</li> <li>(c) Experience Period (Years) = (3b) - (3a)</li> </ul>	7/1/2020 12/31/2021 1.500	7/1/2020 12/31/2021 1.500	7/1/2020 12/31/2021 1.500	7/1/2020 12/31/2021 1.500
(4)	<ul><li>(a) Trend-to Date</li><li>(b) Projection Period (Years) = (4a) - (3b)</li></ul>	1/1/2024 2.000	1/1/2024 2.000	1/1/2024 2.000	1/1/2024 2.000
(5)	Expense Trend Factor	1.147	1.147	1.147	1.147
(6)	Fixed Expenses	21.3%	21.3%	21.3%	21.3%
(7)	2020 Premium Trend Factor	1.128	1.211	1.199	1.039
(8)	Trended Fixed Expenses	21.7%	20.2%	20.4%	23.5%
(9)	2021 Manual-Level Base Premium	\$30,907,603	\$1,686,371	\$3,245,753	\$1,809,847
(10)	2021 Earned Exposures	82,423	72,330	82,227	81,820
(11)	Average Current Base Premium	\$374.99	\$23.32	\$39.47	\$22.12
(12)	Fixed Expense Per Policy	\$81.25	\$4.70	\$8.04	\$5.20

<sup>(1), (2)</sup> From Section C, Page 69

<sup>(3</sup>a), (3b) Based on experience period used to select expenses

<sup>(4</sup>a) Based on a proposed effective date of 7/1/2023

 $<sup>(5) = [1 + (1)] ^ (3</sup>c) x [1 + (2)] ^ (4b)$ 

<sup>(6)</sup> From Section C, Page 71

<sup>(7)</sup> From Section C, Page 63

 $<sup>(8) = (5) \</sup>times (6) / (7)$ 

 $<sup>(9) \ {\</sup>it Calculated based on data provided by member companies and the extension of exposures method } \\$ 

See Section E, Page 9 for more details on the rate order calculation

See Explanatory Memorandum (Average Rating Factors) for definitions of the base class

<sup>(10)</sup> Based on data provided by member companies; excludes exposure where amount of insurance is unavailable

<sup>(11) = (9) / (10)</sup> 

 $<sup>(12) = (8) \</sup>times (11)$ 

# Derivation of Underwriting Expense Ratios

	2017		2018		2019		2020		2021		Average:	
	\$	%	\$	%	\$	%	\$	%	\$	<u>%</u>	2019-2021	Selected
(1) Direct Premiums Written	\$66,508,975	xxx	\$67,139,601	xxx	\$68,239,118	xxx	\$73,965,740	xxx	\$79,662,492	xxx		
(2) Direct Premiums Earned	67,029,886	xxx	66,944,380	xxx	67,290,504	xxx	71,655,674	xxx	76,749,306	xxx		
(3) Commission & Brokerage	\$12,472,436	18.8%	\$12,112,121	18.0%	\$11,585,604	17.0%	\$12,237,317	16.5%	\$13,024,353	16.3%	16.6%	16.6%
(4) Taxes, Licenses, & Fees	1,841,143	2.8%	2,233,831	3.3%	2,104,476	3.1%	2,531,459	3.4%	2,520,639	3.2%	3.2%	3.2%
(5) Other Acquisition	9,334,970	13.9%	9,426,839	14.1%	9,414,383	14.0%	8,885,677	12.4%	8,906,497	11.6%	12.7%	12.7%
(6) General Expenses	5,235,195	7.8%	5,306,155	7.9%	5,772,437	8.6%	6,289,239	8.8%	6,460,610	8.4%	8.6%	8.6%
(7) Total		43.3%		43.4%		42.6%		41.1%		39.5%	41.1%	41.1%
(8) Variable Expenses		21.5%		21.4%		20.1%		20.0%		19.5%	19.8%	19.8%
(9) Fixed Expenses		21.7%		22.0%		22.6%		21.2%		20.0%	21.3%	21.3%

<sup>(1)</sup> through (6) Provided by the North Carolina Rate Bureau

<sup>(3) &</sup>amp; (4) Relative to written premium

<sup>(5) &</sup>amp; (6) Relative to earned premium

<sup>(7) = (3) + (4) + (5) + (6)</sup> 

<sup>(8) = (3) + (4)</sup> 

<sup>(9) = (5) + (6)</sup> 

Derivation of Ratio of Unallocated Loss Adjustment Expense (ULAE) to Loss & Allocated Loss Adjustment Expense (ALAE)

	(1)	(2)	(3) = (1) / (2)	(4)
Calendar Year	Incurred ULAE	Incurred Loss & ALAE	Ratio of Incurred ULAE to Incurred Loss & ALAE	Distribution of Incurred Hurricane Loss & ALAE as % of Total
2017	\$1,782,980	\$19,202,879	9.3%	1.6%
2018	3,992,348	59,786,206	6.7%	52.5%
2019	1,685,290	19,635,114	8.6%	6.0%
2020	2,335,573	27,519,599	8.5%	6.1%
2021	2,244,599	24,462,678	9.2%	1.2%
Total	\$12,040,790	\$150,606,476	8.0%	
	Av	erage (2017-2021):	8.4%	
	Averag	e (excluding 2018):	8.9%	
	Av	erage (2019-2021):	8.7%	
Selected Ratio	of ULAE to Loss & ALAE	E (Non-Hurricane):	8.9%	
S	Selected Ratio of LAE to	6.0%		

<sup>(1) =</sup> Adjusting & Other Expenses

Note: See pre-filed testimony of M. Mao for support of the Catastrophe LAE Ratio, which is applied by Aon to the modeled hurricane wind and storm surge losses

<sup>(2) =</sup> Incurred Loss + Defense & Cost Containment Expenses

<sup>(1), (2)</sup> Provided by the North Carolina Rate Bureau

<sup>(4)</sup> Based on data provided by member companies

## Derivation of Policyholder Dividends

	(1)	(2)	(3) = (2) / (1)
	Total		
	Written Premium:		Dividends as
Calendar	Homeowners	Dividends	Percent of Total
Year	(\$000)	(\$000)	Written Premium
2017	\$2,564,886	\$10,203	0.40%
2018	2,710,120	11,678	0.43%
2019	2,887,386	17,986	0.62%
2020	3,105,409	15,534	0.50%
2021	3,322,162	14,368	0.43%
Total	\$14,589,964	\$69,770	0.48%
	Avera	ge (2017-2021):	0.48%
	Average (2017-2021 excludi	ng High & Low):	0.45%
	Avera	ge (2019-2021):	0.52%
	Selected Policyhol	der Dividends:	0.45%

(1), (2) From industry Annual Statements, Statutory Page 14, Homeowners Multiple Peril

### Derivation of Compensation for Assessment Risk per Policy

	Mobile Home Structures	Adjacent Structures	Personal Effects
(1) Average Current Base Premium	\$374.99	\$23.32	\$39.47
(2) Compensation for Assessment Risk	1.6%	1.6%	1.6%
(3) Commission & Brokerage	16.6%	16.6%	16.6%
(4) Taxes, Licenses, & Fees	3.2%	3.2%	3.2%
(5) Compensation for Assessment Risk (Adj for Expenses)	2.0%	2.0%	2.0%
(6) Compensation for Assessment Risk per Policy	\$7.54	\$0.47	\$0.79

<sup>(1)</sup> From Section C, Page 70

<sup>(2)</sup> See pre-filed testimony from P. Anderson for support of Compensation for Assessment Risk provision

<sup>(3), (4)</sup> From Section C, Page 71

<sup>(5) = (2) / [1 - (3) - (4)]</sup> 

 $<sup>(6) = (1) \</sup>times (5)$ 

# North Carolina Mobile Homeowners MH(C) - Mobile Home Structures

Derivation of Base Class Net Cost of Reinsurance by Territory Group

(1) (2) (3) (4) (5) (6) (7) 
$$= (3) / \{(4) \times (5) \times [1-(6)]\}$$

Territory Group	Estimated Net Cost of Reinsurance	2021 House Years	Average Net Cost of Reinsurance	2021 Average Rating Factor	2021 Premium Trend Factor	Variable Expenses	Base Class Net Cost of Reinsurance
1	\$1,538,413	1,972	\$780.09	1.847	1.096	0.278	\$533.45
2	1,282,234	2,749	466.41	1.884	1.096	0.278	312.63
3	4,755,444	13,319	357.03	1.816	1.096	0.278	248.31
4	2,779,913	9,887	281.16	2.218	1.096	0.278	160.08
5	2,024,496	10,891	185.89	2.200	1.096	0.278	106.74
6	2,784,362	43,761	63.63	2.184	1.096	0.278	36.79
Statewide	\$15,164,862	82,580	\$183.64	2.087	1.096	0.278	\$111.12

<sup>(1)</sup> Provided by Aon

<sup>(2)</sup> Based on data provided by member companies; excludes exposure where amount of insurance is unavailable

<sup>(4)</sup> From Section C, Page 66

<sup>(5)</sup> From Section C, Page 63

<sup>(6)</sup> From Section C, Page 1. Includes Commission and Brokerage expense; Taxes, Licenses, and Fees; Profit; Contingencies; and Policyholder Dividends

## North Carolina Mobile Homeowners MH(C) - Adjacent Structures

Derivation of Base Class Net Cost of Reinsurance by Territory Group

(1) (2) (3) (4) (5) (6) (7) 
$$= (3) / \{(4) \times (5) \times [1-(6)]\}$$

Territory Group	Estimated Net Cost of Reinsurance	2021 House Years	Average Net Cost of Reinsurance	2021 Average Rating Factor	2021 Premium Trend Factor	Variable Expenses	Base Class Net Cost of Reinsurance
1	\$107,599	1,489	\$72.24	2.294	1.155	0.278	\$37.72
2	112,583	2,318	48.57	2.653	1.155	0.278	21.93
3	452,129	10,885	41.54	2.744	1.155	0.278	18.13
4	284,258	8,731	32.56	3.552	1.155	0.278	10.98
5	194,017	9,266	20.94	3.481	1.155	0.278	7.21
6	285,583	39,678	7.20	3.292	1.155	0.278	2.62
Statewide	\$1,436,169	72,367	\$19.85	3.165	1.155	0.278	\$7.51

<sup>(1)</sup> Provided by Aon

<sup>(2)</sup> Based on data provided by member companies; excludes exposure where amount of insurance is unavailable

<sup>(4)</sup> From Section C, Page 66

<sup>(5)</sup> From Section C, Page 63

<sup>(6)</sup> From Section C, Page 1. Includes Commission and Brokerage expense; Taxes, Licenses, and Fees; Profit; Contingencies; and Policyholder Dividends

## North Carolina Mobile Homeowners MH(C) - Personal Effects

Derivation of Base Class Net Cost of Reinsurance by Territory Group

(1) (2) (3) (4) (5) (6) (7) 
$$= (3) / \{(4) \times (5) \times [1-(6)]\}$$

Territory Group	Estimated Net Cost of Reinsurance	2021 House Years	Average Net Cost of Reinsurance	2021 Average Rating Factor	2021 Premium Trend Factor	Variable Expenses	Base Class Net Cost of Reinsurance
1	\$291,173	1,905	\$152.81	2.663	1.148	0.278	\$69.20
2	241,726	2,704	89.39	2.930	1.148	0.278	36.80
3	486,755	13,054	37.29	3.189	1.148	0.278	14.10
4	243,748	9,826	24.81	4.056	1.148	0.278	7.37
5	153,900	10,729	14.34	3.854	1.148	0.278	4.49
6	219,368	44,093	4.98	3.900	1.148	0.278	1.54
Statewide	\$1,636,669	82,312	\$19.88	3.658	1.148	0.278	\$6.56

<sup>(1)</sup> Provided by Aon

<sup>(2)</sup> Based on data provided by member companies; excludes exposure where amount of insurance is unavailable

<sup>(4)</sup> From Section C, Page 66

<sup>(5)</sup> From Section C, Page 63

<sup>(6)</sup> From Section C, Page 1. Includes Commission and Brokerage expense; Taxes, Licenses, and Fees; Profit; Contingencies; and Policyholder Dividends

#### **Derivation of Net Deviations**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		= (1) + (2)			= (4) + (5)	= (4) / (6)	= 1 - (1) / (4)	= 1- (2) / (5)	= 1 - (3) / (6)

Calendar	Direct Written P	remium (Including	Net Deviations)	Man	Manual Premium (Excluding Net Deviations)				<b>Deviation from Manual Premium</b>		
Year	Standard	Non-Standard	Total	Standard	Non-Standard	Total	Total % Standard Standard		Non-Standard	Total	
2017	\$66,508,975	\$0	\$66,508,975	\$75,883,932	\$0	\$75,883,932	100.0%	12.4%	N/A	12.4%	
2018	67,139,601	0	67,139,601	71,174,173	0	71,174,173	100.0%	5.7%	N/A	5.7%	
2019	68,239,118	0	68,239,118	78,365,841	0	78,365,841	100.0%	12.9%	N/A	12.9%	
2020	73,937,467	28,273	73,965,740	87,400,493	20,932	87,421,425	100.0%	15.4%	-35.1%	15.4%	
2021	76,146,820	3,515,672	79,662,492	90,834,717	3,127,151	93,961,868	96.7%	16.2%	-12.4%	15.2%	
Total	\$351,971,981	\$3,543,945	\$355,515,926	\$403,659,156	\$3,148,083	\$406,807,239	99.2%	12.8%	-12.6%	12.6%	

Average (2017-2021): 12.3% Average (2017-2021 excluding High & Low): 13.5% Average (2019-2021): 14.5%

Selected Net Deviations: 5.0%

<sup>(1), (2), (4), (5)</sup> Provided by the North Carolina Rate Bureau

## North Carolina Mobile Homeowners MH(C) Program

## **Section D**

**Exhibits Supporting the Rating Plan Revisions** 

## North Carolina Mobile Homeowners MH(C) Program

## Exhibits Supporting the Rating Plan Revisions

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Wind Exclusion Credits	Page 1

**Derivation of Wind Exclusion Credits** 

	<u> </u>	Territory Group 1			Territory Group 2			
	Mobile Home Structures	Adjacent Structures	Personal Effects	Mobile Home Structures	Adjacent Structures	Personal Effects		
(1) Indicated Required Base Class Rate	\$1,491.31	\$94.80	\$164.75	\$1,048.80	\$60.58	\$98.63		
(2) Loss Cost Underlying Indicated Rate Change	\$535.34	\$30.55	\$50.71	\$394.21	\$19.42	\$30.02		
(3) Non-Wind Portion of Losses	30.86%	16.00%	45.63%	39.15%	20.62%	56.64%		
(4) Fixed Expenses per Policy	\$91.82	\$6.49	\$11.05	\$90.01	\$5.61	\$10.04		
(5) Variable Expense per Policy	27.75%	27.75%	27.75%	27.75%	27.75%	27.75%		
(6) Non-Wind Base Rate excl. Reinsurance Cost; = [ (2) x (3) + (4) ] / [ 1.0 - (5) ]	\$355.74	\$15.75	\$47.32	\$338.19	\$13.31	\$37.43		
(7) Compensation for Assessment Risk per Policy	\$15.25	\$1.06	\$1.85	\$13.54	\$0.98	\$1.45		
(8) Compensation for Assessment Risk Adjustment Factor	0.410	0.307	0.554	0.505	0.384	0.675		
(9) Adjusted Compensation for Assessment Risk; = (7) x (8)	\$6.25	\$0.33	\$1.02	\$6.83	\$0.38	\$0.98		
(10) Net Cost of Reinsurance (Non-Wind Perils Only)	\$75.95	\$5.45	\$27.14	\$50.38	\$3.59	\$19.57		
(11) Net Deviations	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%		
(12) Indicated Wind Exclusion Credit	69.1%	76.1%	51.8%	60.3%	70.0%	38.1%		
(13) Current Wind Exclusion Credit	59.6%	37.9%	38.9%	59.6%	37.9%	38.9%		
(14) Proposed Wind Exclusion Credit	64.3%	57.0%	45.3%	60.0%	53.9%	38.5%		

<sup>(1), (2), (4), (5), (7)</sup> From Section C, Pages 10, 21, and 32

<sup>(3) =</sup> X / (X + Y + Z); where X = 5-year average annual non-wind losses + 2021 modeled storm surge losses, Y = 2021 modeled hurricane wind losses, and Z = 5-year average annual non-hurricane wind losses

 $<sup>(8) = [(2) \</sup>times (3) + (4)]/[(2) + (4)]$ 

<sup>(10)</sup> Based on data provided by Aon

<sup>(11)</sup> From Section C, Page 1

 $<sup>(12) = { (1) - [ (6) + (9) + (10) ] / [ 1 - (11) ] } / (1)</sup>$ 

<sup>(13)</sup> From NCRB MH(C) Rate Manual

<sup>(14)</sup> Based on average of (12) and (13)

## North Carolina Mobile Homeowners MH(C) Program

Section E

**Supplemental Information** 

## North Carolina Mobile Homeowners MH(C) Program

## Supplemental Exhibits Responses to North Carolina Administrative Code Title 11, Chapter 10.1105

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North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1)
Summary of Earned Premium by Coverage and Year

Earned Premium at Actual (i.e. Collected) Level

(1)	(2)	(3)	(4)	(5)	(6)
			= (1) + (2) + (3)		= (4) + (5)

**Property Coverages** Mobile Home Calendar / Adjacent Personal Sub-Total Total Effects Liability MH(C) Accident Year Structures Structures Property 2017 \$43,869,170 \$4,545,555 \$10,647,591 \$59,062,316 \$2,287,084 \$61,349,400 2018 43,558,226 4,578,868 10,785,165 58,922,259 2,250,779 61,173,038 2019 43,557,906 59,170,282 2,217,979 61,388,261 4,657,439 10,954,937 2020 46,305,567 2,329,028 5,027,770 11,950,463 63,283,800 65,612,828 2021 48,618,954 5,452,750 12,518,874 66,590,577 2,377,681 68,968,258 Total \$225,909,822 \$24,262,382 \$56,857,030 \$307,029,234 \$11,462,550 \$318,491,784

Earned Premium at Current (i.e. Manual) Rate Level

(7) (8) (9) (10) (11) (12) 
$$= (7) + (8) + (9) = (10) + (11)$$

	P	roperty Coverages					
Calendar / Accident Year	Mobile Home Structures	Adjacent Structures	Personal Effects	Sub-Total Property	Liability	Total MH(C)	
2017	\$58,970,121	\$4,622,213	\$10,087,168	\$73,679,502	\$2,394,944	\$76,074,446	
2018	58,516,825	4,658,622	10,231,316	73,406,763	2,360,602	75,767,365	
2019	58,416,471	4,734,168	10,394,723	73,545,363	2,326,875	75,872,237	
2020	61,985,833	5,063,060	11,215,384	78,264,277	2,429,867	80,694,144	
2021	64,510,959	5,337,948	11,872,318	81,721,225	2,467,108	84,188,333	
Total	\$302,400,209	\$24,416,010	\$53,800,910	\$380,617,129	\$11,979,396	\$392,596,525	

Note: based on data provided by member companies; earned premiums at current (manual) rate level are calculated using the extension of exposures method

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1) Summary of Paid Losses and Allocated Loss Adjustment Expenses (ALAE) by Coverage and Year

Paid Losses										
	(1)	(2)	(3)	(4) = (1) + (2) + (3)	(5)	(6) = (4) + (5)				
	P									
Calendar / Accident Year	Mobile Home Structures	Adjacent Structures	Personal Effects	Sub-Total Property	Liability	Total MH(C)				
2017	\$15,925,010	\$740,476	\$2,592,349	\$19,257,835	\$597,204	\$19,855,039				
2018	52,981,384	4,202,189	7,606,889	64,790,462	908,577	65,699,039				
2019	17,014,941	893,618	2,348,134	20,256,694	962,324	21,219,018				
2020	26,460,839	1,644,213	3,200,330	31,305,383	793,584	32,098,967				
2021	19,071,313	1,216,579	2,522,225	22,810,117	154,799	22,964,916				
Total	\$131,453,487	\$8,697,076	\$18,269,928	\$158,420,491	\$3,416,487	\$161,836,978				
			Paid ALAE							
	(7)	(8)	(9)	(10) = (7) + (8) + (9)	(11)	(12) = (10) + (11)				
	P	roperty Coverages								
Calendar /	Mobile Home	Adjacent	Personal	Sub-Total		Total				
Accident Year	Structures	Structures	Effects	Property	Liability	MH(C)				
2017	\$2,554,907	\$135,105	\$482,742	\$3,172,754	\$199,847	\$3,372,601				
2018	7,001,525	591,141	1,261,013	8,853,679	228,207	9,081,886				
2019	2,782,383	140,090	415,172	3,337,645	101,839	3,439,484				
2020	4,412,539	401,732	555,411	5,369,682	101,080	5,470,762				
2021	2,455,503	235,216	348,269	3,038,989	55,290	3,094,279				
Total	\$19,206,858	\$1,503,285	\$3,062,606	\$23,772,749	\$686,262	\$24,459,011				

#### Notes:

Losses and ALAE based on data provided by member companies and include actual hurricane losses.

All amounts shown exclude Unallocated Loss Adjustment Expenses (ULAE).

ULAE was accounted for in the rate indication via a 8.9% ULAE factor applied to Non-Hurricane Losses and a 6.0% LAE factor applied to Hurricane Losses (see Section C, Page 72). For Non-Hurricane losses, the ULAE factors are applied on Section C, Pages 3, 5, 7, and 9. For Hurricane losses, the LAE factor is applied by Aon.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1) Summary of Incurred Losses and Allocated Loss Adjustment Expenses (ALAE) by Coverage and Year

#### Incurred Losses

	(1)	(2)	(3)	(4) = (1) + (2) + (3)	(5)	(6) = (4) + (5)
	P	roperty Coverages				
Calendar / Accident Year	Mobile Home Structures	Adjacent Structures	Personal Effects	Sub-Total Property	Liability	Total MH(C)
2017 2018	\$15,928,010 52,987,084	\$740,476 4,202,189	\$2,592,349 7,606,889	\$19,260,835 64,796,162	\$597,204 908,577	\$19,858,039 65,704,739
2019	17,014,941	893,618	2,348,134	20,256,694	1,017,324	21,274,018
2020	26,463,839	1,644,213	3,200,330	31,308,383	945,992	32,254,375
2021	19,156,085	1,219,209	2,541,605	22,916,899	1,010,300	23,927,199
Total	\$131,549,959	\$8,699,706	\$18,289,308	\$158,538,973	\$4,479,397	\$163,018,370
		Ir	ncurred ALAE			
	(7)	(8)	(9)	(10) = (7) + (8) + (9)	(11)	(12) = (10) + (11)
	P	roperty Coverages				
Calendar /	Mobile Home	Adjacent	Personal	Sub-Total		Total
Accident Year	Structures	Structures	Effects	Property	Liability	MH(C)
2017	\$2,554,907	\$135,105	\$482,742	\$3,172,754	\$199,847	\$3,372,601
2018	7,001,225	591,141	1,261,013	8,853,379	228,207	9,081,586
2019	2,782,383	140,090	415,172	3,337,645	201,839	3,539,484
2020	4,412,539	401,732	555,411	5,369,682	102,080	5,471,762
2021	2,460,623	235,216	348,609	3,044,449	56,290	3,100,739
Total	\$19,211,678	\$1,503,285	\$3,062,946	\$23,777,909	\$788,262	\$24,566,171

#### Notes:

Losses and ALAE based on data provided by member companies and include actual hurricane losses.

All amounts shown exclude Unallocated Loss Adjustment Expenses (ULAE).

ULAE was accounted for in the rate indication via a 8.9% ULAE factor applied to Non-Hurricane Losses and a 6.0% LAE factor applied to Hurricane Losses (see Section C, Page 72). For Non-Hurricane losses, the ULAE factors are applied on Section C, Pages 3, 5, 7, and 9. For Hurricane losses, the LAE factor is applied by Aon.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1)
Summary of Incurred Losses by Coverage and Year

#### Anticipated Loss Ratio

The following were the anticipated loss and LAE ratios in the prior filings:

		Anticipated Loss Ratio									
				Eff.							
	Eff.	Eff.	Eff.	Prior to							
Coverage	11/1/2021	6/1/2020	10/1/2015	10/1/2015							
Mobile Home Structures	25.6%	22.9%	33.6%	38.9%							
Adjacent Structures	22.4%	18.6%	33.6%	38.9%							
Personal Effects	35.9%	40.4%	33.6%	38.9%							
Liability	54.7%	54.7%	53.9%	49.5%							

#### Note:

See explanatory filing memorandum and Section C in Exhibit RB-1 for additional information about expenses.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1a)
Summary of Exposure Data by Coverage and Year

#### Earned House Years

(1) (2) (3)

**Property Coverages** Adjacent Calendar / Mobile Home Personal Accident Year Structures Structures Effects Liability 2017 83,438 73,871 82,172 81,778 2018 81,149 71,938 80,378 79,908 2019 79,096 70,003 78,477 77,894 2020 71,719 81,322 80,700 81,762 2021 82,585 72,369 82,313 81,935 Total 408,031 359,899 404,663 402,215

#### **Excluded Companies:**

- -- No companies were excluded from the premium, loss, and exposure data used to develop the rate level, loss development, trend, relativity, and investment income calculations.
- -- No companies were excluded from the underwriting expense, loss adjustment expense, and deviation data used to develop the rate level calculations.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1b)

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1c) Summary of Data Adjustments

#### (1) Hurricane Losses

Actual hurricane losses were removed from the experience period data and replaced with modeled (i.e. expected) hurricane losses developed by Aon. Additionally, because storm surge is included in the modeled losses, flood losses in territories 110, 120, 130, 140, 150, and 160 associated with hurricanes were also removed. The tables below show, by accident year for each coverage, the proportion of the total losses and claim counts removed from the analysis due to hurricanes and storm surge:

#### Mobile Home Structures

		Proportion of L	oss & ALAE Due to	o Hurricanes		Proportion	of Claims Due to H	urricanes		
			Accident Year					Accident Year		
Territory	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
110	0.0%	68.3%	96.2%	0.0%	0.0%	0.0%	50.0%	82.6%	0.0%	0.0%
120	0.0%	92.8%	79.2%	61.6%	0.0%	0.0%	85.6%	59.1%	42.3%	0.0%
130	0.0%	68.0%	69.7%	34.5%	0.0%	0.0%	62.8%	37.9%	18.2%	0.0%
140	0.0%	89.0%	28.5%	34.1%	0.0%	0.0%	80.6%	39.7%	42.7%	0.0%
150	0.2%	81.1%	24.4%	11.3%	1.3%	0.7%	58.7%	29.4%	13.5%	1.2%
160	2.2%	83.3%	18.9%	15.6%	0.0%	2.8%	69.3%	17.2%	21.5%	0.0%
170	0.0%	6.6%	2.2%	34.0%	0.0%	0.0%	6.1%	4.6%	14.3%	0.0%
180	0.0%	52.4%	18.1%	20.1%	0.9%	0.0%	38.0%	16.5%	13.2%	1.4%
190	1.7%	49.9%	10.8%	18.5%	4.2%	2.0%	50.5%	18.9%	9.6%	1.4%
200	0.0%	82.9%	14.4%	3.3%	0.0%	0.0%	80.0%	13.0%	5.7%	0.0%
210	0.1%	27.5%	6.5%	5.3%	0.0%	0.8%	19.2%	4.1%	4.2%	0.0%
220	0.0%	67.0%	6.9%	1.0%	0.0%	0.0%	58.7%	6.5%	2.7%	0.8%
230	1.0%	79.8%	19.6%	4.2%	0.3%	4.5%	66.7%	11.2%	4.8%	0.9%
240	0.1%	25.1%	1.4%	3.0%	0.6%	0.4%	23.1%	1.3%	1.8%	0.7%
250	0.8%	40.6%	0.4%	1.0%	0.0%	0.7%	43.8%	2.1%	4.6%	0.0%
260	0.1%	11.6%	1.8%	0.4%	0.1%	0.3%	11.7%	0.4%	1.1%	0.3%
270	9.1%	31.8%	0.7%	2.7%	0.1%	4.7%	19.9%	0.9%	1.9%	1.2%
280	0.0%	25.0%	0.0%	4.9%	1.1%	0.0%	17.2%	0.0%	1.9%	2.0%
290	7.1%	53.2%	8.5%	2.4%	0.0%	4.2%	61.9%	4.3%	3.0%	0.0%
300	10.0%	65.2%	0.0%	4.4%	0.0%	6.0%	46.1%	0.0%	3.9%	0.0%
310	0.0%	15.1%	0.0%	3.2%	0.1%	0.0%	10.7%	0.0%	4.2%	0.3%
320	0.1%	10.2%	0.0%	2.4%	0.1%	0.2%	12.5%	0.0%	2.3%	0.3%
330	0.0%	0.6%	0.0%	5.7%	0.0%	0.0%	5.3%	0.0%	7.1%	0.0%
340	1.4%	9.9%	0.0%	4.9%	0.0%	0.6%	11.0%	0.0%	3.3%	0.0%
350	2.5%	6.9%	0.0%	2.3%	0.0%	1.7%	7.3%	0.0%	2.6%	0.0%
360	0.3%	2.7%	0.0%	4.4%	0.2%	0.5%	3.0%	0.2%	3.2%	0.4%
370	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%
380	0.4%	0.2%	0.0%	4.6%	4.7%	2.7%	1.4%	0.0%	3.0%	5.5%
390	2.0%	0.9%	0.0%	1.7%	0.0%	2.0%	1.7%	0.0%	1.4%	0.0%

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1c) Summary of Data Adjustments

#### (1) Hurricane Losses

Actual hurricane losses were removed from the experience period data and replaced with modeled (i.e. expected) hurricane losses developed by Aon. Additionally, because storm surge is included in the modeled losses, flood losses in territories 110, 120, 130, 140, 150, and 160 associated with hurricanes were also removed. The tables below show, by accident year for each coverage, the proportion of the total losses and claim counts removed from the analysis due to hurricanes and storm surge:

#### Adjacent Structures:

		Proportion of L	oss & ALAE Due to	o Hurricanes		Proportion	of Claims Due to H	urricanes		
			Accident Year					Accident Year		
Territory	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
110	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
120	0.0%	97.8%	100.0%	100.0%	0.0%	0.0%	91.3%	100.0%	100.0%	0.0%
130	0.0%	80.0%	100.0%	45.1%	0.0%	0.0%	76.9%	50.0%	50.0%	0.0%
140	0.0%	84.2%	100.0%	84.5%	0.0%	0.0%	86.5%	100.0%	83.3%	0.0%
150	0.0%	86.6%	60.9%	34.0%	0.0%	0.0%	83.4%	46.4%	33.3%	0.0%
160	0.0%	76.2%	100.0%	8.9%	0.0%	0.0%	72.0%	100.0%	25.0%	0.0%
170	0.0%	0.0%	0.0%	14.0%	0.0%	0.0%	0.0%	0.0%	14.3%	0.0%
180	0.0%	73.3%	8.5%	23.3%	0.0%	0.0%	54.0%	25.0%	15.6%	0.0%
190	0.0%	51.8%	52.2%	56.3%	0.0%	0.0%	56.1%	40.0%	26.9%	0.0%
200	0.0%	85.4%	0.0%	0.0%	0.0%	0.0%	91.2%	0.0%	0.0%	0.0%
210	0.0%	53.1%	0.6%	0.7%	0.0%	0.0%	37.5%	5.3%	5.7%	0.0%
220	0.0%	64.2%	0.0%	4.7%	0.0%	0.0%	61.0%	0.0%	12.5%	0.0%
230	0.0%	85.6%	1.7%	0.0%	1.4%	0.0%	82.8%	16.7%	0.0%	8.3%
240	0.1%	31.8%	0.0%	6.0%	0.0%	4.0%	39.4%	0.0%	3.7%	0.0%
250	0.0%	72.5%	0.0%	5.1%	0.0%	0.0%	57.1%	0.0%	6.3%	0.0%
260	0.0%	12.8%	0.0%	0.0%	0.0%	0.0%	17.4%	0.0%	0.0%	0.0%
270	8.3%	25.3%	0.0%	3.5%	0.0%	7.8%	31.0%	0.0%	7.7%	5.9%
280	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
290	0.0%	62.5%	0.0%	0.0%	0.0%	0.0%	71.4%	0.0%	0.0%	0.0%
300	0.0%	36.5%	0.0%	7.5%	0.0%	0.0%	71.4%	0.0%	12.5%	0.0%
310	0.0%	8.1%	0.0%	2.1%	0.0%	0.0%	17.8%	0.0%	4.6%	0.0%
320	0.0%	11.5%	0.0%	1.8%	0.8%	0.0%	16.7%	0.0%	5.4%	1.3%
330	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%
340	7.1%	5.0%	0.0%	3.0%	0.0%	4.1%	22.7%	0.0%	5.4%	0.0%
350	1.2%	7.3%	0.0%	7.2%	0.0%	5.2%	7.4%	0.0%	7.2%	0.0%
360	0.0%	2.3%	0.0%	1.3%	9.2%	0.0%	4.8%	0.0%	4.5%	3.2%
370	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
380	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	8.8%
390	0.0%	0.0%	0.0%	11.2%	0.0%	0.0%	0.0%	0.0%	10.5%	0.0%

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1c) Summary of Data Adjustments

#### (1) Hurricane Losses

Actual hurricane losses were removed from the experience period data and replaced with modeled (i.e. expected) hurricane losses developed by Aon. Additionally, because storm surge is included in the modeled losses, flood losses in territories 110, 120, 130, 140, 150, and 160 associated with hurricanes were also removed. The tables below show, by accident year for each coverage, the proportion of the total losses and claim counts removed from the analysis due to hurricanes and storm surge:

#### Personal Effects:

		Proportion of L	oss & ALAE Due t	Proportion of Claims Due to Hurricanes						
			Accident Year					Accident Year		
Territory	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
110	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
120	0.0%	90.3%	100.0%	78.0%	0.0%	0.0%	92.3%	100.0%	66.0%	0.0%
130	0.0%	64.2%	21.0%	0.0%	0.0%	0.0%	65.8%	25.0%	0.0%	0.0%
140	0.0%	78.9%	13.0%	0.0%	0.0%	0.0%	74.0%	16.7%	0.0%	0.0%
150	0.0%	83.9%	31.4%	4.6%	0.0%	0.0%	70.6%	34.6%	4.5%	0.0%
160	0.0%	85.9%	0.0%	5.2%	0.0%	0.0%	65.8%	0.0%	18.8%	0.0%
170	0.0%	0.0%	0.0%	64.3%	0.0%	0.0%	6.7%	0.0%	11.8%	0.0%
180	0.0%	27.5%	0.2%	4.3%	0.0%	0.0%	34.9%	9.4%	4.8%	0.0%
190	0.0%	33.1%	2.2%	40.0%	0.0%	0.0%	45.3%	6.1%	14.8%	0.0%
200	0.0%	53.1%	0.0%	0.0%	0.0%	0.0%	64.6%	0.0%	0.0%	0.0%
210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	0.0%	3.0%	0.0%
220	0.0%	38.7%	0.0%	0.2%	0.0%	0.0%	45.9%	4.3%	4.5%	0.0%
230	0.0%	56.7%	0.0%	0.0%	0.9%	0.0%	53.9%	0.0%	0.0%	4.0%
240	0.0%	5.8%	0.0%	0.0%	0.0%	0.0%	26.3%	0.0%	0.0%	0.0%
250	0.0%	32.0%	5.1%	-0.4%	0.0%	0.0%	37.2%	2.9%	2.5%	0.0%
260	0.0%	8.6%	0.0%	0.0%	0.0%	0.0%	13.0%	0.0%	0.0%	0.0%
270	0.0%	5.4%	0.0%	2.7%	0.0%	0.0%	19.5%	0.0%	2.1%	4.8%
280	0.0%	6.4%	0.0%	0.0%	2.1%	0.0%	14.7%	0.0%	0.0%	7.7%
290	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	21.4%	0.0%	0.0%	0.0%
300	0.0%	44.0%	0.0%	0.0%	0.0%	0.0%	44.4%	0.0%	0.0%	0.0%
310	0.0%	5.4%	0.0%	0.4%	0.0%	0.0%	17.2%	0.0%	3.4%	0.0%
320	0.0%	4.4%	0.0%	0.0%	0.0%	0.0%	11.0%	0.0%	1.0%	0.0%
330	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
340	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	4.8%	0.0%	5.5%	0.0%
350	0.0%	2.2%	0.0%	0.2%	0.0%	0.0%	2.7%	0.0%	0.8%	0.0%
360	0.0%	1.0%	0.0%	0.2%	0.0%	0.0%	0.5%	0.0%	2.3%	0.9%
370	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
380	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	4.7%
390	0.3%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1c) Summary of Data Adjustments

#### (2) Catastrophe Losses

Losses and claim counts used in the loss trend analysis were adjusted to remove catastrophe losses. This was done to prevent the volatile nature of catastrophe losses from impacting historical and projected trend selections. Because catastrophe losses other than hurricane and flood were not explicitly identified in the data provided by member companies, weekly claim data was reviewed by peril (water and wind) in order to identify catastrophe events. For each peril, weeks during the experience period which had reported claim counts that were greater than two times the standard deviation of weekly reported claims were identified as having catastrophe events. The claims and losses for each peril that occurred during those weeks were excluded from the loss trend analysis. The tables below show, by accident year for each coverage, the proportion of the total losses and claim counts removed from the analysis due to catastrophes:

	Pro	portion of Losses	Due to Catastroph	Proportion of Claims Due to Catastrophes				
Accident	Mobile Home	Adjacent	Personal		Mobile Home	Adjacent	Personal	
Year	Structures	Structures	Effects	Liability	Structures	Structures	Effects	Liability
2017	7.4%	20.6%	3.6%	0.0%	7.3%	21.6%	6.6%	0.0%
2018	72.5%	85.7%	67.6%	0.0%	60.0%	86.2%	66.5%	0.0%
2019	23.8%	37.3%	6.1%	0.0%	16.3%	44.8%	8.8%	0.0%
2020	27.2%	50.0%	15.4%	0.0%	26.2%	47.3%	22.4%	0.0%
2021	3.4%	14.9%	6.5%	0.0%	2.5%	6.7%	3.6%	0.0%

#### (3) Excess Wind Losses

Non-hurricane wind losses have been smoothed using an excess wind procedure. See the prefiled testimony of P. Anderson.

#### (4) Excess Flood Losses

Non-hurricane flood losses have been smoothed using an excess flood procedure. See the prefiled testimony of P. Anderson.

#### (5) Allocation of Data to Territory Groups

Because data provided by member companies only included zip code, the exposure, premium, and loss data needed to be allocated to the current territory definitions in instances where zip codes are located in multiple territories. The allocation in these instances was determined based on the number of mobile homes in each county/zip code/census block combination, as determined from census data. In the affected zip codes, each county/zip code/census block combination was mapped to a territory. Then, for each territory, the proportion of mobile homes within the territory out of the total mobile homes within the zip code was determined. These proportions within each territory were then used to allocate the exposure, premium, and loss data.

#### (6) Loss Development

Losses were developed to ultimate using loss development factors. See the prefiled testimony of P. Anderson.

#### (7) Loss Trend

Losses were trended to the average accident date of the policy period in which the rates are proposed to be in effect in order to bring all historical losses to a common projected cost level. See the prefiled testimony of P. Anderson.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1d)

Calculation of Premium at Current Rate Level

- -- See Section E, Page 1, which provides the actual earned premiums and earned premiums at present rates.
- -- Earned premium at present rates were calculated based on the following rate order calculation formula:

#### Property (Mobile Home Structures, Adjacent Structures, and Personal Effects):

Earned Premium = [Base Rate for Given Amount of Insurance x Territory Factor x (1 - Tie-Down Credit) + Deductible Credit] x Earned Exposure

#### Liability:

Premium = Rate for Given Limit x Earned Exposure

-- The following demonstrates a sample calculation for the earned premium at present rates for a single insured with Mobile Home Structures coverage of \$30,000 and a \$500 deductible, where the mobile home is located in territory group 1 and qualifies for the tie-down credit:

(1) Base Rate for \$30,000 of coverage	\$671.75
(2) Territory Group 1 Surcharge	1.720
(3) Tie-Down Credit	10%
(4) Deductible Credit for \$500 deductible	(62.18)
(5) Earned Exposure	1.000
(6) Premium at Present (Manual) Rates	\$977.69

#### Notes:

- (1) Assumes comprehensive coverage and that the mobile home is the insured's primary residence
- $(6) = [(1) \times (2) \times \{1 (3)\} + (4)] \times (5)$

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1e)
Premium Data for Largest Writers of Mobile Home Insurance in North Carolina

	Company	2021 Written Premium	2021 Written Premium Market Share	2021 Earned Premium	2021 Earned Premium Market Share
1	Foremost Insurance Company Grand Rapids MI	\$48,065,078	60.3%	\$46,763,830	60.9%
2	American Bankers Insurance Company of Florida	12,477,569	15.7%	12,178,709	15.9%
3	American Modern Home Insurance Company	9,837,043	12.3%	11,256,307	14.7%
4	Foremost Property & Casualty Insurance Company	3,452,586	4.3%	3,399,241	4.4%
5	American Modern Property and Casualty Insurance Company	2,911,593	3.7%	247,689	0.3%
6	American Family Home Insurance Company	1,759,288	2.2%	2,003,196	2.6%
7	Aegis Security Insurance Company	662,194	0.8%	631,437	0.8%
8	Tower Hill Prime Insurance Company	497,141	0.6%	268,897	0.4%
	Total	\$79,662,492	100.0%	\$76,749,306	100.0%

#### Note:

Fewer than ten companies are listed above because only companies with 2021 written premium greater than \$0 are included.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1f)

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1g)

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1h)

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1i)
Experience Period Loss Data by Coverage and Year

#### **Mobile Home Structures**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) = (5) x (6) x (7) x (8)	(10)
Accident Year	Paid Claims	Outstanding Claims	Paid Loss & ALAE	Case Outstanding Loss & ALAE	Incurred Loss & ALAE	Loss & ALAE Development Factor	ULAE Factor	Loss Trend Factor	Trended Incurred Loss & LAE	Expected Loss Ratio
2017 2018 2019 2020 2021	6,067 14,130 5,858 8,013 4,802	1 3 0 1 41	\$18,479,917 59,982,909 19,797,324 30,873,379 21,526,817	\$3,000 5,400 0 3,000 89,892	\$18,482,917 59,988,309 19,797,324 30,876,379 21,616,708	1.000 1.000 1.001 1.009 1.051	1.089 1.089 1.089 1.089 1.089	1.726 1.628 1.536 1.449 1.367	\$34,725,667 106,326,334 33,136,675 49,145,467 33,822,719	25.6% 25.6% 25.6% 25.6% 25.6%
Total	38,870	46	\$150,660,346	\$101,292	\$150,761,637				\$257,156,862	25.6%
				A	djacent Structure	s				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19) = (15) x (16) x (17) x (18)	(20)
Accident Year	Paid Claims	Outstanding Claims	Paid Loss	Case Outstanding	Incurred Losses	Loss & ALAE Development Factor	ULAE Factor	Loss Trend Factor	Trended Incurred Loss & LAE	Expected Loss Ratio
2017 2018 2019 2020 2021	450 2,304 482 1,044 637	0 0 0 0	\$875,581 4,793,330 1,033,708 2,045,946 1,451,796	\$0 0 0 0 2,630	\$875,581 4,793,330 1,033,708 2,045,946 1,454,426	1.000 1.001 1.001 1.007 1.047	1.089 1.089 1.089 1.089 1.089	1.441 1.372 1.307 1.245 1.185	\$1,373,635 7,168,978 1,472,410 2,792,115 1,965,961	22.4% 22.4% 22.4% 22.4% 22.4%
Total	4,917	1	\$10,200,361	\$2,630	\$10,202,991				\$14,773,100	22.4%
					Personal Effects					
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29) = (25) x (26) x (27) x (28)	(30)
Accident Year	Paid Claims	Outstanding Claims	Paid Loss	Case Outstanding	Incurred Losses	Loss & ALAE Development Factor	ULAE Factor	Loss Trend Factor	Trended Incurred Loss & LAE	Expected Loss Ratio
2017 2018 2019 2020 2021 Total	1,289 3,683 1,111 1,351 904 8,338	0 0 0 0 0 7	\$3,075,091 8,867,902 2,763,306 3,755,741 2,870,494 \$21,332,534	\$0 0 0 0 19,720	\$3,075,091 8,867,902 2,763,306 3,755,741 2,890,214 \$21,352,254	1.000 1.000 1.001 1.002 1.010	1.089 1.089 1.089 1.089 1.089	1.005 1.020 1.034 1.049 1.064	\$3,365,583 9,845,423 3,115,213 4,299,318 3,383,029 \$24,008,566	35.9% 35.9% 35.9% 35.9% 35.9%
ισιαι	0,000	,	ΨZ 1,00Z,004	Ψ13,120	Ψ21,002,20 <del>4</del>				Ψ24,000,000	

Note: Loss & ALAE and claims based on data provided by member companies; losses include actual hurricane losses

<sup>(6), (16), (26)</sup> from Section C, Pages 47, 49 and 51, respectively

<sup>(7), (17), (27)</sup> from Section C, Page 72

<sup>(8), (18), (28)</sup> from Section C, Page 55

<sup>(10), (20), (30)</sup> from Section E, Page 4

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1i) Experience Period Loss Data by Coverage and Year

#### Liability

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) = (5) x (6) x (7) x (8)	(10)
Accident Year	Paid Claims	Outstanding Claims	Paid Loss & ALAE	Case Outstanding Loss & ALAE	Incurred Loss & ALAE	Loss & ALAE Development Factor	ULAE Factor	Loss Trend Factor	Trended Incurred Loss & LAE	Expected Loss Ratio
2017	156	0	\$797,050	\$0	\$797,050	1.000	1.089	1.714	\$1,487,341	54.7%
2018	169	0	1,136,783	0	1,136,783	0.978	1.089	1.587	1,920,957	54.7%
2019	104	3	1,064,163	155,000	1,219,163	0.956	1.089	1.469	1,865,593	54.7%
2020	113	4	894,664	153,409	1,048,072	1.044	1.089	1.360	1,620,121	54.7%
2021	95	15	210,089	856,501	1,066,590	1.140	1.089	1.260	1,667,065	54.7%
Total	637	22	\$4,102,749	\$1,164,910	\$5,267,659				\$8,561,078	54.7%

Note: Loss & ALAE and claims based on data provided by member companies; losses include actual hurricane losses

<sup>(6)</sup> from Section C, Page 53

<sup>(7)</sup> from Section C, Page 72

<sup>(8)</sup> from Section C, Page 56

<sup>(10)</sup> from Section E, Page 4

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1j)

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1k)

See explanatory filing memorandum in Exhibit RB-1 and prefiled testimony of P. Anderson and M. Mao.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (1I) Summary of Loss & ALAE Data by Cause of Loss

#### **Mobile Home Structures**

Incurred	Loss 8	& Al	LAE	by	Peril
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Accident	Fire, Lightning			Non-Flood		Non-Hurricane				
Year	& Removal	Liability	Theft	Water	Flood	Wind & Hail	Hurricane	Vandalism	All Other	Total
2017	\$4,869,393	\$525	\$325,713	\$4,646,607	\$31,324	\$7,357,769	\$335,101	\$142,607	\$773,879	\$18,482,917
2018	4,558,913	350	206,772	7,523,036	3,216,512	10,366,256	32,526,814	193,219	1,396,437	59,988,309
2019	3,999,129	2,813	166,041	5,595,587	170,042	7,368,950	1,344,808	151,475	998,479	19,797,324
2020	5,310,532	2,515	99,236	7,319,215	135,088	13,892,693	2,040,370	249,811	1,826,919	30,876,379
2021	4,422,098	1,650	87,901	8,010,142	450,247	6,774,578	288,846	129,094	1,452,152	21,616,708
Total	\$23,160,066	\$7,853	\$885,663	\$33,094,587	\$4,003,214	\$45,760,244	\$36,535,938	\$866,206	\$6,447,866	\$150,761,637

#### Adjacent Structures

Incurred	Loss 8	ALAE	by	Peri
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Accident	Fire, Lightning			Non-Flood		Non-Hurricane				
Year	& Removal	Liability	Theft	Water	Flood	Wind & Hail	Hurricane	Vandalism	All Other	Total
2017	\$179,193	\$0	\$4,108	\$19,186	\$4,049	\$605,463	\$23,413	\$1,706	\$38,464	\$875,581
2018	158,770	0	3,501	398,282	289,365	991,766	2,796,313	0	155,333	4,793,330
2019	156,580	0	9,740	59,985	18,542	645,482	66,055	17,315	60,009	1,033,708
2020	175,724	0	9,614	76,075	63,881	1,350,234	158,542	24,795	187,079	2,045,946
2021	274,721	0	7,553	61,034	196,406	669,754	23,330	6,518	215,110	1,454,426
Total	\$944,987	\$0	\$34,516	\$614,562	\$572,243	\$4,262,700	\$3,067,654	\$50,334	\$655,994	\$10,202,991

#### Personal Effects

Incurred	220	ጲ	AI AF	by Peril	

Accident	Fire, Lightning			Non-Flood		Non-Hurricane				
Year	& Removal	Liability	Theft	Water	Flood	Wind & Hail	Hurricane	Vandalism	All Other	Total
2017	\$1,810,461	\$0	\$703,954	\$141,391	\$4,762	\$277,398	\$11,573	\$40,284	\$85,269	\$3,075,091
2018	1,629,213	0	679,371	402,402	1,043,873	994,724	3,903,695	57,060	157,563	8,867,902
2019	1,617,170	0	526,933	153,010	55,038	173,774	70,819	42,020	124,544	2,763,306
2020	2,047,719	0	333,580	243,714	92,721	632,228	71,512	95,433	238,834	3,755,741
2021	1,873,666	0	283,671	173,050	173,673	166,685	13,452	33,057	172,959	2,890,214
Total	\$8,978,229	\$0	\$2,527,508	\$1,113,568	\$1,370,066	\$2,244,809	\$4,071,051	\$267,854	\$779,169	\$21,352,254

#### Liability

Incurred	Losses	by	Peril
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Accident	Fire, Lightning			Non-Flood		Non-Hurricane				
Year	& Removal	Liability	Theft	Water	Flood	Wind & Hail	Hurricane	Vandalism	All Other	Total
2017	\$0	\$709,411	\$0	\$0	\$0	\$0	\$0	\$0	\$87,640	\$797,050
2018	0	1,130,753	0	0	0	0	1,270	0	4,760	1,136,783
2019	0	1,103,851	0	0	0	0	0	0	115,312	1,219,163
2020	13,463	361,482	332	378	0	6,426	722	1,134	664,134	1,048,072
2021	25,203	390,666	290	0	0	4,559	0	0	645,872	1,066,590
Total	\$38,666	\$3,696,164	\$622	\$378	\$0	\$10,985	\$1,992	\$1,134	\$1,517,718	\$5,267,659

Note: based on data provided by member companies

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (2)
Credibility Factor Development and Application

See explanatory filing memorandum in Exhibit RB-1 and prefiled testimony of P. Anderson.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (3)

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (4)

Loss Trend Factor Development and Application

- (4a) See Section C, Pages 55 through 61 and prefiled testimony of P. Anderson.
- (4b) Not applicable (no external indices used for loss trending purposes)
- (4c) Not applicable to Mobile Homeowners rate filings.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (5)
Changes in Premium Base resulting from Rating Exposure Trend

- (5a) See Section C, Pages 62 through 64 and prefiled testimony of P. Anderson.
- (5b) Not applicable to Mobile Homeowners rate filings.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (6)
Limitations

- (6a) No limitations were placed on the loss data provided by member companies included in the filing.
- (6b) Limitations were applied to the rate changes by coverage. The filed overall rate level changes for Mobile Home Structures, Adjacent Structures, Personal Effects, and Liability are 28.2%, 15.1%, 1.4%, and 14.1% in Year 1, and 28.7%, 15.9%, 2.4%, and 14.1% in Year 2, respectively.

There were no limitations on the extent of the rate level change by coverage amount, by form, by protection class, by construction, or by deductible

(6c) Limitations were applied to the territorial rate changes as follows:

Proposed Rate Change - Year 1					Proposed Rate Change - Year 2					
Territory Group	Mobile Home Structures	Adjacent Structures	Personal Effects	Liability	Total	Mobile Home Structures	Adjacent Structures	Personal Effects	Liability	Total
1	40.3%	34.2%	34.5%	14.1%	38.8%	40.3%	34.2%	34.5%	14.1%	38.9%
2	24.9%	11.9%	17.4%	14.1%	22.9%	24.9%	11.9%	17.4%	14.1%	23.0%
3	43.6%	34.4%	12.4%	14.1%	37.9%	43.6%	34.4%	12.4%	14.1%	38.9%
4	32.4%	13.7%	1.8%	14.1%	26.6%	32.4%	13.7%	1.8%	14.1%	27.6%
5	25.3%	8.8%	-3.4%	14.1%	20.1%	25.3%	8.8%	-3.4%	14.1%	21.0%
6	21.4%	9.9%	-5.3%	14.1%	16.5%	21.4%	9.9%	-5.3%	14.1%	17.3%

#### Note

Territory Group 1 (Territories 110, 120, 130, and 140)

Territory Group 2 (Territories 150 and 160)

Territory Group 3 (Territories 180, 190, 200, 210, 220, and 230)

Territory Group 4 (Territories 170, 240, and 250)

Territory Group 5 (Territories 260, 270, 280, 290, and 300)

Territory Group 6 (Territories 310, 320, 330, 340, 350, 360, 370, 380, and 390)

(6d) There were no limitations other than those mentioned above.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (7)
Overhead and Underwriting Expenses

- (7a) See Section C, Pages 69 through 71 and prefiled testimony of P. Anderson.
- (7b) Not applicable to Mobile Homeowners rate filings.
- (7c) Not applicable to Mobile Homeowners rate filings.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (8)
Percent Rate Change

- (8a) See Section A, Page 1
- (8b) The proposed rate changes are based on the indicated rate changes, which reflect an assumed effective date of 7/1/2023 and the assumption that the proposed rates will be in effect for one year. However, the Rate Bureau Governing Committee elected to spread the proposed rate changes over two years, with a proposed effective date of 7/1/2023 for the year 1 change and an effective date of 7/1/2024 for the year 2 change.

If the actual implementation date is later than the assumed effective date for the year 1 change, the indicated and proposed rate changes would be impacted, as the change in the proposed effective date would impact the loss and premium trend periods used in the filing. Changes in trend periods would impact projected losses, premiums, and fixed expenses used to calculate the rate level indications.

If the effective data were to change, advance notice of 105 days is required for an orderly implementation of the change in rates.

(8c) Not applicable

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (9) Final Proposed Rates

- (9a) The proposed rates and rating factors can be found in Section B of Exhibit RB-1 accompanying this filing.
- (9b) Not applicable

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (10)
Investment Earnings

(10a) See Investment Income calculations on Section E, Pages 30 and 31.

Note: The Investment Income calculations reflect data for the entire statutory line of business, Homeowners Multiple Peril, rather than only Mobile Homeowners policies since the investment income information is from Statutory Page 14 of the Annual Statement.

- (10b) Not applicable to Mobile Homeowners rate filings.
- (10c) Not applicable to Mobile Homeowners rate filings.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (10a) Investment Earnings

				Calendar Year		
		2017	2018	2019	2020	2021
Direct Ea	rned Premium					
(1)	Direct Earned Premium	\$2,507,844,811	\$2,627,900,639	\$2,801,717,952	\$2,986,362,325	\$3,181,779,596
Unearned	Premium Reserve (UPR)					
(2) (3)	Prior Year UPR as of 12/31 Current Year UPR as of 12/31	\$1,271,993,627 1,329,073,828	\$1,329,073,828 1,410,344,202	\$1,410,344,202 1,495,357,747	\$1,495,357,747 1,615,506,455	\$1,615,506,455 1,736,266,771
(4)	Average UPR; = [ (2) + (3) ] / 2	1,300,533,728	1,369,709,015	1,452,850,975	1,555,432,101	1,675,886,613
(5)	Total Prepaid Expenses; = (5a) + (5b) + (5c) + (5d)	32.4%	32.4%	31.3%	30.6%	29.5%
	<ul><li>(5a) Commission &amp; Brokerage</li><li>(5b) Taxes, Licenses &amp; Fees</li><li>(5c) General Expenses / 2</li><li>(5d) Other Acquisition / 2</li></ul>	18.8% 2.8% 3.9% 7.0%	18.0% 3.3% 4.0% 7.0%	17.0% 3.1% 4.3% 7.0%	16.5% 3.4% 4.4% 6.2%	16.3% 3.2% 4.2% 5.8%
(6)	Deduction for Prepaid Expenses; = (4) x (5)	421,238,763	443,391,988	455,417,109	475,275,103	494,802,170
(7)	Net UPR Subject to Investment; = (4) - (6)	\$879,294,964	\$926,317,027	\$997,433,865	\$1,080,156,998	\$1,181,084,443
Delayed F	Remission of Premium (Agents' Balances)					
(8)	Agents' Balances - premium due < 90 days (% of net written premium)	16.45%	16.27%	15.65%	15.13%	14.35%
(9)	Factor for Agents' Balances due > 90 days	1.021	1.021	1.021	1.021	1.021
(10)	Delayed Remission; = (1) x (8) x (9)	\$421,203,821	\$436,538,182	\$447,676,706	\$461,325,189	\$466,173,665
Loss and	Loss Adjustment Expense (LAE) Reserve					
(11)	Expected Loss and LAE Expense Ratio	48.79%	48.67%	49.42%	50.91%	52.51%
(12)	Expected Incurred Loss and LAE; = (1) x (11)	\$1,223,625,298	\$1,279,126,411	\$1,384,582,035	\$1,520,219,707	\$1,670,878,620
(13)	Expected Loss and LAE Reserve Ratio; = (13d / 13a) x (1 + 13e) / (1 + 13f)	36.55%	25.57%	45.05%	32.19%	38.20%
	(13a) Current Calendar Year Incurred Losses	\$1,239,571,663	\$2,460,297,524	\$1,577,131,843	\$1,888,147,346	\$1,607,231,192
	(13b) Prior Year Loss Reserves as of 12/31 (13c) Current Year Loss Reserves as of 12/31 (13d) Average Loss Reserves; = [ (13b) + (13c) ] / 2	454,664,103 405,130,335 429,897,219	405,130,335 789,176,282 597,153,309	789,176,282 554,613,540 671,894,911	554,613,540 611,757,026 583,185,283	611,757,026 577,425,079 594,591,053
	(13e) Ratio of LAE Reserves to Loss Reserves	19.8%	18.7%	21.3%	18.8%	17.2%
(1.4)	(13f) Ratio of Incurred LAE to Incurred Losses  Expected Average Loss and LAE Reserves; = (12) x (13)	13.7% \$447,280,103	12.7% \$327,031,548	14.7% \$623,738,844	14.0% \$489,420,036	13.5% \$638,257,281
(14)	Expected Average Loss and LAE Reserves, = (12) x (13)	\$447,200,103	\$327,031,346	\$023,730,044	\$409,420,030	\$030,237,201
	Reserves Subject to Investment					
(15)	Total Net Subject to Investment; = (7) - (10) + (14)	\$905,371,246	\$816,810,393	\$1,173,496,004	\$1,108,251,846	\$1,353,168,059
Average I	Rate of Return					
(16)	Net Investment Income Earned	\$51,092,459	\$57,828,994	\$57,147,344	\$54,385,089	\$56,619,534
(17)	Average Cash and Invested Assets	1,676,831,258	1,733,729,297	1,822,857,949	1,975,605,647	2,045,710,371
(18)	Average Rate of Return; = (16) / (17)	3.05%	3.34%	3.14%	2.75%	2.77%
(19)	Investment Earnings on Net Subject to Investment; = (15) x (18)	\$27,586,344	\$27,244,924	\$36,789,581	\$30,508,303	\$37,451,902
(20)	Average Rate of Return as $\%$ of Direct Earned Premium; = (19) / (1)	1.10%	1.04%	1.31%	1.02%	1.18%
(21)	Federal Income Tax Rate; From Section E, Page 31	23.5%	14.9%	15.9%	15.6%	15.6%
(22)	Average Rate of Return after Federal Income Tax; = (20) * [1 - (21)]	0.84%	0.88%	1.10%	0.86%	0.99%

<sup>(1), (2), (3), (8), (13</sup>a), (13b), (13c), (16), (17) Aggregate North Carolina Homeowners information from Statutory Page 14 of Annual Statement

<sup>(5), (11)</sup> from NCRB's selected expense, profit, contingency, and dividend ratios

<sup>(9)</sup> Based on data provided by A.M. Best

<sup>(13</sup>e), (13f) From A.M. Best Aggregate Insurance Expense Exhibit

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (10a)
Federal Income Tax Rate

		2017	7	2018	3	2019	9	2020	)	2021	<u> </u>
Federal	Income Tax Rate	Investment Income	Tax Rate	Investment Income	Tax Rate	Investment <u>Income</u>	Tax Rate	Investment Income	Tax Rate	Investment Income	Tax Rate
(1)	Taxable Bonds	\$23,362,682	35.0%	\$26,150,371	21.0%	\$29,370,354	21.0%	\$28,332,003	21.0%	\$27,541,921	21.0%
(2)	Non-Taxable Bonds	9,714,339	0.0%	8,700,372	0.0%	7,800,625	0.0%	7,245,882	0.0%	6,758,270	0.0%
(3)	Sub-total / Weighted Average	\$33,077,021	24.7%	\$34,850,743	15.8%	\$37,170,979	16.6%	\$35,577,885	16.7%	\$34,300,191	16.9%
(4)	Taxable Stocks	\$7,610,774	10.5%	\$7,971,643	10.5%	\$8,913,032	10.5%	\$8,486,504	10.5%	\$9,208,921	10.5%
(5)	Non-Taxable Stocks	1,785,853	0.0%	4,181,953	0.0%	1,595,181	0.0%	2,429,550	0.0%	3,215,338	0.0%
(6)	Sub-total / Weighted Average	\$9,396,627	8.5%	\$12,153,596	6.9%	\$10,508,213	8.9%	\$10,916,054	8.2%	\$12,424,259	7.8%
(7)	Mortgage Loans	\$755,495	35.0%	\$908,689	21.0%	\$996,462	21.0%	\$1,029,624	21.0%	\$1,149,755	21.0%
(8)	Real Estate	1,839,346	35.0%	1,937,053	21.0%	2,034,695	21.0%	1,999,576	21.0%	1,995,863	21.0%
(9)	Collateral Loans	622	35.0%	5,854	21.0%	202	21.0%	17,597	21.0%	91	21.0%
(10)	Cash on Deposit	980,167	35.0%	1,984,480	21.0%	2,497,031	21.0%	819,448	21.0%	138,807	21.0%
(11)	Short-term Investments	(156,684)	35.0%	(116,536)	21.0%	(92,630)	21.0%	(183,091)	21.0%	46,945	21.0%
(12)	All Other	10,384,974	35.0%	12,017,086	21.0%	9,878,232	21.0%	10,043,449	21.0%	12,669,733	21.0%
(13)	Sub-total / Weighted Average	\$13,803,920	35.0%	\$16,736,626	21.0%	\$15,313,992	21.0%	\$13,726,603	21.0%	\$16,001,194	21.0%
(14)	Total; = $(3) + (6) + (13)$	\$56,277,568	24.5%	\$63,740,965	15.4%	\$62,993,184	16.4%	\$60,220,542	16.1%	\$62,725,644	16.1%
(15)	Investment Deductions	\$5,185,109	35.0%	\$5,911,971	21.0%	\$5,845,840	21.0%	\$5,835,453	21.0%	\$6,106,110	21.0%
(16)	Net Investment Income Earned	\$51,092,459		\$57,828,994		\$57,147,344		\$54,385,089		\$56,619,534	
(17)	Federal Income Tax Rate		23.5%		14.9%		15.9%		15.6%		15.6%

All investment income and investment deductions based on A.M. Best's Aggregates and Averages; Underwriting & Investment Exhibit, Part 1, Col. 8

<sup>(4)</sup> For calendar year 2017, 30% of dividend income from held securities is subject to tax, hence the tax rate on stocks = 35% x 0.30 = 10.5% For calendar years 2018 - 2021, 50% of dividend income from held securities is subject to tax, hence the tax rate on stocks = 21% x 0.50 = 10.5% (17) weighted average of (14) and (15)

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (11)
Statistical Plans & Programs

(11a)	The list below identifies the applicable data calls and the data utilized:
	Data Calls
	North Carolina Rate Bureau 2022 Mobile Homeowners Data Call

Annual Statement for Calendar Year 2021
Insurance Expense Exhibit for Calendar Year 2021
RB Calls for 2021 North Carolina Expense Experience
Mobile Home Census Data

- (11b) The North Carolina Rate Bureau certifies that there is no evidence known to it or, insofar as it is aware following reasonable inquiry, to Milliman that the data which were collected under the data calls 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 P. Anderson.
- (11c) 1. After receiving the data provided by each member company, each data set is checked to verify that all fields represented as part of each plan are included in the data and that the values for each record are appropriate for the given field. For instance, numeric fields are checked to make sure that only numeric data is reported.
  - 2. Record count and exposure distributions are then summarized for every field included in each dataset to identify unusual, unexpected, or missing values as well as unintuitive distributional relationships.
  - 3. Univariate statistical summaries are then run on all numeric fields, such as premiums, losses, and exposures, to identify outliers or unusual values.
  - 4. When appropriate, records with missing values are overridden to an appropriate null or missing value. For instance, for numeric fields such as claim counts and losses, records with missing values are set to 0. For text fields, records with missing values might be set to "Missing."
  - 5. Loss, premium, and exposure data by individual company was then summarized and compared to data provided by member companies from the most recent Mobile Homeowners MH(C) filing for consistency. When inconsistencies are noted, the member companies are subsequently notified so that the inconsistencies can be verified.
  - 6. Incurred loss, written and earned premium, and exposure data was aggregated across all member companies and summarized by calendar / accident year to compare against data from the most recent Mobile Homeowners MH(C) filing for consistency.
  - 7. The average written premium, average earned premium, average incurred severity, frequency, and incurred pure premium are summarized by member company and in aggregate for each field included in each dataset. These metrics are also summarized for each field by calendar / accident year, policy form, and coverage. The summaries are also compared to data summaries from the most recent Mobile Homeowners MH(C) filing for consistency, to the extent that prior data is available. These summaries were reviewed to identify inconsistencies in the data. When inconsistencies are noted, the member companies are subsequently notified so that the inconsistencies can be verified.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (12)

Not applicable to Mobile Homeowners rate filings.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (13)
Required Surplus

(13a) The weighted average premium to surplus ratios (weighted by North Carolina Mobile Homeowners Direct Premiums Written) for the calendar years 2012-2021 for the company groups that wrote the coverages in each of those years, based on data from the North Carolina Rate Bureau and S&P Global Market Intelligence, are:

Calendar Year	Premium to Surplus Ratio
2012	1.23
2013	1.20
2014	1.24
2015	1.23
2016	1.25
2017	1.38
2018	1.45
2019	1.36
2020	1.27
2021	1.34

- (13b) The expected weighted average premium to surplus ratio for all companies writing Mobile Homeowners insurance during the years the proposed rates are expected to be in effect is estimated to be 1.30. See the prefiled testimony of G. Zanjani.
- (13c) The necessary level of capital and surplus to support particular coverages varies by line, and the Rate Bureau regards the ratios shown in (a) as indicative of levels typical within the industry for the lines of business covered by this filing. 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.
- (13d) The Rate Bureau has determined the premium to surplus ratios for Mobile Homeowners insurance in North Carolina based on the weighted average premium to surplus ratios for insurance groups writing Mobile Homeowners insurance in North Carolina, where the weights are the actual premiums written. The premium to surplus ratios of the insurers actually writing this business in North Carolina are representative of the leverage relevant for this line and state. The Rate Bureau has not further allocated surplus within these insurers across lines and states in this or other filings in North Carolina.

North Carolina Administrative Code (NCAC) Title 11, Chapter 10.1105, Section (14)
Additional Information Requested by the Commissioner

- (14a) See pre-filed testimony of G. Zanjani and P. Anderson.
- (14b) Not applicable to Mobile Homeowners rate filings.
- (14c) Not applicable to Mobile Homeowners rate filings.
- (14d) The items below summarize the changes in methodology, approach, or presentation from that used in the Rate Bureau's 2021 Mobile Homeowners rate filing:
  - (1) In this filing, the modeled hurricane losses for the 2022 storm season for the Beach and FAIR Plans were not available for use in the compensation for assessment risk analysis. The compensation for assessment risk provision was determined by using an average of the compensation for assessment risk provisions used in the 2017, 2018, 2019, 2020, and 2021 property filings and then modifying that average to reflect that some insurance companies no longer retain exposure to assessments from the Beach and FAIR Plans pursuant to their respective reinsurance agreements. In the previous filing, the modeled losses for the 2019 storm season were adjusted to the 2020 storm season based on the impact of changes in the underlying exposures and the hurricane models, because the modeled losses for the 2020 storm season were not available.

See also prefiled testimony of P. Anderson.

# North Carolina Mobile Homeowners MH(C) Program

**Section F** 

**Modeled Catastrophe Data** 

NOTE: SECTION F IS INCLUDED SEPARATELY AS PART 2 OF THE FILING

# North Carolina Mobile Homeowners Policy MH(C) Program

#### 1. Definitions

A mobile home is defined as a factory fabricated, transportable permanent housing unit, which is at least 8 body feet in width or 32 body feet in length, built on a chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities. It may be equipped with one or more room sections that fold, collapse or telescope into the principal unit when being transported and which can be expanded at the site to provide additional living area. Running gear consisting of wheels and tires may be removed while it is being lived in, but can be readilyre-installed.

## 2. Policy and Forms

Coverage will be written on the Mobile Home Owner Policy MH(C) Form which will consist of:

- a. Mobile Home Owner Policy MH(C), plus
- b. Mobile Home Owner Policy- Page One, or;
- c. Required endorsements, if any.

#### 3. Terms Rule

The policy may be written for a maximum of seven years (84 months) at the Term Factors shown in the Rate Section. If a policy is issued for a period of less than twelve months and for a term not shown in the Term Factor chart it will be written short rate and the premium for the policy shall be computed in accordance with the short rate table, except that in the following circumstances the premium will be computed pro rata:

- a. When coverage is afforded to secure a common inception date with other coverages or lines of insurance.
- b. To replace an outstanding policy of a company in liquidation, provided a new policy is based upon the rules and rates in effect at the time replacement is made and will be in effect for a period equal to the unexpired term of the outstanding policy.

If a policy is issued for a period of more than twelve months and for a term not shown in the Term Factor chart, it will be computed at the full premium for each full year and pro rata for any portion of a year.

#### 4. Premium Rules (General)

The premium will be rounded to the nearest whole dollar. A premium involving \$0.50 or over will be rounded to the next whole dollar.

The procedure will apply to all interim premium adjustments including endorsements, or cancellations at the request of the insured. In the case of cancellation by the Company, the return premium may be carried to the next higher whole dollar.

Any rating discrepancy involving a premium of \$2.00 or less may be waived except, that an overcharge shall be refunded, regardless of amount, if requested by the insured.

#### 5. Minimum Written Premium Rule

No policy may be written for less than \$30.00 regardless of the term. The Trip Coverage premium and the Secured Interest Protection premium are in addition to the \$30.00 Minimum Written Premium. No additional premium charge will be less than \$6.00.

#### 6. Minimum Earned Premium Rule

The Minimum Short Rate Earned Premium will not be less than \$30.00. Trip Coverage premium shall be fully earned.

## 7. Changes

- a. All changes requiring adjustments of premium shall be computed pro rata.
- b. If a mobile home or a form of coverage that was cancelled from a policy at the request of the insured is reinstated within 30 days, the premium will be the same as the amount that was returned at the time of cancellation.
- c. Minimum Premiums: If an outstanding policy is amended and results in a premium adjustment, that adjustment shall not be less than \$6.00, except that the actual return premium will be allowed at the request of the insured.

#### 8. Cancellation Rule

Cancellation may be effected as follows:

- a. The insured can cancel the policy by mailing to the Company a written notice telling the Company the future date cancellation is to be effective. If a lien holder is named on Page One of the policy, the Company will mail to the lien holder ten days written notice of cancellation of the lien holder's interest in this policy.
- b. When a lien holder named in the policy has repossessed or has otherwise acquired ownership of the mobile home, the lien holder may, for the account of all parties at interest under the policy, cancel the policy by surrendering it to the Company.
- c. The Company can cancel the policy for any reason during the first 60 days. The Company can cancel the policy after the first 60 days only if the insured or his representative:
  - Conceal, omit or misrepresent any material facts or circumstances, or make a false or fraudulent claim, or
  - Fail to comply with any governmental requirement regulating mobile home tie-down or anchoring systems, or
  - Have knowledge of any change that substantially increases the risk assumed by the Company without notifying the Company, and paying any required premium for the increased risk, or
  - Has not paid the premium.
  - The Company will mail a cancellation notice to the insured at least 30 days (non-payment I0 days) before the policy is cancelled. The Company will mail a cancellation notice to the insured's last address know to the Company or the agent. The Company will also give the same notice to the lien holder.

#### d. Computation

- (1) Cancellation by the named insured on any policy within one year of its inception date will be computed short rate, using the appropriate short rate chart. All other cancellations will be prorata.
- (2) Cancellation by any other party at interest will be pro rata regardless of policy term.
- (3) No endorsement will have the effect of violating the Written or Earned Premium rules.

#### 9. Tenants Coverage Rule

The Mobile Home Owner Policy MH(C) may also be issued to a tenant (non-owner) of a mobile home, for any of the following coverages:

- a. Comprehensive Personal Effects;
- b. Comprehensive or Named Perils Adjacent Structures;
- c. Liability.

If the policy includes Comprehensive Personal Effects Coverage, Mobile Home Tenants Coverage Endorsement is to be attached automatically affording the following additional policy coverages:

- a. Additional Living Expense;
- b. Fire Department service;
- c. Credit Card and Depositors Forgery.

The additional coverages are excess over any other collectible insurance.

#### 10. Natural Disaster Protection Rules

Coverage may be afforded under each policy insuring a financed mobile home. It amends the amount of the Company's liability to the outstanding principal balance of the loan or the amount which would be recoverable under the policy, whichever is greater, if total loss results from Perils covered. For rate information, refer to the Rate Section.

## 11. Seasonal/Vacation Mobile Home Rule

A seasonal/vacation mobile home is defined as a mobile home that is not the primary residence of the insured, but one that is used on an intermittent basis by the insured and his (her) immediate family. It may not be rented to others. Mobile homes that are rented to others for seasonal or vacation use are not eligible for the Mobile Home Owner Policy MH(C). A minimum deductible of \$250 shall automatically apply to Comprehensive or Named Perils Mobile Home Structures Coverage, Comprehensive Personal Effects Coverage, and Comprehensive or Named Perils Adjacent Structures Coverage.

#### 12. Deductible Rule

The basic rates in the Rate Section contemplate a \$100 deductible for *Comprehensive* Primary Residence and Tenants, \$0 deductible for *Named Perils* Primary Residence and Tenants, and \$250 deductible for *Comprehensive and Named Perils* Seasonal/Vacation. This deductible amount may be modified as provided for in the rate section.

In Territories 110, 120, 130, 140, 150, and 160, the Mobile Homeowners Policy may be endorsed to provide an optional Windstorm or Hail Deductible used in conjunction with the deductibles applicable to All Other Perils. This option provides for higher dollar deductible amounts of \$1,000, \$2,000, \$5,000, 1%, 2%, or 5% when the higher deductible amount selected exceeds the deductible applicable to All Other Perils.

In Territories 110, 120, 130, 140, 150, and 160, the Mobile Homeowners Policy may be endorsed to provide a Named Storm Percentage Deductible of 1%, 2%, or 5% of the Mobile Home Structures, Adjacent Structures, or Comprehensive Personal Effects limit of liability, whichever is greatest, when the dollar amount of the percentage deductible exceeds the deductible applicable to All Other Perils. Use **MH(C)-320** Named Storm Percentage Deductible.

## 13. Fire Department Service Charge

The \$100 Fire Department Service Charge may be increased for an additional premium as provided for in the Rate Section.

#### 14. Radio and Television Antenna Coverage

The \$50 Radio and Antenna Coverage may be increased for an additional premium as provided for in the Rate Section.

#### 15. Inflation Coverage

This form may be attached to the policy when the mobile home is used as the primary residence or as a seasonal/vacation residence. For rate information, refer to the Rate Section.

## 16. Rentals

A Mobile Home Owner Policy MH(C) may be written to cover the interest of the owners of a rented mobile home.

#### 17. Tie-Down:

When the mobile home is properly secured in accordance with the regulations of the North Carolina Building Code Council as set forth in the State of North Carolina Regulations for mobile homes, a credit of 10% shall be deducted from the rates applicable to the following coverages:

- a. Comprehensive or Named Perils Mobile Home Structures Coverage
- b. Comprehensive Personal Effects Coverage

## 18. Personal Effects Replacement Cost

For an additional premium your policy may be extended to cover the full cost of repair or replacement without deduction for depreciation of your personal effects. For rate information see Rate Section.

Attach Comprehensive Personal Effects Replacement Cost Endorsement.

#### 19. Replacement Cost Coverage

For an additional premium your policy may be extended to cover the cost of repair or replacement without deduction for depreciation of your mobile home. For rate information see Rate Section.

Attach MH(C) Mobile Home Replacement Cost Coverage (Ed. 8-85).

#### 20. Additional Living Expense Coverage

For an additional premium the \$10 per day coverage for a maximum of 60 days may be increased. For rate information see Rate Section.

#### 2I. Windstorm or Hail Exclusion - Territories 110, 120, 130, 140, 150, and 160 only

The perils of windstorm or hail may be excluded from coverage if the insured purchases a separate policy for windstorm or hail from the North Carolina Insurance Underwriting Association at the premium credit developed from the Premium Section of this manual.

The Peril of Windstorm or Hail may be excluded if:

- a. The property is located in an area eligible for such coverage from the North Carolina Insurance Underwriting Association; and
- b. A Windstorm or Hail Rejection Form is secured and maintained by the Company.

Attach Endorsement MH(C)-306 Windstorm or Hail Exclusion Endorsement.

When Endorsement MH(C)-306 is attached to the policy, enter the following on the Declarations Page:

"This policy does not provide coverage for the peril of Windstorm or Hail."

### 22. Installment Payment Plan

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. An additional charge of \$3.00 shall be made for each installment.
- c. 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 policy to the due date of the next installment.

#### 23. Stated Value Loss Settlement

For an additional premium, your policy may be changed to reflect a stated value for the covered mobile home. For rate information, see Rate Section.

Attach MH(C)-310 (Ed. 9-97)

#### 24. Optional Rating Characteristics

Companies may use the following optional rating characteristics or any combination of such optional rating characteristics and Bureau filed characteristics to determine rates, as long as applicable legal requirements are satisfied. The resulting premium shall not exceed the premium that would have been determined using the rates, rating plans, classifications, schedules, rules and standards promulgated by the Bureau, except as provided by statute. The rating factor for any combination of the following optional risk characteristics cannot exceed 1.00 unless the resulting premium does not exceed the Bureau premium.

- a. Policy characteristics not otherwise recognized in this manual. Examples include: account or multi-policy credit; tiers; continuity of coverage; coverages purchased; intra-agency transfers; payment history; payment options; prior insurance; and new and renewal status.
- b. Policyholder/Insured personal characteristics not otherwise recognized in this manual. Examples include: Smoker/non-smoker status; credit information; loss history; loss prevention training/education; age; work status; marital status; number of years owned; owned real estate; household composition; and good student/education.

- c. Dwelling characteristics not otherwise recognized in this manual. Examples include: Gated community; retirement community; limited access community; mobile home community; revitalized/renovated mobile home; security, safety or loss deterrent systems or devices; age of mobile home; occupancy; fire protection/distance to fire department; and construction type and quality.
- d. Affinity group or other group not otherwise recognized in this manual.
- e. Any other rating characteristics or combination of characteristics if filed by a company and approved by the Commissioner.

## 25. Scheduled Personal Property

Coverage may be provided against all risks of physical loss with certain exceptions on scheduled personal property subject to the rules and rates filed by or on behalf of the Company.

Attach endorsement MH(C)-2598 Scheduled Personal Property and MH(C)-4344 Valuable Personal Property List.

#### 26. Territory Groups

For rating purposes, territories are grouped as follows:

Territory Group 1: Territories 110, 120, 130, and 140

Territory Group 2: Territories 150 and 160

Territory Group 3: Territories 180, 190, 200, 210, 220, and 230

Territory Group 4: Territories 170, 240, and 250

Territory Group 5: Territories 260, 270, 280, 290, and 300

Territory Group 6: Territories 310, 320, 330, 340, 350, 360, 370, 380, and 390

COMPREHENSIVE MOB					
TERRITORY GROUP	3; \$100 DEDUCTI	BLE			
	Premiums				
A	Primary	Dontal			
Amount of Insurance	Residence	Rental			
1 - 3,999	\$266.25	\$456.10			
4,000 - 4,999	284.07	486.62			
5,000 - 5,999	298.75	511.76			
6,000 - 6,999	314.30	538.40			
7,000 - 7,999	330.06	565.40			
8,000 - 8,999	345.88	592.50			
9,000 - 9,999	362.56	621.06			
10,000 - 10,999	378.35	648.12			
11,000 - 11,999	391.70	670.99			
12,000 - 12,999	405.05	693.86			
13,000 - 13,999	417.98	716.01			
14,000 - 14,999	430.91	738.15			
15,000 - 15,999	445.56	763.25			
16,000 - 16,999	461.37	790.34			
17,000 - 17,999	476.83	816.83			
18,000 - 18,999	492.20	843.15			
19,000 - 19,999	509.04	871.99			
20,000 - 20,999	524.87	899.11			
21,000 - 21,999	537.52	920.78			
22,000 - 22,999	550.17	942.45			
23,000 - 23,999	563.54	965.36			
24,000 - 24,999	577.10	988.58			
25,000 - 25,999	591.70	1,013.59			
26,000 - 26,999	607.10	1,039.97			
27,000 - 27,999	622.26	1,065.95			
	637.32	1,091.74			
29,000 - 29,999	654.23	1,120.70			
30,000 - 30,999	671.75	1,150.72			
	684.90	1,173.25			
	697.69				
· · · · · · · · · · · · · · · · · · ·	+	-			
	724.94	1,241.84			
	739.62	1,266.98			
	754.29	1,292.11			
	768.97	-			
' '	<b>†</b>	1,342.39			
	+	-			
	+				
	827.66				
22,000 - 22,999 23,000 - 23,999 24,000 - 24,999 25,000 - 25,999 26,000 - 26,999 27,000 - 27,999 28,000 - 28,999	550.17 563.54 577.10 591.70 607.10 622.26 637.32 654.23 671.75 684.90 697.69 710.47 724.94 739.62 754.29 768.97 783.64 798.31 812.99	942.45 965.36 988.58 1,013.59 1,039.97 1,065.95 1,091.74 1,120.70 1,150.72 1,173.25 1,195.15 1,217.05 1,241.84 1,266.98 1,292.11 1,317.25			

COMPREHENSIVE MO TERRITORY GROUI	P 3; \$100 DEDUCTIB				
Premiums					
Amount of Insurance	Primary Residence	Rental			
42,000 - 42,999	\$842.34	\$1,442.9			
43,000 - 43,999	857.01	1,468.0			
44,000 - 44,999	871.69	1,493.2			
45,000 - 45,999	886.36	1,518.3			
46,000 - 46,999	901.04	1,543.4			
47,000 - 47,999	915.71	1,568.6			
48,000 - 48,999	930.39	1,593.7			
49,000 - 49,999	945.06	1,618.9			
50,000 - 50,999	959.74	1,644.0			
51,000 - 51,999	974.41	1,669.1			
52,000 - 52,999	989.09	1,694.3			
53,000 - 53,999	1,003.76	1,719.4			
54,000 - 54,999	1,018.43	1,744.6			
55,000 - 55,999	1,033.11	1,769.7			
56,000 - 56,999	1,047.78	1,794.8			
57,000 - 57,999	1,062.46	1,820.0			
58,000 - 58,999	1,077.13	1,845.1			
59,000 - 59,999	1,091.81	1,870.2			
60,000 - 60,999	1,106.48	1,895.4			
61,000 - 61,999	1,121.16	1,920.			
62,000 - 62,999	1,135.83	1,945.			
63,000 - 63,999	1,150.51	1,970.8			
64,000 - 64,999	1,165.18	1,995.9			
65,000 - 65,999	1,179.86	2,021.3			
66,000 - 66,999	1,194.53	2,046.2			
67,000 - 67,999	1,209.21	2,071.3			
68,000 - 68,999	1,223.88	2,096.5			
69,000 - 69,999	1,238.55	2,121.6			
70,000 - 70,999	1,253.23	2,146.8			
71,000 - 71,999	1,267.90	2,171.9			
72,000 - 72,999	1,282.58	2,197.0			
73,000 - 73,999	1,297.25	2,222.2			
74,000 - 74,999	1,311.93	2,247.3			
75,000 - 75,999	1,326.60	2,272.4			
76,000 - 76,999	1,341.28	2,297.6			
77,000 - 77,999	1,355.95	2,322.7			
78,000 - 78,999	1,370.63	2,347.9			
79,000 - 79,999	1,385.30	2,373.0			
Each Add'l \$1,000	\$14.67	\$25.1			

Territory Group 1	Surcharge	72.0%
Territory Group 2	Surcharge	52.6%
Territory Group 4	Discount	-3.6%
Territory Group 5	Discount	-13.3%
Territory Group 6	Discount	-29.9%

NAMED PERILS MOBILE HOME STRUCTURES					
TERRITORY GROUP	T .				
	Prem Primary	iums			
Amount of Insurance	Residence	Rental			
1 - 3,999	\$237.31	\$427.16			
4,000 - 4,999	253.19	455.75			
5,000 - 5,999	266.27	479.29			
6,000 - 6,999	280.14	504.25			
7,000 - 7,999	294.18	529.53			
8,000 - 8,999	308.28	554.91			
9,000 - 9,999	323.15	581.66			
10,000 - 10,999	337.23	607.01			
11,000 - 11,999	349.12	628.42			
12,000 - 12,999	361.02	649.84			
13,000 - 13,999	372.55	670.59			
14,000 - 14,999	384.07	691.33			
15,000 - 15,999	397.13	714.83			
16,000 - 16,999	411.22	740.20			
17,000 - 17,999	425.00	765.01			
18,000 - 18,999	438.70	789.66			
19,000 - 19,999	453.70	816.67			
20,000 - 20,999	467.82	842.07			
21,000 - 21,999	479.09	862.37			
22,000 - 22,999	490.37	882.66			
23,000 - 23,999	502.29	904.12			
24,000 - 24,999	514.37	925.87			
25,000 - 25,999	527.38	949.28			
26,000 - 26,999	541.11	974.00			
27,000 - 27,999	554.62	998.32			
28,000 - 28,999	568.04	1,022.48			
29,000 - 29,999	583.11	1,049.60			
30,000 - 30,999	598.73	1,077.72			
31,000 - 31,999	610.45	1,098.81			
32,000 - 32,999	621.85	1,119.33			
33,000 - 33,999	633.24	1,139.84			
34,000 - 34,999	646.14	1,163.05			
35,000 - 35,999	659.22	1,186.60			
36,000 - 36,999	672.30	1,210.14			
37,000 - 37,999	685.38	1,233.68			
38,000 - 38,999	698.46	1,257.23			
39,000 - 39,999	711.54	1,280.77			
40,000 - 40,999	724.62	1,304.31			
41,000 - 41,999	737.70	1,327.86			

NAMED PERILS MOBILE HOME STRUCTURES					
TERRITORY GROUI					
	Premiums				
	Primary				
Amount of Insurance	Residence	Rental			
42,000 - 42,999	\$750.78	\$1,351.40			
43,000 - 43,999	763.86	1,374.94			
44,000 - 44,999	776.94	1,398.49			
45,000 - 45,999	790.02	1,422.03			
46,000 - 46,999	803.10	1,445.57			
47,000 - 47,999	816.18	1,469.12			
48,000 - 48,999	829.25	1,492.66			
49,000 - 49,999	842.33	1,516.20			
50,000 - 50,999	855.41	1,539.74			
51,000 - 51,999	868.49	1,563.29			
52,000 - 52,999	881.57	1,586.83			
53,000 - 53,999	894.65	1,610.37			
54,000 - 54,999	907.73	1,633.92			
55,000 - 55,999	920.81	1,657.46			
56,000 - 56,999	933.89	1,681.00			
57,000 - 57,999	946.97	1,704.55			
58,000 - 58,999	960.05	1,728.09			
59,000 - 59,999	973.13	1,751.63			
60,000 - 60,999	986.21	1,775.18			
61,000 - 61,999	999.29	1,798.72			
62,000 - 62,999	1,012.37	1,822.26			
63,000 - 63,999	1,025.45	1,845.81			
64,000 - 64,999	1,038.53	1,869.35			
65,000 - 65,999	1,051.61	1,892.89			
66,000 - 66,999	1,064.69	1,916.44			
67,000 - 67,999	1,077.77	1,939.98			
68,000 - 68,999	1,090.85	1,963.52			
69,000 - 69,999	1,103.93	1,987.07			
70,000 - 70,999	1,117.00	2,010.61			
71,000 - 71,999	1,130.08	2,034.15			
72,000 - 72,999	1,143.16	2,057.69			
73,000 - 73,999	1,156.24	2,081.24			
74,000 - 74,999	1,169.32	2,104.78			
75,000 - 75,999	1,182.40	2,128.32			
76,000 - 76,999	1,195.48	2,151.87			
77,000 - 77,999	1,208.56	2,175.41			
78,000 - 78,999	1,221.64	2,198.95			
79,000 - 79,999	1,234.72	2,222.50			
Each Add'l \$1,000	\$13.08	\$23.55			

Territory Group 1	Surcharge	72.0%
Territory Group 2	Surcharge	52.6%
Territory Group 4	Discount	-3.6%
Territory Group 5	Discount	-13.3%
Territory Group 6	Discount	-29.9%

SEASONAL/VACATION MOBILE HOME STRUCTURES						
TERRITORY GROUI	TERRITORY GROUP 3; \$250 DEDUCTIBLE					
	Premi					
Amount of Incurance	Comprehensive	Named Perils				
Amount of Insurance 1 - 3,999	\$266.25	\$237.31				
4,000 - 4,999	284.07	253.19				
	298.75	266.27				
5,000 - 5,999	314.30	280.14				
6,000 - 6,999	330.06	294.18				
7,000 - 7,999	345.88	308.28				
8,000 - 8,999	362.56	323.15				
9,000 - 9,999	378.35	337.23				
10,000 - 10,999	391.70	349.12				
11,000 - 11,999	405.05	361.02				
12,000 - 12,999						
13,000 - 13,999	417.98	372.55 384.07				
14,000 - 14,999	430.91 445.56	397.13				
15,000 - 15,999	461.37	411.22				
16,000 - 16,999	476.83	425.00				
17,000 - 17,999						
18,000 - 18,999	492.20	438.70 453.70				
19,000 - 19,999	509.04					
20,000 - 20,999	524.87 537.52	467.82 479.09				
21,000 - 21,999	550.17	490.37				
22,000 - 22,999	563.54	502.29				
23,000 - 23,999	577.10	514.37				
24,000 - 24,999	591.70	527.38				
25,000 - 25,999	607.10	541.11				
26,000 - 26,999	622.26	554.62				
27,000 - 27,999	637.32	568.04				
28,000 - 28,999 29,000 - 29,999	654.23	583.11				
30,000 - 30,999	671.75	598.73				
31,000 - 31,999	684.90	610.45				
32,000 - 32,999	697.69	621.85				
33,000 - 33,999	710.47	633.24				
34,000 - 34,999	724.94	646.14				
35,000 - 35,999	739.62	659.22				
36,000 - 36,999	754.29	672.30				
37,000 - 37,999	768.97	685.38				
38,000 - 38,999	783.64	698.46				
39,000 - 38,999	798.31	711.54				
40,000 - 40,999	812.99	711.54				
41,000 - 41,999	827.66	737.70				
41,000 - 41,999	027.00	/3/./0				

SEASONAL/VACATION MOBILE HOME STRUCTURES					
TERRITORY GROUP 3; \$250 DEDUCTIBLE					
	Premiums				
		Named			
Amount of Insurance	Comprehensive	Perils			
42,000 - 42,999	\$842.34	\$750.78			
43,000 - 43,999	857.01	763.86			
44,000 - 44,999	871.69	776.94			
45,000 - 45,999	886.36	790.02			
46,000 - 46,999	901.04	803.10			
47,000 - 47,999	915.71	816.18			
48,000 - 48,999	930.39	829.25			
49,000 - 49,999	945.06	842.33			
50,000 - 50,999	959.74	855.41			
51,000 - 51,999	974.41	868.49			
52,000 - 52,999	989.09	881.57			
53,000 - 53,999	1,003.76	894.65			
54,000 - 54,999	1,018.43	907.73			
55,000 - 55,999	1,033.11	920.81			
56,000 - 56,999	1,047.78	933.89			
57,000 - 57,999	1,062.46	946.97			
58,000 - 58,999	1,077.13	960.05			
59,000 - 59,999	1,091.81	973.13			
60,000 - 60,999	1,106.48	986.21			
61,000 - 61,999	1,121.16	999.29			
62,000 - 62,999	1,135.83	1,012.37			
63,000 - 63,999	1,150.51	1,025.45			
64,000 - 64,999	1,165.18	1,038.53			
65,000 - 65,999	1,179.86	1,051.61			
66,000 - 66,999	1,194.53	1,064.69			
67,000 - 67,999	1,209.21	1,077.77			
68,000 - 68,999	1,223.88	1,090.85			
69,000 - 69,999	1,238.55	1,103.93			
70,000 - 70,999	1,253.23	1,117.00			
71,000 - 71,999	1,267.90	1,130.08			
72,000 - 72,999	1,282.58	1,143.16			
73,000 - 73,999	1,297.25	1,156.24			
74,000 - 74,999	1,311.93	1,169.32			
75,000 - 75,999	1,326.60	1,182.40			
76,000 - 76,999	1,341.28	1,195.48			
77,000 - 77,999	1,355.95	1,208.56			
78,000 - 78,999	1,370.63	1,221.64			
79,000 - 79,999	1,385.30	1,234.72			
Each Add'l \$1,000	\$14.67	\$13.08			

Territory Group 1	Surcharge	72.0%
Territory Group 2	Surcharge	52.6%
Territory Group 4	Discount	-3.6%
Territory Group 5	Discount	-13.3%
Territory Group 6	Discount	-29.9%

ADJACENT STRUCTURES						
TERRITORY GROUP 3 Premiums						
	Premi	lums				
Amount of Insurance	Comprehensive	Named Perils				
100 - 199	N/A	\$2.48				
200 - 299	N/A	3.92				
300 - 399	\$6.21	5.36				
400 - 499	7.88	6.80				
500 - 599	9.55	8.24				
600 - 699	11.22	9.68				
700 - 799	12.89	11.12				
800 - 899	14.56	12.56				
900 - 999	16.23	14.00				
1,000 - 1,099	17.90	15.44				
1,100 - 1,199	19.57	16.88				
1,200 - 1,299	21.24	18.32				
1,300 - 1,399	22.91	19.76				
1,400 - 1,499	24.58	21.20				
1,500 - 1,599	26.25	22.64				
1,600 - 1,699	27.92	24.08				
1,700 - 1,799	29.59	25.52				
1,800 - 1,899	31.26	26.96				
1,900 - 1,999	32.93	28.40				
2,000 - 2,099	34.60	29.84				
2,100 - 2,199	36.27	31.28				
2,200 - 2,299	37.94	32.72				
2,300 - 2,399	39.61	34.16				
2,400 - 2,499	41.28	35.60				
2,500 - 2,599	42.95	37.04				
2,600 - 2,699	44.62	38.48				
2,700 - 2,799	46.29	39.92				
2,800 - 2,899	47.96	41.36				
2,900 - 2,999	49.63	42.80				
3,000 - 3,099	51.30	44.24				
3,100 - 3,199	52.97	45.68				
3,200 - 3,299	54.64	47.12				
3,300 - 3,399	56.31	48.56				
3,400 - 3,499	57.98	50.00				
3,500 - 3,599	59.65	51.44				

	Base Deductible		
	Comprehensive	Named Perils	
Primary Residence	\$100 Deductible	No Deductible	
Seasonal/Vacation	\$250 Deductible	\$250 Deductible	
Tenants	\$100 Deductible	No Deductible	

Note: Rates shown applicable to all occupancy types

ADJACENT STRUCTURES						
TERRIT	TERRITORY GROUP 3					
	Premiu					
Amount of Insurance	Comprehensive	Named Perils				
	\$61.32	\$52.88				
3,600 - 3,699	62.99	54.32				
3,700 - 3,799 3,800 - 3,899	64.66	55.76				
3,900 - 3,999	66.33	57.20				
4,000 - 4,099	68.00	58.64				
4,100 - 4,199	69.67	60.08				
· ·	71.34	61.52				
4,200 - 4,299	73.01	62.96				
4,300 - 4,399 4,400 - 4,499	74.68	64.40				
· ·	76.35	65.84				
4,500 - 4,599	78.02	67.28				
4,600 - 4,699	79.69	68.72				
4,700 - 4,799	81.36	70.16				
4,800 - 4,899 4,900 - 4,999	83.03	70.10				
	84.70	73.04				
5,000 - 5,099	86.37	74.48				
5,100 - 5,199	88.04	75.92				
5,200 - 5,299 5,300 - 5,399	89.71	77.36				
5,400 - 5,499	91.38	77.30				
5,500 - 5,599	93.05	80.24				
5,600 - 5,699	94.72	81.68				
5,700 - 5,799	96.39	83.12				
5,800 - 5,899	98.06	84.56				
	99.73	86.00				
5,900 - 5,999 6,000 - 6,099	101.40	87.44				
6,100 - 6,199	103.07	88.88				
6,200 - 6,299	104.74	90.32				
6,300 - 6,399	106.41	91.76				
6,400 - 6,499	108.08	93.20				
6,500 - 6,599	109.75	94.64				
6,600 - 6,699	111.42	96.08				
, , , , , , , , , , , , , , , , , , , ,	113.09	97.52				
6,700 - 6,799	114.76	98.96				
6,800 - 6,899 6,900 - 6,999	116.43	100.40				
Each Add'l \$100	\$1.67	\$1.44				
Lacii Add i \$100	71.07	71.44				

Territory Group 1	Surcharge	87.2%
Territory Group 2	Surcharge	72.2%
Territory Group 4	Discount	-3.4%
Territory Group 5	Discount	-13.2%
Territory Group 6	Discount	-34.8%

COMPREHENSIVE PERSONAL EFFECTS					
TERRITORY GROUP 3					
Amount of Insurance	Premium				
500 - 599	\$20.00				
600 - 699	20.79				
700 - 799	21.58				
800 - 899	22.37				
900 - 999	23.16				
1,000 - 1,099	23.95				
1,100 - 1,199	24.74				
1,200 - 1,299	25.53				
1,300 - 1,399	26.32				
1,400 - 1,499	27.11				
1,500 - 1,599	27.90				
1,600 - 1,699	28.69				
1,700 - 1,799	29.48				
1,800 - 1,899	30.27				
1,900 - 1,999	31.06				
2,000 - 2,099	31.85				
2,100 - 2,199	32.64				
2,200 - 2,299	33.43				
2,300 - 2,399	34.22				
2,400 - 2,499	35.01				
2,500 - 2,599	35.80				
2,600 - 2,699	36.59				
2,700 - 2,799	37.38				
2,800 - 2,899	38.17				
2,900 - 2,999	38.96				
3,000 - 3,099	39.75				
3,100 - 3,199	40.54				
3,200 - 3,299	41.33				
3,300 - 3,399	42.12				
3,400 - 3,499	42.91				
3,500 - 3,599	43.70				
3,600 - 3,699	44.49				
3,700 - 3,799	45.28				

	Base Deductible
Primary Residence	\$100 Deductible
Seasonal/Vacation	\$250 Deductible
Tenants	\$100 Deductible

Note: Rates shown applicable to all occupancy types

COMPREHENSIVE PERSO	NAL EFFECTS				
TERRITORY GROUP 3					
Amount of Insurance	Premium				
3,800 - 3,899	\$46.07				
3,900 - 3,999	46.86				
4,000 - 4,099	47.65				
4,100 - 4,199	48.44				
4,200 - 4,299	49.23				
4,300 - 4,399	50.02				
4,400 - 4,499	50.81				
4,500 - 4,599	51.60				
4,600 - 4,699	52.39				
4,700 - 4,799	53.18				
4,800 - 4,899	53.97				
4,900 - 4,999	54.76				
5,000 - 5,099	55.55				
5,100 - 5,199	56.34				
5,200 - 5,299	57.13				
5,300 - 5,399	57.92				
5,400 - 5,499	58.71				
5,500 - 5,599	59.50				
5,600 - 5,699	60.29				
5,700 - 5,799	61.08				
5,800 - 5,899	61.87				
5,900 - 5,999	62.66				
6,000 - 6,099	63.45				
6,100 - 6,199	64.24				
6,200 - 6,299	65.03				
6,300 - 6,399	65.82				
6,400 - 6,499	66.61				
6,500 - 6,599	67.40				
6,600 - 6,699	68.19				
6,700 - 6,799	68.98				
6,800 - 6,899	69.77				
6,900 - 6,999	70.56				
Each Add'l \$100	\$0.79				

Territory Group 1	Surcharge	97.0%
Territory Group 2	Surcharge	54.7%
Territory Group 4	Discount	-13.0%
Territory Group 5	Discount	-18.8%
Territory Group 6	Discount	-26.1%

# **DEDUCTIBLE – COMPREHENSIVE COVERAGE**

## **Primary Residence:**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Add	\$29.73	\$26.33	\$19.02	\$18.12	\$16.31	\$13.21
None	Adjacent Structures	Add	1.99	1.82	1.16	1.13	1.01	0.76
	Personal Effects	Add	10.57	8.28	5.88	5.09	4.75	4.33
	Mobile Home Structures	Add	\$13.52	\$11.98	\$8.67	\$8.26	\$7.42	\$6.01
\$50	Adjacent Structures	Add	0.99	0.92	0.58	0.55	0.50	0.37
	Personal Effects	Add	5.29	4.14	2.94	2.54	2.37	2.17
	Mobile Home Structures	Included						
\$100	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$24.33	\$21.55	\$15.57	\$14.84	\$13.35	\$10.81
\$250	Adjacent Structures	Subtract	1.99	1.82	1.16	1.13	1.01	0.76
	Personal Effects	Subtract	10.57	8.28	5.88	5.09	4.75	4.33
	Mobile Home Structures	Subtract	\$62.18	\$55.06	\$39.80	\$37.91	\$34.11	\$27.63
\$500	Adjacent Structures	Subtract	15.88	14.57	9.28	8.96	8.04	6.05
	Personal Effects	Subtract	15.86	12.42	8.81	7.63	7.12	6.50
	Mobile Home Structures	Subtract	\$95.02	\$84.13	\$60.84	\$57.94	\$52.14	\$42.23
\$750	Adjacent Structures	Subtract	26.80	24.59	15.66	15.11	13.56	10.21
	Personal Effects	Subtract	20.09	15.74	11.15	9.67	9.02	8.23
	Mobile Home Structures	Subtract	\$121.47	\$107.55	\$77.77	\$74.07	\$66.66	\$53.99
\$1,000	Adjacent Structures	Subtract	33.94	31.14	19.84	19.14	17.16	12.94
. ,	Personal Effects	Subtract	23.10	18.10	12.82	11.12	10.38	9.46
	Mobile Home Structures	Subtract	\$204.55	\$181.09	\$130.99	\$124.74	\$112.28	\$90.93
\$2,000	Adjacent Structures	Subtract	56.26	51.61	32.88	31.72	28.44	21.46
. ,	Personal Effects	Subtract	33.40	26.18	18.52	16.09	15.00	13.68
	Mobile Home Structures	Subtract	\$408.40	\$361.54	\$261.56	\$249.08	\$224.21	\$181.58
\$5,000	Adjacent Structures	Subtract	110.91	101.72	64.80	62.51	56.03	42.33
	Personal Effects	Subtract	61.07	47.89	33.84	29.43	27.45	25.01

## Seasonal/Vacation Residence:

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
	Mobile Home Structures	Included						
\$250	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$37.86	\$33.53	\$24.22	\$23.06	\$20.75	\$16.81
\$500	Adjacent Structures	Subtract	13.89	12.74	8.13	7.84	7.05	5.29
	Personal Effects	Subtract	5.29	4.14	2.94	2.54	2.37	2.17
	Mobile Home Structures	Subtract	\$70.69	\$62.58	\$45.26	\$43.10	\$38.80	\$31.42
\$750	Adjacent Structures	Subtract	24.81	22.77	14.50	13.98	12.54	9.45
	Personal Effects	Subtract	9.52	7.46	5.27	4.58	4.27	3.90
	Mobile Home Structures	Subtract	\$97.14	\$86.00	\$62.20	\$59.23	\$53.32	\$43.18
\$1,000	Adjacent Structures	Subtract	31.95	29.32	18.68	18.01	16.15	12.18
	Personal Effects	Subtract	12.54	9.83	6.94	6.04	5.63	5.13
	Mobile Home Structures	Subtract	\$180.22	\$159.54	\$115.41	\$109.90	\$98.93	\$80.12
\$2,000	Adjacent Structures	Subtract	54.27	49.79	31.72	30.59	27.42	20.71
	Personal Effects	Subtract	22.83	17.90	12.64	11.00	10.25	9.35
	Mobile Home Structures	Subtract	\$384.07	\$340.00	\$245.99	\$234.24	\$210.86	\$170.77
\$5,000	Adjacent Structures	Subtract	108.92	99.90	63.64	61.39	55.02	41.57
	Personal Effects	Subtract	50.50	39.61	27.96	24.34	22.69	20.68

# **DEDUCTIBLE – NAMED PERILS COVERAGE**

Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 3	Territory Group 4	Territory Group 5	Territory Group 6
None	Mobile Home Structures	Included						
	Adjacent Structures	Included						
	Personal Effects	Included						
	Mobile Home Structures	Subtract	\$13.52	\$11.98	\$8.67	\$8.26	\$7.42	\$6.01
\$50	Adjacent Structures	Subtract	0.99	0.92	0.58	0.55	0.50	0.37
	Personal Effects	Subtract	4.40	3.46	2.45	2.12	1.98	1.81
	Mobile Home Structures	Subtract	\$25.69	\$22.75	\$16.42	\$15.65	\$14.08	\$11.41
\$100	Adjacent Structures	Subtract	1.99	1.82	1.16	1.13	1.01	0.76
	Personal Effects	Subtract	8.81	6.90	4.90	4.25	3.96	3.62
\$250	Mobile Home Structures	Subtract	\$45.95	\$40.69	\$29.42	\$28.02	\$25.21	\$20.42
	Adjacent Structures	Subtract	2.98	2.74	1.75	1.68	1.51	1.13
	Personal Effects	Subtract	17.62	13.80	9.80	8.48	7.92	7.22
	Mobile Home Structures	Subtract	\$75.74	\$67.08	\$48.52	\$46.22	\$41.57	\$33.66
\$500	Adjacent Structures	Subtract	4.53	4.18	2.67	2.54	2.29	1.72
	Personal Effects	Subtract	30.68	24.04	17.05	14.76	13.79	12.56
\$750	Mobile Home Structures	Subtract	\$100.25	\$88.79	\$64.24	\$61.19	\$55.03	\$44.56
	Adjacent Structures	Subtract	5.96	5.52	3.52	3.34	3.01	2.25
	Personal Effects	Subtract	41.56	32.56	23.09	19.99	18.67	17.01
	Mobile Home Structures	Subtract	\$118.52	\$104.97	\$75.96	\$72.36	\$65.07	\$52.69
\$1,000	Adjacent Structures	Subtract	7.23	6.72	4.28	4.05	3.65	2.73
	Personal Effects	Subtract	49.82	39.03	27.67	23.96	22.38	20.38
\$2,000	Mobile Home Structures	Subtract	\$172.45	\$152.75	\$110.55	\$105.35	\$94.70	\$76.69
	Adjacent Structures	Subtract	12.10	11.29	7.16	6.76	6.09	4.53
	Personal Effects	Subtract	78.71	61.65	43.68	37.84	35.34	32.18
	Mobile Home Structures	Subtract	\$300.83	\$266.46	\$192.89	\$183.87	\$165.24	\$133.82
\$5,000	Adjacent Structures	Subtract	26.16	24.53	15.50	14.61	13.14	9.76
Ī	Personal Effects	Subtract	157.10	123.03	87.13	75.51	70.50	64.19

# WINDSTORM OR HAIL DEDUCTIBLES TERRITORY GROUPS 1 AND 2 ONLY

The Windstorm or Hail Deductible options are used in conjunction with the deductibles applicable to All Other Perils. This option provides for higher dollar deductible amounts of \$1,000, \$2,000, \$5,000, 1%, 2%, or 5% when the higher deductible amount selected exceeds the deductible applicable to All Other Perils.

An endorsement is not required. Separately enter on the policy declarations the deductible amounts that apply to Windstorm or Hail and All Other Perils. For example: Deductible - \$500 except \$1,000 for Windstorm or Hail.

The factors displayed incorporate the factors for the All Perils Deductibles. Do not use the factors for the All Perils Deductibles when rating a policy with a higher Windstorm or Hail deductible.

#### **COMPREHENSIVE**

The Windstorm or Hail Deductible factor applies to the \$100 Deductible rate.

\$1,000 WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$ 50	1.08		
100	0.99		
250	0.92		
500	0.85		
750	0.79		
**The amount of insurance on the structure must be			

at least \$10,000.
The maximum \$1,000 Windstorm or Hail Deductible

credits by Territory Group are: Territory Group 1 \$588.14 Territory Group 2 \$565.03

\$2,000 WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$ 50	1.03		
100	0.95		
250	0.88		
500	0.82		
750	0.77		
1,000	0.72		
**The amount of insurance on the structure must be			

The maximum \$2,000 Windstorm or Hail Deductible credits by Territory Group are:

Territory Group 1 \$1,176.29 Territory Group 2 \$1,130.06

at least \$20,000.

\$5,000 WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$ 50	0.99		
100	0.93		
250	0.85		
500	0.80		
750	0.75		
1,000	0.70		
2,000	0.53		
**The amount of insurance on the structure must be			

at least \$50,000.
The maximum \$5,000 Windstorm or Hail Deductible credits by

Territory Group 1 \$1,882.07 Territory Group 2 \$1,808.10

Territory Group are

1% WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$50	1.11		
100	1.01		
250	0.94		
500	0.86		

<sup>\*\*</sup>The amount of insurance on the structure must be at least \$25,000 for all other peril deductibles below 500 and \$50,000 for an all other peril deductible equal to 500

The maximum 1% Windstorm or Hail Deductible credits by Territory Group are

Territory Group 1 \$235.25 Territory Group 2 \$226.01

2% WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$50	1.07		
100	0.98		
250	0.91		
500	0.84		
750	0.78		
1,000	0.73		
2,000	0.54		

<sup>\*\*</sup>The amount of insurance on the structure must be at least \$50,000 for all other peril deductibles below 2,000 and \$100,000 for an all other peril deductible equal to 2,000

The maximum 1% Windstorm or Hail Deductible credits by Territory Group are

Territory Group 1 \$735.18 Territory Group 2 \$706.29

5% WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$50	1.01		
100	0.94		
250	0.86		
500	0.81		
750	0.76		
1,000	0.70		
2,000	0.53		
5,000	0.36		

<sup>\*\*</sup>The amount of insurance on the structure must be at least \$50,000 for all other peril deductibles below 2,000 and \$100,000 for any other all other peril deductibles

The maximum 1% Windstorm or Hail Deductible credits by Territory Group are

Territory Group 1 \$1,588.00 Territory Group 2 \$1,525.58

#### **NAMED PERILS**

The Windstorm or Hail Deductible factor applies to the \$0 Deductible rate.

\$1,000 WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$ 50	1.03		
100	0.95		
250	0.88		
500	0.80		
750	0.73		

<sup>\*\*</sup>The amount of insurance on the structure must be at least \$10,000.

The maximum \$1,000 Windstorm or Hail Deductible credits by Territory Group are:

Territory Group 1 \$588.14 Territory Group 2 \$565.03

\$2,000 WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$ 50	0.99		
100	0.91		
250	0.85		
500	0.77		
750	0.71		
1,000	0.65		

<sup>\*\*</sup>The amount of insurance on the structure must be at least \$20,000.

The maximum \$2,000 Windstorm or Hail Deductible credits by Territory Group are:

Territory Group 1 \$1,176.29 Territory Group 2 \$1,130.06

\$5,000 WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$ 50	0.95		
100	0.89		
250	0.82		
500	0.75		
750	0.70		
1,000	0.64		
2,000	0.46		

<sup>\*\*</sup>The amount of insurance on the structure must be at least \$50,000.

The maximum \$5,000 Windstorm or Hail Deductible credits by Territory Group are:

Territory Group 1 \$1,882.07 Territory Group 2 \$1,808.10

1% WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$50	1.05		
100	0.97		
250	0.90		
500	0.81		
1			

<sup>\*\*</sup>The amount of insurance on the structure must be at least \$25,000 for all other peril deductibles below 500 and \$50,000 for an all other peril deductible equal to 500

The maximum 1% Windstorm or Hail Deductible credits by Territory Group are

Territory Group 1 \$235.25 Territory Group 2 \$226.01

2% WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$50	1.02		
100	0.94		
250	0.87		
500	0.79		
750	0.72		
1,000	0.66		
2,000	0.47		

<sup>\*\*</sup>The amount of insurance on the structure must be at least \$50,000 for all other peril deductibles below 2,000 and \$100,000 for an all other peril deductible equal to 2,000

The maximum 1% Windstorm or Hail Deductible credits by Territory Group are

Territory Group 1 \$735.18 Territory Group 2 \$706.29

5% WINDSTORM OR HAIL DEDUCTIBLE**			
ALL OTHER PERILS	DEDUCTIBLE		
DEDUCTIBLE AMOUNT	FACTOR		
\$50	0.97		
100	0.90		
250	0.83		
500	0.76		
750	0.70		
1,000	0.64		
2,000	0.46		
5,000	0.30		

<sup>\*\*</sup>The amount of insurance on the structure must be at least \$50,000 for all other peril deductibles below 2,000 and \$100,000 for any other all other peril deductibles

The maximum 1% Windstorm or Hail Deductible credits by Territory Group are

Territory Group 1 \$1,588.00 Territory Group 2 \$1,525.58

# OPTIONAL NAMED STORM PERCENTAGE DEDUCTIBLE TERRITORY GROUPS 1 AND 2 ONLY

#### **DEDUCTIBLE COMPREHENSIVE COVERAGE**

The surcharges/credits displayed incorporate the surcharges/credits for the All Perils Deductibles. Do not use the surcharges/credits for the All Perils Deductibles when rating a policy with a higher Named Storm Percentage Deductible. For Comprehensive Coverage Primary Residence, the 1%, 2%, or 5% Named Storm Deductible surcharge/credit applies to the \$100 deductible rate. For Comprehensive Coverage Seasonal/Vacation Residence, the 1%, 2%, or 5% Named Storm Deductible credit applies to the \$250 deductible rate.

#### 1% Named Storm Deductible

			Primary Residence		Seasonal/ Resid	
All Other Perils Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 1	Territory Group 2
	Mobile Home Structures	Add	\$20.88	\$18.50		
None	Adjacent Structures	Add	1.33	1.22		
	Personal Effects	Add	9.42	7.38		
	Mobile Home Structures	Add	\$4.84	\$4.29		
\$50	Adjacent Structures	Add	0.35	0.32		
	Personal Effects	Add	4.19	3.28		
	Mobile Home Structures	Subtract	\$8.54	\$7.57		
\$100	Adjacent Structures	Subtract	0.63	0.58		
	Personal Effects	Subtract	1.05	0.82		
	Mobile Home Structures	Subtract	\$32.64	\$28.91	\$8.54	\$7.57
\$250	Adjacent Structures	Subtract	2.59	2.38	0.63	0.58
	Personal Effects	Subtract	11.51	9.02	1.05	0.82
	Mobile Home Structures	Subtract	\$70.10	\$62.07	\$46.03	\$40.77
\$500	Adjacent Structures	Subtract	16.36	15.01	14.38	13.19
	Personal Effects	Subtract	16.74	13.12	6.29	4.93

			Primary Residence		Seasonal/Vacation Residence	
All Other Perils	Coverage		Territory	Territory	Territory	Territory
Deductible Amount	Coverage		Group 1	Group 2	Group 1	Group 2
	Mobile Home Structures	Add	\$12.04	\$10.66		
None	Adjacent Structures	Add	0.68	0.63		
	Personal Effects	Add	8.27	6.48		
	Mobile Home Structures	Subtract	\$3.84	\$3.39		
\$50	Adjacent Structures	Subtract	0.30	0.28		
	Personal Effects	Add	3.08	2.41		
	Mobile Home Structures	Subtract	\$17.09	\$15.14		
\$100	Adjacent Structures	Subtract	1.27	1.17		
	Personal Effects	Subtract	2.09	1.63		
	Mobile Home Structures	Subtract	\$40.94	\$36.26	\$17.09	\$15.14
\$250	Adjacent Structures	Subtract	3.19	2.95	1.27	1.17
	Personal Effects	Subtract	12.45	9.76	2.09	1.63
	Mobile Home Structures	Subtract	\$78.03	\$69.09	\$54.21	\$48.01
\$500	Adjacent Structures	Subtract	16.65	15.28	14.57	13.37
	Personal Effects	Subtract	17.63	13.82	7.29	5.71

	Mobile Home Structures	Subtract	\$111.67	\$98.87	\$88.60	\$78.45
\$750	Adjacent Structures	Subtract	28.61	26.23	26.47	24.30
	Personal Effects	Subtract	21.67	16.99	11.87	9.31
	Mobile Home Structures	Subtract	\$140.94	\$124.78	\$119.29	\$105.63
\$1,000	Adjacent Structures	Subtract	38.54	35.32	36.46	33.47
	Personal Effects	Subtract	24.41	19.15	15.63	12.25
	Mobile Home Structures	Subtract	\$250.32	\$221.59	\$234.81	\$207.91
\$2,000	Adjacent Structures	Subtract	74.32	68.09	72.57	66.62
	Personal Effects	Subtract	33.64	26.42	29.14	22.84

			Primary R	esidence	Seasonal/ Resid	
All Other Perils  Deductible Amount	Coverage		Territory Group 1	Territory Group 2	Territory Group 1	Territory Group 2
	Mobile Home Structures	Subtract	\$14.49	\$12.84		
None	Adjacent Structures	Subtract	1.29	1.16		
	Personal Effects	Add	4.82	3.77		
	Mobile Home Structures	Subtract	\$29.89	\$26.45		
\$50	Adjacent Structures	Subtract	2.23	2.06		
	Personal Effects	Subtract	0.23	0.20		
	Mobile Home Structures	Subtract	\$42.72	\$37.84		
\$100	Adjacent Structures	Subtract	3.16	2.92		
	Personal Effects	Subtract	5.23	4.08		
	Mobile Home Structures	Subtract	\$65.85	\$58.33	\$42.72	\$37.84
\$250	Adjacent Structures	Subtract	4.98	4.63	3.16	2.92
	Personal Effects	Subtract	15.28	11.99	5.23	4.08
	Mobile Home Structures	Subtract	\$101.80	\$90.14	\$78.74	\$69.73
\$500	Adjacent Structures	Subtract	18.30	16.78	16.31	15.00
	Personal Effects	Subtract	20.29	15.92	10.29	8.07
	Mobile Home Structures	Subtract	\$133.62	\$118.30	\$111.32	\$98.56
\$750	Adjacent Structures	Subtract	30.04	27.48	27.98	25.72
	Personal Effects	Subtract	24.02	18.86	14.58	11.45
	Mobile Home Structures	Subtract	\$160.47	\$142.06	\$139.59	\$123.56
\$1,000	Adjacent Structures	Subtract	39.69	36.27	37.67	34.62
	Personal Effects	Subtract	26.37	20.70	17.93	14.09
	Mobile Home Structures	Subtract	\$265.20	\$234.75	\$250.13	\$221.35
\$2,000	Adjacent Structures	Subtract	75.15	68.57	73.39	67.42
	Personal Effects	Subtract	35.04	27.52	30.69	24.16
	Mobile Home Structures	Subtract	\$573.60	\$507.68	\$575.92	\$509.55
\$5,000	Adjacent Structures	Subtract	174.29	158.88	171.52	157.50
•	Personal Effects	Subtract	59.83	47.01	67.61	53.28

#### **DEDUCTIBLE NAMED PERILS COVERAGE**

The surcharges/credits displayed incorporate the surcharges/credits for the All Perils Deductibles. Do not use the surcharges/credits for the All Perils Deductibles when rating a policy with a higher Named Storm Percentage Deductible. For Named Perils Coverage, the 1%, 2%, or 5% Named Storm Deductible credit applies to the \$0 deductible rate.

#### 1% Named Storm Deductible

			Primary F	tesidence
All Other Perils Deductible Amount	Coverage		Territory Group 1	Territory Group 2
	Mobile Home Structures	Subtract	\$15.24	\$13.49
None	Adjacent Structures	Subtract	1.08	0.99
	Personal Effects	Subtract	2.10	1.65
	Mobile Home Structures	Subtract	\$28.51	\$25.25
\$50	Adjacent Structures	Subtract	2.06	1.90
	Personal Effects	Subtract	6.42	5.02
	Mobile Home Structures	Subtract	\$40.41	\$35.79
\$100	Adjacent Structures	Subtract	3.05	2.79
	Personal Effects	Subtract	10.74	8.42
	Mobile Home Structures	Subtract	\$60.28	\$53.38
\$250	Adjacent Structures	Subtract	4.00	3.67
	Personal Effects	Subtract	19.35	15.17
	Mobile Home Structures	Subtract	\$93.40	\$82.71
\$500	Adjacent Structures	Subtract	5.59	5.14
	Personal Effects	Subtract	33.71	26.42

			Primary R	esidence
All Other Perils	Coverage		Territory	Territory
<b>Deductible Amount</b>	Coverage		Group 1	Group 2
	Mobile Home Structures	Subtract	\$30.48	\$26.99
None	Adjacent Structures	Subtract	2.16	1.99
	Personal Effects	Subtract	4.21	3.31
	Mobile Home Structures	Subtract	\$43.49	\$38.52
\$50	Adjacent Structures	Subtract	3.13	2.88
	Personal Effects	Subtract	8.43	6.59
	Mobile Home Structures	Subtract	\$55.13	\$48.82
\$100	Adjacent Structures	Subtract	4.11	3.76
	Personal Effects	Subtract	12.67	9.93
	Mobile Home Structures	Subtract	\$74.61	\$66.07
\$250	Adjacent Structures	Subtract	5.03	4.61
	Personal Effects	Subtract	20.74	16.26
	Mobile Home Structures	Subtract	\$103.87	\$91.97
\$500	Adjacent Structures	Subtract	6.23	5.72
	Personal Effects	Subtract	32.49	25.47
	Mobile Home Structures	Subtract	\$129.13	\$114.32
\$750	Adjacent Structures	Subtract	7.07	6.50
	Personal Effects	Subtract	42.02	32.94
	Mobile Home Structures	Subtract	\$149.76	\$132.57
\$1,000	Adjacent Structures	Subtract	7.52	6.90
	Personal Effects	Subtract	48.98	38.39

## **NORTH CAROLINA**

	Mobile Home Structures	Subtract	\$225.32	\$199.42
\$2,000	Adjacent Structures	Subtract	8.86	8.11
	Personal Effects	Subtract	72.97	57.18

			Primary R	esidence
All Other Perils			Territory	Territory
<b>Deductible Amount</b>	Coverage		Group 1	Group 2
	Mobile Home Structures	Subtract	\$76.19	\$67.47
None	Adjacent Structures	Subtract	5.41	4.96
	Personal Effects	Subtract	10.52	8.27
	Mobile Home Structures	Subtract	\$88.45	\$78.33
\$50	Adjacent Structures	Subtract	6.34	5.82
	Personal Effects	Subtract	14.47	11.30
	Mobile Home Structures	Subtract	\$99.29	\$87.94
\$100	Adjacent Structures	Subtract	7.28	6.67
	Personal Effects	Subtract	18.47	14.48
	Mobile Home Structures	Subtract	\$117.60	\$104.13
\$250	Adjacent Structures	Subtract	8.10	7.42
	Personal Effects	Subtract	26.30	20.64
	Mobile Home Structures	Subtract	\$143.67	\$127.20
\$500	Adjacent Structures	Subtract	8.98	8.24
	Personal Effects	Subtract	37.39	29.36
	Mobile Home Structures	Subtract	\$164.65	\$145.76
\$750	Adjacent Structures	Subtract	9.37	8.60
	Personal Effects	Subtract	46.05	36.18
	Mobile Home Structures	Subtract	\$180.06	\$159.39
\$1,000	Adjacent Structures	Subtract	9.48	8.70
	Personal Effects	Subtract	52.52	41.28
	Mobile Home Structures	Subtract	\$241.70	\$213.92
\$2,000	Adjacent Structures	Subtract	9.89	9.01
	Personal Effects	Subtract	76.06	59.82
	Mobile Home Structures	Subtract	\$426.62	\$377.50
\$5,000	Adjacent Structures	Subtract	11.13	9.84
	Personal Effects	Subtract	143.75	113.12

#### TERRITORY GROUP SURCHARGE/DISCOUNT

Mobile Home Structures			
Territory Group 1	72.0%		
Territory Group 2	52.6%		
Territory Group 3	0.0%		
Territory Group 4	-3.6%		
Territory Group 5	-13.3%		
Territory Group 6	-29.9%		

Adjacent Structures				
Territory Group 1	87.2%			
Territory Group 2	72.2%			
Territory Group 3	0.0%			
Territory Group 4	-3.4%			
Territory Group 5	-13.2%			
Territory Group 6	-34.8%			

Comprehensive Personal Effects			
Territory Group 1	97.0%		
Territory Group 2	54.7%		
Territory Group 3	0.0%		
Territory Group 4	-13.0%		
Territory Group 5	-18.8%		
Territory Group 6	-26.1%		

#### TRIP COVERAGE

30 Day Trip; \$100 Deductible = \$25

#### NATURAL DISASTER PROTECTION COVERAGE

A \$3.00 premium charge per mobile home shall apply

#### FIRE DEPARTMENT SERVICE CHARGE

Additional Amounts of Insurance:

\$2.00 per \$100 of Insurance Maximum additional Amount of Insurance = \$400

#### RADIO AND TELEVISION ANTENNA COVERAGE

Additional Amounts of Insurance:

\$5.00 per \$100 of Insurance
Maximum additional Amount of Insurance = \$2,500

#### MEDICAL PAYMENTS TO OTHERS

Additional Limit	Premium
\$1,000	\$3.00

#### LIABILITY

\$500 Medical Payments to Others Coverage and \$250 Damage to Property of Others automatically included.

Personal Liability Coverages			
Limits	Premium		
\$25,000	\$22.12		
50,000	25.22		
100,000	29.20		
200,000	34.06		
250,000	36.06		
300,000	37.83		

#### **INFLATION COVERAGE**

\$5.00 per mobile home

#### **DETERMINATION OF TERM PREMIUMS**

Multiply the 1 year unrounded premium for the specific coverage by the term factor then total and round total of all coverages.

#### **TERM FACTORS**

Apply to all Coverages:

Term	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year
Factor	1.00	2.00	3.00	3.85	4.65	5.35	6.00

#### PERSONAL EFFECTS REPLACEMENT COST ENDORSEMENT

\$0.30 per \$100 of Insurance The Minimum Additional Premium is \$15.00

## REPLACEMENT COST COVERAGE

When coverage is provided on a replacement cost basis, charge 5% of the premium from the premium rate table.

#### MOBILE HOME ADDITIONAL LIVING EXPENSE COVERAGE

\$25 per day = \$6 per mobile home \$50 per day = \$16 per mobile home

#### WINDSTORM OR HAIL EXCLUSION

(Territories 110, 120, 130, 140, 150, 160)

	Territory	Territory
	Group 1	Group 2
Mobile Home Structures	59.6%	59.6%
Adjacent Structures	37.9%	37.9%
Comprehensive Personal Effects	38.9%	38.9%

#### STATED VALUE LOSS SETTLEMENT

When coverage is provided on a stated value basis, charge 3% of the premium from the premium rate table.

Code

390

260

180

310

240

250

380

360

170

250

130

340

390

240

150

290

190

350

390

380

180

360

340

370

#### **MOBILE HOMEOWNERS POLICY TERRITORY PAGES**

County of

Graham

Granville

Greene

Guilford

Halifax

Harnett

Haywood

Hertford

Hoke

Iredell

Jones

Lenoir

Lincoln

Macon

Martin McDowell

Mitchell

Madison

Mecklenburg

Lee

Jackson

Johnston

Henderson

Hyde (other than Beach Areas)

#### 1. TERRITORY ASSIGNMENTS

If a territory shown is defined in terms of United States Postal Service (USPS) ZIP code:

A. Determine the applicable rating territory based on the location of the dwelling.

**B.** An insured's rates shall not be changed solely because the USPS changed his or her ZIP code and the physical boundaries of a rating territory shall be determined by the ZIP code boundaries in effect at the time of the latest rate filing defining the territory. Territory boundaries in North Carolina are concurrent with USPS ZIP code boundaries in effect as of July 1, 2013. If the USPS introduces a new ZIP code or realigns a ZIP code boundary after July 1, 2013, the new ZIP code may not yet be listed in Rule 2.C. If this is the case, assign the rating territory based on the ZIP code boundary that formerly applied to the dwelling before the USPS changed the ZIP code.

2. TERRITORY DEFINITIONS – (For all Coverages and Perils Other than Earthquake).

Assign the applicable territory using the following order of priority:

		Millorien	310
			300
			290
			240
		Northampton	240
		Orange	280
			130
		Pasquotank	150
		Perquimans	150
		Person	260
		Pitt	180
Bladen		Polk	360
Buncombe		Randolph	320
Burke		Richmond	300
		Robeson	230
Caldwell		Rockingham	310
Camden		Rowan	320
		Rutherford	350
		Sampson	220
Chatham		Scotland	250
		Stanly	340
		Stokes	310
		Surry	310
		Swain	380
Columbus		Transylvania	380
		Tyrrell	150
		Union	340
		Vance	260
		Wake	270
		Warren	260
		Washington	150
		Watauga	360
Durham		Wayne	180
Edgecombe	210	Wilkes	340
Forsyth		Wilson	210
Franklin		Yadkin	330
Gaston		Yancey	360
Gates	170		
	Cabarrus Caldwell Camden Caswell Catawba Chatham Cherokee Chowan Clay Cleveland Columbus Craven Cumberland Currituck (other than Beach Areas) Dare (other than Beach Areas) Davie Duplin Durham Edgecombe Forsyth Franklin Gaston	Alamance       310         Alexander       340         Alleghany       360         Anson       300         Ashe       360         Avery       370         Beaufort       150         Bertie       180         Bladen       230         Buncombe       360         Burke       360         Cabarrus       320         Caldwell       360         Camden       150         Caswell       310         Catawba       360         Chatham       280         Cherokee       390         Chowan       150         Clay       390         Cleveland       350         Columbus       200         Craven       150         Cumberland       220         Currituck (other than Beach Areas)       130         Davidson       320         Davidson       320         Davide       310         Duplin       190         Durham       270         Edgecombe       210         Forsyth       310         Franklin       240	County of         Code         Montgomery           Alamance         310         Nash           Alexander         340         Northampton           Alleghany         360         Orange           Anson         300         Pasquotank           Ashe         360         Pasquotank           Avery         370         Perquimans           Beaufort         150         Person           Bertie         180         Pitt           Bladen         230         Polk           Buncombe         360         Randolph           Burke         360         Richmond           Cabarrus         320         Robeson           Caldwell         360         Rockingham           Camden         150         Rowan           Caswell         310         Rutherford           Catawba         360         Scotland           Cherokee         390         Stanly           Cherokee         390         Stury           Clay         390         Surry           Cleveland         350         Swain           Columbus         20         Transylvania           Craven         150

# MOBILE HOMEOWNERS POLICY TERRITORY PAGES

#### B. Beach Areas

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 Banks".

Beach areas in Currituck, Dare, and Hyde Counties: 110
Beach areas in Brunswick, Carteret, New Hanover,
Onslow, and Pender Counties: 120

# C. Other than Beach Areas of Brunswick, Carteret, New Hanover, Onslow, and Pender Counties

For areas of Brunswick, Carteret, New Hanover, Onslow and Pender Counties, other than the Beach Areas, refer to the following ZIP codes. If portions of these ZIP codes fall in Counties other than Brunswick, Carteret, New Hanover, Onslow and Pender Counties use the territory code for those Counties.

#### 1. Eastern Coastal Territory

Edotoiii Godotai		101111019	
	ZIP Code	<b>USPS ZIP Code Name</b>	Code
	28403	Wilmington	140
	28404	Wilmington	140
	28405	Wilmington	140
	28406	Wilmington	140
	28407	Wilmington	140
	28408	Wilmington	140
	28409	Wilmington	140
	28410	Wilmington	140
	28411	Wilmington	140
	28412	Wilmington	140
	28422	Bolivia	140
	28428	Carolina Beach	140
	28443	Hampstead	140
	28445	Holly Ridge	140
	28459	Shallotte	140
	28460	Sneads Ferry	140
	28461	Southport	140
	28462	Supply	140
	28467	Calabash	140
	28468	Sunset Beach	140
	28469	Ocean Isle Beach	140
	28470	Shallotte	140
	28480	Wrightsville Beach	140
	28511	Atlantic	140
	28516	Beaufort	140
	28520	Cedar Island	140
	28524	Davis	140
	28528	Gloucester	140

ZIP Code	<b>USPS ZIP Code Name</b>	Code
28531	Harkers Island	140
28532	Havelock	140
28533	Cherry Point	140
28539	Hubert	140
28553	Marshallberg	140
28557	Morehead City	140
28570	Newport	140
28577	Sealevel	140
28579	Smyrna	140
28581	Stacy	140
28584	Swansboro	140
28589	Williston	140

#### 2. Western Coastal Territory

western Coasta	ii Territory	
ZIP Code	<b>USPS ZIP Code Name</b>	Code
28401	Wilmington	160
28402	Wilmington	160
28420	Ash	160
28421	Atkinson	160
28425	Burgaw	160
28429	Castle Hayne	160
28435	Currie	160
28436	Delco	160
28447	Ivanhoe	160
28448	Kelly	160
28451	Leland	160
28452	Longwood	160
28454	Maple Hill	160
28456	Riegelwood	160
28457	Rocky Point	160
28466	Wallace	160
28478	Willard	160
28479	Winnabow	160
28518	Beulaville	160
28521	Chinquapin	160
28540	Jacksonville	160
28541	Jacksonville	160
28542	Camp Lejeune	160
28543	Tarawa Terrace	160
28544	Midway Park	160
28545	McCutcheon Field	160
28546	Jacksonville	160
28547	Camp Lejeune	160
28555	Maysville	160
28574	Richlands	160
28582	Stella	160

# OF JOANNA BILIOURIS

#### OCTOBER 2022

# 2022 NORTH CAROLINA MOBILE HOMEOWNERS MH(C) INSURANCE RATE FILING BY THE NORTH CAROLINA RATE BUREAU

- Q. Would you state your full name and business address?
- A. My name is Joanna Biliouris. My business address is 2910 Sumner Blvd, Raleigh, North Carolina 27616.
- Q. Are you employed by the North Carolina Rate Bureau ("Bureau")?
- A. Yes.
- Q. In what capacity?
- A. I am the General Manager.
- Q. What is the Bureau's function with respect to rates for Mobile Homeowners MH(C) insurance?
- A. The Bureau promulgates rates and rules for residential property insurance in North Carolina, including this MH(C) program.
- Q. Can you identify Exhibits RB-1 through RB-23?
- A. Yes. Exhibit RB-1 sets forth the revised rates for the MH(C) market in North Carolina, as well as the data and calculations underlying those rates and the MH(C) rate manual changes that accompany the filed rate changes. RB-1 also includes the supplemental data and exhibits required by statute and by regulation for this filing. Exhibit RB-2 is the current MH(C) rate manual. Exhibits RB-3 through RB-23 contain the required accompanying pre-filed testimony and exhibits. Together, these materials constitute a filing (the "Filing") that is dated October 31, 2022 submitted by the Bureau to the Honorable Mike Causey, Commissioner of Insurance, with respect to MH(C) rates in North Carolina.
- Q. Do you know how the expense data underlying the Filing were compiled?
- A. Yes. The underwriting expense provisions included in the Filing were derived from the results of a special call for expense experience that is issued on an annual basis to all member companies of the Bureau. The responses received from that special call were compiled, reviewed, and furnished to Milliman for incorporation into the Filing. The Bureau also furnished to Milliman certain information appearing in the

Annual Statements and the Insurance Expense Exhibits of Bureau member companies, which are filed by those companies with the Department of Insurance ("DOI") and are part of the DOI's official records.

- Q. Was the information you described above, which was furnished to Milliman and utilized in the Filing, correct and accurate to the best of your knowledge, information and belief?
- A. Yes.
- Q. Can you identify the document (Exhibit RB-2) entitled the North Carolina Mobile Homeowners Policy MH(C) Program?
- A. Yes. The North Carolina Mobile Homeowners Policy MH(C) Program is a manual of the rules, rates and classifications used to write Mobile Homeowners MH(C) insurance in North Carolina. This manual and any approved amendments are on file with the North Carolina Department of Insurance and a copy is maintained at the offices of the Bureau.
- Q. Do you know how the exposure and loss experience data underlying the Filing were compiled?
- A. Yes. The exposure and loss experience data included in the Filing were derived from the results of a special call for experience that was issued to all companies writing MH(C) insurance. The responses received from that special call were furnished to Milliman for incorporation into the Filing.
- Q. To the extent that actuarial expertise was necessary in the preparation of this Filing, where did the Bureau obtain that expertise?
- A. Actuarial expertise was obtained from Milliman. Milliman is retained by the Bureau to provide actuarial services for, among numerous other tasks, preparation of this Filing. Many of the individual company representatives serving on the Bureau's Mobile Home and Property Rating Subcommittees are also actuaries. The Bureau's Subcommittees reviewed the data underlying the Filing and made recommendations to the Property Committee, which then made recommendations to the Bureau's Governing Committee as to the items contained in the Filing. In addition, the Bureau has an actuary on its staff who assisted in the review and the preparation of the Filing.
- Q. What is the proposed effective date of the rates in the Filing?
- A. The rate review proposes that the indicated rate changes be implemented in two phases over a two-year period. The Bureau proposes that the new rates for Year 1 apply to all policies becoming effective on or after July 1, 2023, and the new rates for Year 2 apply to all policies becoming effective on or after July 1, 2024.
- Q. Does the Filing submitted to the Commissioner include, to the extent available, the information to be furnished in connection with filings under Article 36 of Chapter 58 of the General Statutes?

A. Yes. Those data that were available have been submitted to the Commissioner as part of the Filing. As shown and explained in that submission, some data were not collected or, if collected, were not retrievable in the form requested. The individual circumstances with respect to such data are explained in the submission.

#### Q. Does that conclude your pre-filed testimony?

A. Yes.

# PREFILED TESTIMONY OF PAUL D. ANDERSON

### 2022 MOBILE HOMEOWNERS MH(C) INSURANCE RATE FILING BY THE NORTH CAROLINA RATE BUREAU

- Q. Please state your name and business address.
- A. My name is Paul D. Anderson. My business address is 17335 Golf Parkway, Brookfield, WI 53045.
- Q. By whom are you employed?
- A. I am employed by Milliman, Inc. (Milliman) and have been employed by Milliman since February 1, 2007.
- Q. What is your educational background?
- A. I received a Bachelor of Science in Actuarial Science from Drake University in Des Moines, Iowa in 1993.
- Q. Do you have any additional certifications or qualifications?
- A. Yes. I have been a Fellow of the Casualty Actuarial Society (CAS) since 2002 and a Certified Specialist in Predictive Analytics of the CAS Institute (iCAS) since 2018. Since 2002, I have served on several committees of the Casualty Actuarial Society, including the following:
  - Syllabus & Examination Committee: April 2004 to July 2006;
  - Volunteer Support Task Force: February 2012 to April 2013;
  - Volunteer Resources Committee: April 2013 to March 2020;
  - Vehicle Technology & Impact on Loss Trends Planning Committee: October 2017 to August 2018;
  - Participation Survey Task Force: January 2018 to January 2019;
  - Crash Course in Vehicle Technology & Driverless Cars Committee (chairperson): February 2020 to November 2021;
  - Volunteer Resources Advisory Committee: June 2020 to November 2021;
  - Crash Course Seminar Task Force (volunteer chairperson): November 2021 to Present: and
  - Volunteer Resources Task Force: November 2021 to Present.

I have also been a member of the American Academy of Actuaries since 2002 and meet all of the continuing education requirements of that organization as well as those of the Casualty Actuarial Society.

#### Q. What is your employment background?

A. I was employed by Allstate Insurance Company from June 1993 until January 2007. While at Allstate, I held various actuarial roles. I began my career as an Auto Pricing Analyst, and over time, I assumed increasing responsibility in various departments that included Property Pricing, Auto Pricing, Property Research, and Auto Research. On the pricing teams, I assisted in developing rates for property and auto insurance products in most states across the country. On the research teams, I assisted in developing new property and auto risk classification plans to be implemented by Allstate's pricing teams. From 2006 until January 2007, I served as a Senior Manager for Allstate's Eastern region, which included assisting in the oversight of the pricing strategies for approximately half the country, including North Carolina.

In February 2007 I began my career at Milliman. Since 2007, I have completed, managed, or overseen numerous property and auto pricing analyses for a variety of clients. My clients have included small single-state insurance companies, industry-leading national insurance companies, start-up InsurTech insurance companies, government entities, the North Carolina Rate Bureau, and other entities with similar coastal property exposure in states such as Florida, Hawaii, and Texas. These client assignments have included such projects as pricing analyses to evaluate overall rate adequacy, predictive modeling assignments to develop new risk classification plans, and analyses of catastrophe losses to evaluate the adequacy and allocation of property premiums corresponding to catastrophe risk.

#### Q. What is Milliman?

A. Milliman is among the world's largest providers of actuarial, risk management, and related technology and data solutions. Milliman was founded in Seattle in 1947 as Milliman & Robertson and today has offices in principal cities worldwide, covering markets in North America, Latin America, Europe, Asia and the Pacific, the Middle East, and Africa. Milliman employs more than 4,000 people, including actuaries and specialists ranging from clinicians to economists. The firm has consulting practices in employee benefits, financial services, healthcare, life insurance, and property and casualty insurance. Milliman serves the full spectrum of business, education, financial, governmental, union, and nonprofit organizations.

#### Q. What are your current responsibilities at Milliman?

A. I am responsible for managing and overseeing the personal lines and insurance-related predictive analytics portion of Milliman's Milwaukee Casualty practice. The personal lines and predictive analytics team conducts a variety of property and auto pricing, product development, and predictive modeling assignments, primarily for insurance companies. Over the last five years, we have completed property analyses for nearly every state in the country, including North Carolina.

- Q. Were you engaged to provide actuarial services to the North Carolina Rate Bureau (Rate Bureau or Bureau) in relation to its 2022 mobile homeowners MH(C) rate filing?
- A. Yes, I was.
- Q. What work did Milliman perform in connection with the rate review and this rate filing?
- A. Milliman was engaged to provide actuarial ratemaking services directly to the Rate Bureau to assist in the preparation of the 2022 mobile homeowners MH(C) rate review. As such, I was involved in several aspects of the preparation of this filing.

First, under the direction and administration of the Rate Bureau, Milliman developed a Mobile Homeowners Data Call. In response to this data call, Milliman received data from Bureau member companies that write mobile homeowners insurance in North Carolina. Milliman compiled the data and reviewed the data for reasonability and consistency. In addition to data from the data call, Milliman received and evaluated expense-related data that the Rate Bureau collected from its member companies. During the course of our analysis for this filing, Milliman also received modeled hurricane data and net cost of reinsurance data from Aon. Milliman aggregated all of this data and reviewed each component for reasonability.

Second, I and other Milliman staff under my direction compiled the ratemaking data to be reviewed by the Rate Bureau's Mobile Home Subcommittee, Property Rating Subcommittee, Property Committee, and Governing Committee in preparation for the rate review.

Third, Milliman staff under my direction assembled the vast majority of the data and performed all of the calculations contained in Exhibits RB-1, RB-6, and RB-7. This work was performed under the ultimate direction of the Bureau committees.

Finally, I reviewed the filed rates to determine whether they are calculated in accordance with applicable actuarial standards and reasonable actuarial methodologies. In conducting this review and making this determination, I adhered to the American Academy of Actuaries' *Code of Professional Conduct*. Based on the guidance of Precept 3 in the *Code of Professional Conduct*, which states that actuarial services shall satisfy applicable standards of practice, I conducted my review in accordance with all Actuarial Standards of Practice (ASOPs) that relate to this filing. A few examples of the ASOPs that I applied during my review include ASOP No. 13, *Trending Procedures in Property/Casualty Insurance*; ASOP No. 39, *Treatment of Catastrophe Losses in Property/Casualty Insurance Ratemaking*; and ASOP No. 53, *Estimating Future Costs for Prospective Property/Casualty Risk Transfer and Risk Retention*.

I also conducted my review in accordance with ASOP No. 17, *Expert Testimony by Actuaries*. In addition, I applied the rate standards set forth in the North Carolina General Statutes, including G.S. 58-36-10, which provides that rates must not be excessive, inadequate, or unfairly discriminatory and that certain statutory rating factors must be considered.

- Q. Is your firm being compensated for this engagement?
- A. Yes, it is.
- Q. Is that compensation in any way contingent on providing favorable testimony in support of the filing?
- A. No, it is not.
- Q. Were there any constraints placed on your analysis, such as limited or delayed access to data or limited time, that may have hindered your complete review?
- A. No, I was provided all the data and information necessary for my work, and I had adequate time for a complete analysis. My analysis was not limited in any way.
- Q. What is the source of the data evaluated in Exhibit RB-1?
- A. The ratemaking data reflected in Exhibit RB-1 was, in general, supplied by the individual insurance companies that write mobile homeowners insurance policies in North Carolina on the MH(C) policy form. Those companies submitted their data in response to the mobile homeowners data call described above. Data received in response to the data call included the following:
  - Premium data 7 years of policy-level data with rating characteristics needed to calculate mobile homeowners premium;
  - Claims data 7 years of claims-level data including cause of loss;
  - Summarized loss data at least 15 years of summarized losses for nonhurricane wind, hurricane, flood, and all (non-liability) perils combined; and
  - Loss development data 12 years of summarized loss and claim data by accident year evaluated at successive evaluation dates.

After receiving the data from the individual insurance companies, Milliman reviewed and verified each company's data and then consolidated the data for use in the rate review analysis.

The individual insurance companies that write mobile homeowners policies in North Carolina on the MH(C) policy form also submitted expense-related data to the North Carolina Rate Bureau. The Rate Bureau reviewed the expense data for

reasonability and aggregated the data before providing it to Milliman for final review and consolidation.

During the rate review analysis, Milliman also received modeled hurricane losses and net cost of reinsurance data from Aon. After receiving the data from Aon, Milliman reviewed the modeled hurricane losses and reinsurance costs for reasonability.

After consolidating the data from the member companies, the Rate Bureau, and Aon, Milliman produced various exhibits of the combined data in a format and detail necessary for review by the Rate Bureau committees and ultimately for use in rate filings.

### Q. What exposure and loss experience data supporting this filing are contained in Exhibit RB-1?

A. In general, the supporting data for the indicated and proposed rate changes are contained in Sections C and D. The most recent five years of loss experience are summarized and displayed in Section C. The experience used in this filing includes accident year experience for the years ending December 31, 2017 through December 31, 2021. To clarify what is meant by "accident year," the losses for the accident year ending December 31, 2021 include all losses resulting from claims caused by events that occurred between January 1, 2021 and December 31, 2021, even if the loss was paid or a reserve established on or after January 1, 2022.

Similar to Section C, the information underlying Section D is also based on accident year experience for the years 2017 through 2021. That information supports changes to the wind exclusion credits, which are one of the mobile homeowners rating variables.

# Q. Why are five years of loss experience used to determine the indicated rate changes?

A. The objective of ratemaking is to establish rates that are sufficient to cover all expected losses and expenses and to provide a reasonable margin for profit. Rates are prospective and, as such, are developed for the time period during which they will be in effect. The rate review underlying this filing was performed with the assumption that the effective date would be July 1, 2023, and that the proposed rates would be in effect for one year beginning from that date. However, in order to mitigate the effect of the rate increase on policyholders, the Rate Bureau Governing Committee elected to spread the proposed rate change over two years, with a proposed effective date of July 1, 2023 for the year 1 change and an effective date of July 1, 2024 for the year 2 change.

Historical loss experience is evaluated for the purpose of projecting expected future losses. For insured losses, including flood losses, but not including hurricane

losses (for which hurricane models are used) and not including non-hurricane catastrophic wind losses and flood losses (for which a separate excess wind procedure and a separate excess flood procedure, respectively, are applied), five years of data are considered to be reasonable and appropriate. Using five years of loss experience to evaluate non-catastrophic types of losses balances the overall stability of the rates with the responsiveness of the rates to current market conditions. Additionally, North Carolina statutes allow the Rate Bureau to review five years of experience in its rate filings in addition to other factors that are to be considered. Note that, for the purposes of this filing, "hurricane losses" mean wind and storm surge losses from hurricanes.

Previous North Carolina mobile homeowners rate filings submitted by the Rate Bureau have relied on five years of experience with weights of 10%, 15%, 20%, 25%, and 30% applied to each year respectively as a way to balance stability and responsiveness of the proposed rates. In this filing, we use those same weights for the property coverages and the liability coverage being evaluated. These weights are frequently used and generally accepted in all jurisdictions within the United States.

# Q. What is the overall indicated and proposed change in mobile homeowners MH(C) rates in this filing?

A. This filing shows the indicated need for an overall 53.4% statewide average rate increase for mobile homeowners MH(C) policies. This includes an indicated 65.0% change to Mobile Home Structures rates, an indicated 33.4% change to Adjacent Structures rates, an indicated 3.8% change to Personal Effects rates, and an indicated 30.1% change to Liability rates.

Based on these indicated rate changes, the Rate Bureau's Governing Committee decided to implement the indicated rates over a two-year period. Section A, Page 1 shows the proposed statewide rate changes for each MH(C) coverage separately for year 1 and year 2. Within each territory group, the proposed rate change percentage by coverage will be the same in year 1 and year 2, as shown on Page 2 in Section A. Due to a shift in the premium distribution by territory group and by coverage from year 1 to year 2, the overall proposed rate changes across all territory groups and all coverages will vary slightly between year 1 and year 2.

As a result of this implementation approach, this filing proposes an overall 23.2% statewide average rate increase in year 1 and an overall 24.5% statewide average rate increase in year 2. Allocating those rate changes by coverage, the year 1 rate change includes a proposed 28.2% change to Mobile Home Structures rates, a proposed 15.1% change to Adjacent Structures rates, a proposed 1.4% change to Personal Effects rates, and a proposed 14.1% change to Liability rates. Similarly, the year 2 rate change includes a proposed 28.7% change to Mobile Home Structures rates, a proposed 15.9% change to Adjacent Structures rates, a

proposed 2.4% change to Personal Effects rates, and a proposed 14.1% change to Liability rates.

#### Q. Please describe the overall ratemaking methodology that underlies the filing.

A. The approach in this filing is generally consistent with prior mobile homeowners MH(C) filings submitted by the Rate Bureau. Consistent with ASOP No. 53, Estimating Future Costs for Prospective Property/Casualty Risk Transfer and Risk Retention as published by the Actuarial Standards Board, the indicated rates reflect the expected costs associated with insuring mobile homeowners MH(C) policies. These expected future costs include claims, claim settlement expenses, operational and administrative expenses, and a fair and reasonable profit.

The statewide rate indications for mobile homeowners MH(C) policies are developed based on a loss cost methodology (instead of a loss ratio methodology). The indicated rate change is calculated for each coverage (i.e., Mobile Home Structures, Adjacent Structures, Personal Effects, and Liability) by comparing the required base rate per policy to the current base rate. This comparison of the required and current base rates is consistent with ASOP No. 53 referenced above, is commonly used throughout the industry, and is an actuarially sound method of developing an indicated rate-level change.

# Q. Are there any changes in the ratemaking methodology compared to prior filings?

A. No. The methodology used in the 2022 mobile homeowners MH(C) filing is consistent with the 2021 filing.

#### Q. Looking at Section C, page 1, what is shown on this exhibit?

A. Section C, page 1 shows the statewide indicated rate changes for the major coverages offered in the North Carolina mobile homeowners MH(C) program. The data shown on this page reflects all MH(C) business written in the state. The MH(C) program consists of four major types of coverages. Overall, the perils insured against by MH(C) policies are similar to those insured against under homeowners policies except that MH(C) policies also provide coverage for losses caused by the perils of earthquake, flood, and landslide.

### Q. Referring to row 1 on page 1 of Section C, what is the *total base class loss cost*?

A. The *total base class loss cost* is the average amount of projected loss per exposure, including both non-hurricane and hurricane losses, for the risk identified as the base class for each respective MH(C) coverage. The calculations underlying the *total base class loss cost* for each coverage are included later in the discussion of Section C, pages 2, 4, 6, and 8.

- Q. Please explain each of the items shown in row 2 of Section C, page 1, including the fixed expense per policy, variable expense per policy, profit, contingencies, and policyholder dividends.
- A. Row 2a shows the *fixed expense per policy* for each MH(C) coverage. These amounts reflect the average costs for general expenses and other acquisition expenses that are expected to be paid to service policies written between July 1, 2023 and June 30, 2024. General expenses include overhead expenses such as equipment, rent, and salaries. Other acquisition expenses include costs required to issue a policy, excluding commission and brokerage and including such items as advertising fees, postage, and telephone charges. General expenses and other acquisition expenses are fixed expenses in that they do not vary directly in proportion to the amount of premium charged or collected. As a result, the amounts shown in row 2a (e.g., \$81.25 for Mobile Home Structures) are applicable to each mobile homeowners policy that includes the respective MH(C) coverages.

The *fixed expense per policy* for each coverage is calculated on page 70 of Section C and further supported by data found on pages 69 and 71 of Section C. We began by evaluating historical expense information provided by the Rate Bureau and calculating the ratio of general expenses and other acquisition expenses to earned premium for each year from 2017 through 2021. Although we considered the same five years of experience as used in the overall rate indications, the selected expense ratios were based on the most recent three years in order to best reflect any recent shifts in the expense ratios. The selected general expense ratio is 8.6% and the selected other acquisition expense ratio is 12.7%, resulting in a total fixed expense ratio of 21.3%. Because these selections were based on the average expense ratios from 2019 through 2021, the selected 21.3% fixed expense ratio corresponds to the fixed expenses observed at the midpoint of that experience period, or July 1, 2020.

Row 2b shows the *variable expense per policy* for each MH(C) coverage. Unlike fixed expenses, variable expenses vary directly in proportion to the amount of premium charged or collected. As a result, the variable expenses are included in the indicated rate change calculations as percentages relative to the written premium rather than dollar amounts. The variable expense percentage for each MH(C) coverage includes a provision for commission and brokerage and a provision for premium taxes, licenses, and fees. These provisions are supported by data found on page 71 of Section C. Similar to our analysis of the fixed expenses, we evaluated historical expense information and calculated the ratio of commission and brokerage expenses and taxes, licenses, and fees to written premium for each year from 2017 through 2021. We considered the same five years of experience as used in the overall rate indications; however the selected expense ratios were based on the most recent three years in order to best reflect any recent shifts in the expense ratios. The selected commission and brokerage

expense ratio is 16.6% and the selected taxes, licenses, and fees expense ratio is 3.2%, resulting in a total variable expense ratio of 19.8%.

Similar to the variable expense ratio, rows 2c, 2d, and 2e contain three additional provisions that vary directly in proportion to the written premium. Row 2c includes a provision for *profit*, row 2d contains a provision for *contingencies*, and row 2e contains a provision for *policyholder dividends*. Each of these selected provisions is a consistent percentage across the various MH(C) coverages, except for profit, which differs for liability coverage, as noted below.

- The underwriting profit provisions used in this filing are 6.5% for the three major property coverages and 6.0% for liability coverage. These provisions were selected by the Rate Bureau based on an analysis completed by Dr. Zanjani.
- The selected contingency provision in this filing is 1.0%, which is consistent with the prior mobile homeowners MH(C) filing and other Rate Bureau property insurance filings.
- The provision for policyholder dividends is supported by data on page 73 of Section C. To determine the provision for policyholder dividends, we evaluated historical annual statement information for companies writing Homeowners Multiple Peril premium in North Carolina. (Similar information specific to mobile homeowners insurance is not available.) We calculated the ratio of total dividends to total written premium for homeowners for each year from 2017 through 2021 and observed that companies consistently paid dividends to policyholders during that time period. Because of the consistency of these dividends during the historical experience, the Rate Bureau concluded that a provision for expected policyholder dividends is appropriate and, as such, selected a provision of 0.45% in this filing.

# Q. In your opinion, are the provisions for general expenses and for other acquisition expenses reasonable?

A. Yes, the general expenses provision and the other acquisition expenses provision are reasonable. It is common practice in the industry to rely on historical experience and to calculate a three-year average expense ratio to determine provisions for general expenses and for other acquisition expenses.

# Q. In your opinion, are the provisions for commission and brokerage and for taxes, licenses, and fees reasonable?

A. Yes, the commission and brokerage provision and the taxes, licenses, and fees provision are reasonable. It is common practice in the industry to rely on historical experience and to calculate a three-year average expense ratio to determine provisions for commission and brokerage and for taxes, licenses, and fees.

#### Q. Is the provision for contingencies included in this filing reasonable?

Α. Yes, the selected 1% provision for contingencies is reasonable to include in this filing. In addition to being consistent with prior Rate Bureau filings, the use of a contingency provision is common within the property and casualty insurance industry. According to Actuarial Standard of Practice No. 30: Treatment of Profit and Contingency Provisions and the Cost of Capital in Property/Casualty Insurance Ratemaking, "the actuary should include a contingency provision if the assumptions used in the ratemaking process produce cost estimates that are not expected to equal average actual costs, and if this difference cannot be eliminated by changes in other components of the ratemaking process." There are several reasons why expected cost estimates may not be equal to actual costs. Some of these reasons include adverse court decisions, extension of coverage for unforeseen or unintended exposures, regulatory delay or reduction in filed rate changes, and unexpected large losses not sufficiently recognized in the normal ratemaking process. For these reasons, among others, a contingency provision is appropriate and necessary in my opinion.

Included with this filing as Exhibit RB-7 is an exhibit I prepared that summarizes the estimated impact of delays in the filing process within the State of North Carolina. The delay in obtaining rate changes, whether caused by the regulatory review process or other delays inherent in the filing process, is merely one of several items listed above that supports the use of a contingency provision in a rate-level indication. Exhibit RB-7 lists the eighteen property rate filings submitted by the Rate Bureau between 2008 and 2021. For each filing, I compared the effective date assumed in the rate filing to the actual effective date. This difference, which reflects the delay due to the filing process, ranges from 0 months in the 2019 dwelling filing, to 22 months in the 2011 dwelling filing. After determining the length of delay for each filing, I applied the net trend (i.e., the loss trend offset by the premium trend) in that filing for the number of months of delay to determine the estimated impact of the delay in the filing process on the overall rate level. The estimated impact of delay varies across the eighteen filings, ranging from -1.9% in the 2021 MH(C) mobile homeowners filing to +5.9% in the 2008 MH(C) mobile homeowners filing, with an average impact of +0.9%.

Based on prior filings submitted by the Rate Bureau, my experience with property filings submitted by insurance companies in other states, and the 0.9% estimated impact of delays in the North Carolina filing process, it is my opinion that a 1% contingency provision is reasonable, consistent with common actuarial practice, and appropriate based on fundamental actuarial principles. Again, the impact of delays in the filing process is only one of many reasons that justifies a contingency provision.

#### Q. Is the provision for policyholder dividends included in this filing reasonable?

A. Yes, as described above, the Rate Bureau evaluated five years of historical experience and selected a 0.45% provision for policyholder dividends based on a five-year average ratio of the total policyholder dividends issued by homeowners insurers in North Carolina to the total direct written premium of those same companies.

The North Carolina ratemaking statutes (N.C. Gen. Stat. § 58-36-10(2)) require that policyholder dividends be considered in setting rates. Also, Actuarial Standard of Practice (ASOP) No. 29 regarding *Expense Provisions in Property/Casualty Insurance Ratemaking* states the following:

When the actuary determines that policyholder dividends are a reasonably expected expense and are associated with the risk transfer, the actuary may include a provision in the rate for the expected amount of policyholder dividends. In making this determination, the actuary should consider the following: the company's dividend payment history, its current dividend policy or practice, whether dividends are related to loss experience, the capitalization of the company, and other considerations affecting the payment of dividends.

ASOP No. 53 (Estimating Future Costs for Prospective Property/Casualty Risk Transfer and Risk Retention) also articulates that future cost estimates should reflect the expected costs associated with insuring mobile homeowners policies, including operational and administrative expenses. As such, since policyholder dividends are an operating expense, it is consistent with ASOP No. 29 and ASOP No. 53 to include a provision for policyholder dividends in the proposed rates reflected in this filing. Moreover, policyholder dividends are returns of premium to a company's policyholders and are not the same as dividends that publicly traded stock companies (owned by shareholders) pay to their shareholders. If dividends were not reflected in the Bureau's rates, the profit level in the filing would not be achieved because of dividends paid to policyholders.

By reviewing five years of historical experience to determine a provision for policyholder dividends, the Rate Bureau is complying with the statutes and ASOP No. 53 by considering the dividend payment history and ensuring that the selected provision is a reasonably expected expense.

### Q. Referring to row 3 on page 1 of Section C, what is the base rate excluding reinsurance cost?

A. The base rate excluding reinsurance cost is the average base rate for each coverage before reflecting additional adjustments for the compensation for assessment risk, the net cost of reinsurance, and net deviations. The base rate excluding reinsurance cost is calculated based on the following formula:

(total base class loss cost + fixed expense per policy)
(1 – variable expense ratio – profit – contingencies – policyholder dividends)

# Q. Please explain the item shown in row 4 of Section C, page 1, identified as the compensation for assessment risk per policy.

A. There is considerable risk to primary insurers (i.e., the member companies of the Rate Bureau for whom rates are being made in this filing) as a result of the exposures written in the North Carolina Insurance Underwriting Association (i.e., the Coastal Property Insurance Pool, or "Beach Plan") and the North Carolina Joint Underwriting Association (i.e., the FAIR Plan). Together, the Beach Plan and FAIR Plan serve as the "residual market" for residential property insurance in North Carolina. These two entities provide property insurance when policyholders are unable to purchase insurance coverage from companies in the voluntary market. In states with significant exposure to catastrophic events, property insurance residual markets may grow to represent a sizable portion of the total insured risk in the exposed regions of the state. In North Carolina, the Beach Plan has become the predominant writer of homeowners and dwelling insurance in the 18 coastal counties that it covers.

The Beach and FAIR Plans use the premiums collected from policies they issue to fund the losses and expenses attributable to the coverages they insure. When premiums are greater than losses and expenses during a fiscal year, the Beach and FAIR Plans accumulate surplus. That surplus is available to pay losses in the event that future losses and expenses exceed collected premiums plus investment income. However, if the surplus (and any applicable reinsurance) of either the Beach Plan or FAIR Plan is exhausted, then additional losses are passed through to property insurers in North Carolina in the form of an assessment. The potential overall industry assessment from the Beach Plan is limited to \$1 billion per year, but the potential assessment from the FAIR Plan is unlimited. If losses in the Beach Plan exceed its retained surplus, the \$1 billion industry assessment, and any other resources of the Beach Plan (including applicable reinsurance), any additional losses are passed through directly to residential property insurance policyholders in North Carolina in the form of a catastrophe recovery charge of up to 10% of premium per year.

This risk of potential assessments by the Beach Plan and FAIR Plan on property insurers in North Carolina requires that insurance companies be compensated for the additional risk to their capital. To quantify this risk, I have applied a procedure developed by Milliman to incorporate a provision in the mobile homeowners rates that compensates insurers for that assessment risk.

#### Q. Can you please explain the procedure you applied?

A. Yes. The methodology developed by Milliman to quantify the compensation for assessment risk relies on two estimates. The first estimate is based on historical compensation for assessment risk provisions, and the second estimate is to reflect the proportion of North Carolina insurance companies that retain exposure to assessments from the Beach Plan or FAIR Plan. Included with this filing as Exhibit

RB-6 is an exhibit I prepared that summarizes these estimates and develops the resulting compensation for assessment risk provision.

In previous mobile homeowners MH(C) filings, I relied on modeled hurricane data corresponding to the Beach Plan and FAIR Plan exposures. However, updated versions of that data are no longer available to Milliman or the Rate Bureau, and relying on the older data would add uncertainty and variability, which would not be appropriate for use in my analysis.

Because the necessary current modeled hurricane data is not available, I reviewed Rate Bureau property filings from the last several years to develop a compensation for assessment risk provision. From the 2017 homeowners filing to the 2021 mobile homeowners filings, the compensation for assessment risk provision ranged from 2.8% to 3.8%. I grouped the various property filings into rate review seasons, so that each historical compensation for assessment risk analysis received equal weight and determined an average historical compensation for assessment risk provision to be 3.2%.

Based on discussions earlier this year, Milliman and the Rate Bureau were made aware that some reinsurance contracts provide coverage for residual market assessments, including the potential non-recoupable assessments from the Beach Plan and FAIR Plan. As a result, it is possible that the reinsurance contracts purchased by North Carolina property insurance companies include this coverage for assessments and the exposure to Beach Plan or FAIR Plan assessments is no longer retained by the primary carrier. Because the Rate Bureau does not have information about company-specific reinsurance programs, I estimated that 50% of the North Carolina property insurance companies retain their exposure to assessments from the Beach Plan or FAIR Plan.

Next, I multiplied this estimated 50% market share by the 3.2% average historical compensation for assessment risk provision to determine an overall compensation for assessment risk provision of 1.6%.

# Q. In your opinion, is it appropriate to include a 1.6% provision for the compensation for assessment risk in mobile homeowners rates in North Carolina?

A. Yes. Insurance companies writing mobile homeowners policies in North Carolina are exposed to the risk of Beach Plan or FAIR Plan assessments as a result of writing voluntary market property insurance in the state. As such, for those insurance companies that retain this exposure, they are entitled to receive fair compensation for bearing that risk and it is appropriate to include that compensation in the mobile homeowners rates. The current provision is based on historical provisions developed by Milliman that rely on a widely accepted measure of compensation that will fairly compensate insurers for bearing this additional risk to their capital. Moreover, the North Carolina statutes (N.C. Gen. Stat. § 58-45-

5(6c)) provide that prospective exposure to non-recoupable assessments shall be considered as an appropriate factor in the making of rates by the Rate Bureau.

### Q. What is the source of the amounts shown in row 5 of Section C, page 1, labeled as the *net cost of reinsurance per policy*?

A. The source of the net cost of reinsurance for each MH(C) coverage is an analysis completed for the Rate Bureau by Aon. It is my understanding that Aon was retained by the Rate Bureau based on their ability to access relevant data and experience from the reinsurance market, their expertise with catastrophe-related issues, and their prominence with respect to the reinsurance industry. This is consistent with other recent property rate filings submitted by the Rate Bureau.

In Aon's analysis, they use their experience and expertise as a reinsurance broker to develop layers of reinsurance coverage that are representative of typical amounts of reinsurance coverage purchased by the property insurance industry. Using data, catastrophe models, and other information available to Aon, they estimated the reinsurance premium associated with each layer of coverage, determined the expected losses within each layer, and calculated the net cost of reinsurance as the difference between the reinsurance premium and the expected losses in each layer. In this manner, Aon determined the expected net cost of reinsurance for the composite one company writing mobile homeowners insurance in North Carolina. These premium amounts, losses, and net costs of reinsurance were developed separately by peril and by territory for each MH(C) coverage so that they could be summarized appropriately to develop a statewide or territory indicated rate change. More details of Aon's analysis are included in Ms. Mao's testimony and exhibits.

To determine the *net cost of reinsurance per policy* found in row 5 of Section C, page 1, the total reinsurance cost for each MH(C) coverage is first divided by the corresponding number of 2021 earned house years. The resulting average reinsurance cost is further adjusted by dividing by the 2021 average rating factor, the 2021 premium trend factor, and the expected loss and fixed expense ratio. These calculations can be found on pages 75, 76, and 77 of Section C for Mobile Home Structures, Adjacent Structures, and Personal Effects, respectively. These supporting pages show the development of the statewide net cost of reinsurance per policy as well as the net cost of reinsurance for each territory group. Similar to the compensation for assessment risk, the net cost of reinsurance per policy is not included in the calculation of the MH(C) Liability indicated rate change.

# Q. Can you please explain why a provision for the net cost of reinsurance is necessary in this filing?

A. Yes. Mobile homeowners insurance is one of several types of coverages that has exposure to potential catastrophic events. In such coverages (mobile homeowners, homeowners, and other property coverages), individual catastrophic

events can result in significant losses that exceed the amount of liability the typical insurer can reasonably assume for solvency and financial stability considerations. As a result, in these lines of business, insurers routinely purchase reinsurance to mitigate their exposure to extreme events. In order to accurately reflect the expected costs associated with insuring property policies, it is appropriate to include the cost of this reinsurance in the ratemaking process for these lines of insurance.

### Q. In your opinion, is it appropriate to include a provision for the net cost of reinsurance in mobile homeowners rates in North Carolina?

A. Yes. Insurance companies writing mobile homeowners policies in North Carolina incur a significant cost for bearing the risk of insuring properties exposed to catastrophic events. Regardless of whether the risk of catastrophic losses is retained by the primary insurer or transferred to a reinsurer, the market cost of bearing that risk must be included in the rates. This is a foundational actuarial principle included in ASOP No. 29 regarding *Expense Provisions in Property/Casualty Insurance Ratemaking*, and the North Carolina statutes (N.C. Gen. Stat. § 58-36-10(7)) provide for inclusion of the cost of reinsurance in rates. The net cost of reinsurance is a legitimate cost of the risk transfer inherent in the purchase of property insurance, and as such, the net cost of reinsurance should be included in the North Carolina mobile homeowners rates.

# Q. In your opinion, is it appropriate to allocate reinsurance costs within North Carolina in a way that is proportional to risk?

A. Yes. The risk associated with insuring properties exposed to catastrophic events varies geographically within North Carolina. As such, the cost for bearing that risk should be allocated proportional to the measurement of risk. In their analysis of reinsurance costs for this filing, Aon provided the statewide provision for the net cost of reinsurance and, as mentioned above, also allocated the reinsurance costs to each MH(C) coverage and each territory. This allocation is appropriate and consistent with the objective of producing rates that are fair, reasonable, and not unfairly discriminatory across policyholders.

# Q. Please explain the amounts shown in row 6 of Section C, page 1, identified as the *indicated manual base rate*.

A. The dollar amounts shown in row 6 are the sum of the base rate excluding reinsurance cost (row 3), the compensation for assessment risk per policy (row 4), and the net cost of reinsurance per policy (row 5) for each coverage. These amounts represent the average base rate for each MH(C) coverage after reflecting reasonable provisions for all expected losses, expenses, profit, and contingencies quantified in this filing. If insurance companies did not deviate from the manual premiums, the *indicated manual base rate* would represent the appropriate, actuarially sound base rate for each coverage.

### Q. What is the source of the percentages shown in row 7 of Section C, page 1, labeled as *net deviations*?

A. As included in the prior mobile homeowners MH(C) rate filing, the Rate Bureau has selected a provision for *net deviations* of 5%. In making this selection, we evaluated historical written premium and manual premium for each year from 2017 through 2021, and we considered the magnitude of both downward deviations and upward surcharges through consent to rate. The data supporting this analysis can be found on page 78 of Section C. In an attempt to be conservative and to be consistent with the prior mobile homeowners MH(C) filing, the Rate Bureau retained the same selected provision for net deviations of 5%.

### Q. In your opinion, is it appropriate to include a provision for net deviations in mobile homeowners rates in North Carolina?

A. Yes. The difference between the direct premium written by insurance companies and the manual premium should be considered when determining the actuarially sound indicated manual premium. The manual premium must be adjusted upward such that the deviated premium charged by insurance companies will be adequate. In my opinion, the selected provision for net deviations of 5% is a conservative estimate that only partially recognizes the significant deviations we expect to be applied by mobile homeowners insurance companies.

# Q. Please explain the amounts shown in row 8 of Section C, page 1, identified as the *required base rate*.

A. The dollar amounts shown in row 8 are the indicated manual base rate for each coverage (row 6) adjusted for the net deviations (row 7). As mentioned above, if insurance companies were not anticipated to deviate from the manual premiums, the indicated manual base rate for each coverage (row 6) would be adequate and appropriate. However, because historical experience shows that mobile homeowners insurance companies consistently deviate by significant amounts each year, the indicated manual base rate for each coverage is divided by 100% minus the provision for net deviations to determine the *required base rate*. The *required base rate* for each coverage represents the appropriate base rate such that, if insurance companies apply net deviations of 5%, the charged premiums will be sufficient to cover all expected costs associated with the transfer of risk related to mobile homeowners insurance.

### Q. Would you explain the amounts shown in row 9 of Section C, page 1, labeled as the average current base rate?

A. Row 9 displays the current base rate for each coverage, averaged across all policies from 2021 included in our analysis. The average statewide base rate for

each coverage assumes each policyholder purchases the base coverage and has the same characteristics as the base risk.

# Q. Please explain row 10 of Section C, page 1, identified as the *indicated rate change*.

- A. The percentages shown in row 10 represent the needed changes to the current base rate for each coverage so that the mobile homeowners rates will be adequate for the cost levels expected to prevail in the one-year period following the effective date of this filing. The *indicated rate change* is calculated as the required base rate (row 8) divided by the current average base rate (row 9) minus 1. The resulting indicated rate change for each coverage is as follows:
  - Mobile Home Structures = 65.0%
  - Adjacent Structures = 33.4%
  - Personal Effects = 3.8%
  - Liability = 30.1%

The overall indicated rate change across all MH(C) coverages, as summarized on page 1 of Section A, is 53.4%.

- Q. Would you explain the percentages shown in row 11 of Section C, page 1, labeled as the *proposed rate change year 1*?
- A. Due to the wide range of indicated rate changes across the territory groups and MH(C) coverages, the Rate Bureau's Governing Committee decided to implement the indicated rates over a two-year period. The resulting proposed rate change in year 1 for each coverage is as follows:
  - Mobile Home Structures = 28.2%
  - Adjacent Structures = 15.1%
  - Personal Effects = 1.4%
  - Liability = 14.1%

The overall proposed rate change in year 1 across all MH(C) coverages, as summarized on page 1 of Section A, is 23.2%.

- Q. Please explain row 12 of Section C, page 1, identified as the *proposed base rate year 1*.
- A. The dollar amounts shown in row 12 represent the *proposed year 1 base rate* for each coverage, averaged across all policies from 2021 included in our analysis. Similar to the average current base rate, the average statewide proposed year 1 base rate for each coverage assumes each policyholder purchases the base coverage and has the same characteristics as the base risk. The proposed year 1

base rate for each coverage was calculated as the average current base rate (row 9) multiplied by 1 plus the proposed year 1 rate change (row 11).

# Q. Would you explain the percentages shown in row 13 of Section C, page 1, labeled as the *proposed rate change - year 2*?

- A. As mentioned above, the Rate Bureau's Governing Committee decided to implement the indicated rates over a two-year period. After updating each territory group's premium for the year 1 rate changes for each coverage and using the updated premium weights to calculate statewide rate changes, the resulting proposed rate change in year 2 for each coverage is as follows:
  - Mobile Home Structures = 28.7%
  - Adjacent Structures = 15.9%
  - Personal Effects = 2.4%
  - Liability = 14.1%

The overall proposed year 2 rate change across all MH(C) coverages, as summarized on page 1 of Section A, is 24.5%.

# Q. Please explain row 14 of Section C, page 1, identified as the *proposed base rate - year 2*.

A. Similar to the amounts shown in row 12, the dollar amounts shown in row 14 represent the *proposed year 2 base rate* for each coverage, averaged across all policies from 2021 included in our analysis. The average statewide proposed year 2 base rate for each coverage assumes each policyholder purchases the base coverage and has the same characteristics as the base risk. The proposed year 2 base rate for each coverage was calculated as the proposed year 1 base rate (row 12) multiplied by 1 plus the proposed year 2 rate change (row 13).

# Q. What is the difference between the <u>indicated</u> rate change and the <u>proposed</u> rate changes in year 1 and year 2?

A. The indicated rate change is the actuarially sound and correct rate at a statewide level or by territory group for each mobile homeowners MH(C) coverage. It is the indicated rate change (statewide or by territory group) that is needed to sufficiently cover the expected losses and expenses while still providing a fair and reasonable profit. The indicated rate is also the rate that complies with the statutory requirement that rates not be excessive, inadequate, or unfairly discriminatory.

In order to mitigate the impact of these indicated rate changes on policyholders, the Rate Bureau decided to implement the indicated rates over a two-year period in order to reduce the impact of the proposed rate change for each MH(C) coverage. Within each territory group, the proposed rate change percentage will be the same in year 1 and year 2, and was calculated as the square root of 1 plus

the indicated rate change, minus 1. For example, in territory group 6 for Mobile Home Structures, the indicated rate change is 47.5% and the proposed rate change in both year 1 and year 2 is 21.4% (=  $1.475 ^ 0.5 - 1$ ). The statewide proposed rate change for each coverage (except for liability coverage) differs between year 1 and year 2 because the premium weight applied to each territory group changes as a result of the year 1 rate changes.

In my opinion, the Rate Bureau's proposed two-year implementation of the indicated rate change for each MH(C) coverage is reasonable and is an effective strategy to reduce the impact of this filing.

- Q. In an earlier question discussing the *total base class loss cost* found in row 1 of Section C, page 1, your response made reference to Section C, pages 2, 4, 6, and 8. Looking at Section C, page 2, what is shown on this exhibit?
- A. Section C, page 2 shows the determination of the statewide base class loss cost for Mobile Home Structures coverage. More specifically, this exhibit aggregates non-hurricane losses and loss adjustment expenses for the years 2017 through 2021 and combines these amounts with a modeled hurricane loss cost to develop the total base class loss cost. The specific calculations used to aggregate the non-hurricane and hurricane loss experience will be discussed later. Pages 4, 6, and 8 show similar calculations for the other MH(C) coverages: Adjacent Structures, Personal Effects, and Liability (though there are no modeled hurricane losses corresponding to Liability coverage).
- Q. Referring to column 1 on page 2 of Section C, what is the source for the *non-hurricane ultimate loss and LAE* (loss adjustment expense)?
- A. The non-hurricane ultimate loss and LAE shown in column 1 is developed on page 3 of Section C for each year from 2017 through 2021. As implied by the column label, the amounts in column 1 have been developed to ultimate and adjusted to include a provision for expected loss adjustment expenses. Those calculations, as well as adjustments to include expected rather than actual excess wind losses and expected rather than actual flood losses, can be found in more detail on page 3 of Section C.
- Q. If we turn our attention to Section C, page 3, what is shown on this exhibit?
- A. As mentioned in the prior response, Section C, page 3 shows the determination of the *non-hurricane ultimate loss and LAE* for Mobile Home Structures coverage. Column 1 on this exhibit contains incurred loss and ALAE for the years 2017 through 2021 from all causes of loss except those losses caused by hurricanes. As noted previously, the mobile homeowners MH(C) policy includes coverage for flood losses, so any flood losses other than storm surge resulting from a hurricane would be included in the historical loss experience (though such losses may be limited by the excess flood procedure).

### Q. Please explain columns 2 and 4 of Section C, page 3, which both contain data related to excess wind losses.

Α. The incurred loss and ALAE in column 1 reflects all non-hurricane losses, including actual wind losses that may have resulted from very severe storms such as tornados, thunderstorms, or hailstorms. In order to smooth out any potential volatility of severe non-hurricane wind losses, we used the same excess wind methodology as used in prior Rate Bureau property filings. The calculations supporting this excess wind methodology can be found on pages 43 and 44 of Section C. Based on the results of the excess wind methodology, a portion of the wind loss and ALAE included in column 1 is determined to be excess wind loss and ALAE and is removed from the historical loss experience for the purpose of calculating a reasonable provision for expected non-hurricane losses. Column 2 shows the amount of excess wind loss and ALAE incurred under the Mobile Home Structures coverage that is being removed from the incurred loss and ALAE in column 1. In place of the actual excess wind loss and ALAE in column 2, an excess wind loss factor is applied to each year of experience, as shown in column 4. By applying an excess wind loss factor, the Rate Bureau is able to smooth out potentially volatile historical loss experience and reflect a consistent provision for long-term excess wind loss and ALAE.

### Q. Please describe the excess wind methodology found on pages 43 and 44 of Section C in more detail.

A. The excess wind methodology used in this filing and in prior Rate Bureau property filings relies on a longer history of loss experience than the five years used to support most of the other components of this filing. Although the mobile homeowners excess wind loss experience is not as extensive as in homeowners, the Rate Bureau was able to aggregate 18 years of mobile homeowners nonhurricane losses for this filing in order to evaluate excess wind losses. Page 43 of Section C shows non-hurricane losses by year from 2004 through 2021. Among the non-hurricane (and non-liability) losses, the wind losses and flood losses are shown separately from the total non-hurricane losses excluding wind and flood. The ratio of wind losses to total non-hurricane losses excluding wind and flood is calculated for each year and, based on calculations consistent with prior Rate Bureau property filings, the amount of non-hurricane excess wind losses is determined for each year. In addition to determining the excess wind losses by year, the yearly ratios of wind losses to total non-hurricane losses excluding wind and flood are used to calculate an excess wind loss factor of 1.075. This excess wind loss factor represents the provision needed to incorporate the long-term average excess wind losses in the adjusted non-hurricane loss experience.

The excess wind losses determined with this methodology reflect all MH(C) coverages combined. As a result, the total MH(C) excess wind losses are allocated by coverage for each year based on the distribution of incurred non-hurricane wind losses among the coverages within each year. In addition to allocating the excess

wind losses, a non-hurricane ALAE factor is calculated for each year based on the ratio of total non-hurricane (and non-liability) loss and ALAE to total non-hurricane (and non-liability) losses. The resulting non-hurricane ALAE factors are applied to the by-coverage excess wind losses within each year to determine the excess wind loss and ALAE by coverage. That allocation process and application of a non-hurricane ALAE factor can be seen on page 44 of Section C.

### Q. Please explain columns 3 and 5 of Section C, page 3, which both contain data related to excess flood losses.

Similar to the above discussion related to excess wind losses, the incurred loss Α. and ALAE in column 1 reflects all non-hurricane losses, including actual flood losses that may have resulted from severe thunderstorms, heavy rainfalls, or extensive snow runoff. In order to smooth out any potential volatility of severe nonhurricane flood losses, we used the same excess flood methodology as described above for excess wind losses. The calculations supporting this excess flood methodology can be found on pages 45 and 46 of Section C. Based on the results of the excess flood methodology, a portion of the flood loss and ALAE included in column 1 is determined to be excess flood loss and ALAE and are removed from the historical loss experience for the purpose of calculating a reasonable provision for expected non-hurricane losses. Column 3 shows the amount of excess flood loss and ALAE incurred under the Mobile Home Structures coverage that is being removed from the incurred loss and ALAE in column 1. In place of the actual excess flood loss and ALAE in column 3, an excess flood loss factor is applied to each year of experience, as shown in column 5. By applying an excess flood loss factor, the Rate Bureau is able to smooth out potentially volatile historical loss experience and reflect a consistent provision for long-term excess flood loss and ALAE.

### Q. Please describe the excess flood methodology found on pages 45 and 46 of Section C in more detail.

A. The excess flood methodology being utilized in this filing relies on a longer history of loss experience than the five years used to support most of the other components of this filing. Like the excess wind methodology described above, the Rate Bureau was able to aggregate 18 years of mobile homeowners non-hurricane losses for this filing in order to evaluate excess flood losses. Page 45 of Section C shows non-hurricane losses by year from 2004 through 2021. Among the non-hurricane (and non-liability) losses, the wind losses and flood losses are shown separately from the total non-hurricane losses excluding wind and flood. The ratio of flood losses to total non-hurricane losses excluding wind and flood is calculated for each year and, based on calculations consistent with the excess wind methodology, the amount of non-hurricane excess flood losses is determined for each year. In addition to determining the excess flood losses by year, the yearly ratios of flood losses to total non-hurricane losses excluding wind and flood are used to calculate an excess flood loss factor of 1.043. This excess flood loss factor

represents the provision needed to incorporate the long-term average excess flood losses in the adjusted non-hurricane loss experience.

The excess flood losses determined with this methodology reflect all MH(C) coverages combined. As a result, the total MH(C) excess flood losses are allocated by coverage for each year based on the distribution of incurred non-hurricane flood losses among the coverages within each year. In addition to allocating the excess flood losses, a non-hurricane ALAE factor is calculated for each year based on the ratio of total non-hurricane (and non-liability) loss and ALAE to total non-hurricane (and non-liability) losses. The resulting non-hurricane ALAE factors are applied to the by-coverage excess flood losses within each year to determine the excess flood loss and ALAE by coverage. That allocation process and application of a non-hurricane ALAE factor can be seen on page 46 of Section C.

# Q. How are the results of the excess wind methodology and excess flood methodology applied to the Mobile Home Structures loss experience on page 3 of Section C?

A. Based on the wind and flood allocation processes described above, column 2 on page 3 of Section C shows the amount of excess wind loss and ALAE allocated to the Mobile Home Structures coverage for each year, and column 3 shows the amount of excess flood loss and ALAE allocated for each year. In addition, the excess wind loss factor is shown in column 4 and the excess flood loss factor is shown in column 5. Column 6 on this exhibit adjusts the non-hurricane incurred loss and ALAE in column 1 by removing the excess wind loss and ALAE (column 2) and excess flood loss and ALAE (column 3) and multiplying the result by the sum of the excess wind loss factor (column 4) and excess flood factor (column 5) minus 1.00. This calculation produces the adjusted non-hurricane incurred loss and ALAE for each year.

# Q. Is the adjusted non-hurricane incurred loss and ALAE shown in column 6 adjusted in any other way?

A. Yes. After adjusting for excess wind loss and ALAE and excess flood loss and ALAE, the amounts in column 6 are further adjusted for loss development and to include a provision for expected unallocated loss adjustment expenses (ULAE).

Based on data collected in response to the Rate Bureau's mobile homeowners data call, we evaluated historical loss development data and historical claim development data for each mobile homeowners MH(C) coverage. Details of that analysis can be found on pages 47 through 54 of Section C, and the resulting loss and ALAE development factors are included in column 7 on page 3 of Section C. Column 8 on this same exhibit calculates the *non-hurricane ultimate loss and ALAE* for each year by multiplying the adjusted non-hurricane incurred loss and ALAE (column 6) by the corresponding loss and ALAE development factor (column 7).

In addition to evaluating historical loss and ALAE development data, we also compared the ratio of incurred ULAE to incurred loss and ALAE for each of the five years of experience used in the overall rate indications. This analysis of historical ULAE can be found on page 72 of Section C. Based on the average ratio of incurred ULAE to incurred loss and ALAE, the Rate Bureau selected a ULAE provision of 8.9%. Through the use of a ULAE factor equal to 1.089, the selected ULAE provision is added to non-catastrophe mobile homeowners loss and ALAE evaluated in the rate indications.

Referring back to page 3 of Section C, column 10 calculates the *non-hurricane ultimate loss and LAE* for each year by multiplying the non-hurricane ultimate loss and ALAE (column 8) by the ULAE factor, which is shown in column 9.

# Q. In your opinion, is the provision for unallocated loss adjustment expense included in this filing reasonable?

A. Yes, the unallocated loss adjustment expense provision is reasonable. It is common practice in the industry to use an average of historical experience to determine an unallocated loss adjustment expense provision.

# Q. Are the non-hurricane ultimate loss and LAE amounts on page 3 of Section C the same as the amounts shown on page 2 of Section C?

A. Yes. After determining the non-hurricane ultimate loss and LAE on page 3 of Section C, those amounts are copied on page 2 so that additional adjustments and calculations can be completed.

#### Q. What other adjustments must be made to the non-hurricane losses and LAE?

A. The losses need to be adjusted by a loss trend factor to reflect the cost levels expected to prevail during the period that the proposed rates are anticipated to be in effect. For this filing, the assumed effective date is July 1, 2023. If the filling were to become effective on a date later than the July 1, 2023 assumed effective date, then the rate indications would be different than those presented in this filing.

#### Q. Please describe how the loss trend factors are developed and applied.

A. Loss trend data was evaluated separately for each MH(C) coverage in an analysis on pages 55 through 61 of Section C. For each property coverage, only industry data was considered, but for liability coverage, both industry data and external cost index data were considered.

The industry data included quarterly ultimate claim frequencies and quarterly ultimate loss severities evaluated on a 12-month moving basis from the 4<sup>th</sup> quarter of 2016 to the 4<sup>th</sup> quarter of 2021. The reported claims and incurred loss and ALAE

were developed to ultimate using interpolated quarterly development factors found on page 61 of Section C. The external cost index data that was considered for liability coverage included quarterly index values of the medical care component of the Consumer Price Index (CPI).

After compiling the industry-based frequencies and severities and the external cost index (only for liability coverage), several different exponential trends were fit to the data in order to evaluate the historical trends and to project potential future trends.

The Rate Bureau reviewed the exponential trends fit to the industry data as well as the exponential trends fit to the external cost index that was considered for liability coverage. Based on the fitted trends, the Rate Bureau selected frequency and severity trends for two separate time periods. Trends were selected for the historical experience period and separate trends were selected for the projection period. This two-period trend approach is commonly used throughout the industry because it allows companies to reflect the latest changes in trends as historical experience is projected into the future.

The experience period trends were applied to adjust losses from the midpoint of each historical year to the end date of the most recent experience period (i.e., 12/31/2021). Following this, the projection period trends were applied from the end date of the most recent experience period (i.e., 12/31/2021) to the average accident date for the time period that the proposed rates were originally anticipated to be in effect (i.e., 7/1/2024). The selected experience period loss trends and projection period loss trends were each applied for the appropriate number of years and the combined effect of these trends was calculated to determine loss trend factors for each year in the historical experience period. The calculation of the loss trend factors for the MH(C) property coverages can be found on page 55 of Section C and the calculation of the MH(C) Liability loss trend factors can be found on page 56 of Section C.

### Q. After loss trend factors are applied, what other adjustments are made to the non-hurricane ultimate loss and LAE amounts?

A. The calculated loss trend factors discussed above can be found in column 2 on page 2 of Section C. In column 5 on the same exhibit, the *trended average loss cost* is calculated for each year based on multiplying the non-hurricane ultimate loss and LAE (column 1) by the loss trend factor (column 2) and dividing by the earned house years (column 3) and the premium trend factor (column 4). The losses need to be offset (i.e., adjusted downward) by a premium trend factor to reflect the fact that higher cost levels are partially the result of higher amounts of coverage being purchased in each subsequent year. These higher amounts of coverage generally correspond to higher average premiums, and the trend in those higher average premiums should be reflected to mitigate the impact of the loss trend factors.

#### Q. Please describe how the premium trend factors are developed and applied.

A. Premium trend data was evaluated separately for each mobile homeowners MH(C) coverage in an analysis on pages 63 through 65 of Section C.

For each of the property coverages, we calculated the average rating factor by year. The average rating factors were calculated as the ratio of the earned premium at current manual level (using each policy's rating characteristics) to the earned premium at current base class level. The earned premium calculations were completed using the extension of exposures method, as described in Section E. For liability coverage, we calculated the average rating factor by year to be equal to the average increased limit factor. The calculation of the liability average rating factors can be found on page 65 of Section C. After compiling the average rating factors by year, several different exponential trends were fit to the data in order to evaluate the historical trends and to project potential future trends.

The Rate Bureau reviewed the exponential trends fit to the average rating factors and selected trends for two separate time periods. Similar to the loss trend analysis, premium trends were selected for the historical experience period and separate trends were selected for the projection period. As mentioned previously, this two-period trend approach is commonly used throughout the industry because it allows companies to reflect the latest changes in trends as historical experience is projected into the future.

The experience period trends were applied to adjust premiums from the average written date of each historical year to the end date of the most recent experience period (i.e., 12/31/2021). Following this, the projection period trends were applied from the end date of the most recent experience period (i.e., 12/31/2021) to the average written date for the time period that the proposed rates were originally anticipated to be in effect (i.e., 1/1/2024). The selected experience period premium trends and projection period premium trends were each applied for the appropriate number of years and the combined effect of these trends was calculated to determine premium trend factors for each year.

# Q. After premium trend factors are applied, are the trended average loss costs shown in column 5 on page 2 of Section C adjusted in any other way?

A. Yes. The trended average loss costs in column 5 are divided by the average rating factor for each year (column 6) to determine the *trended base class loss cost* as shown in column 7. The average rating factor for each year is calculated as the ratio of the average premium at current manual level to the average current base rate. This ratio represents the relative difference in premium between the average mobile homeowners policy and the base class. To the extent the average policyholder purchases different amounts of coverage, different deductibles, or resides in a different territory group than the base class, the average rating factor will reflect these differences. The average rating factors by year in column 6 are

the same factors as were used to develop the premium trends on page 64 of Section C.

- Q. Please explain how the trended base class loss costs in column 7 on page 2 of Section C are used after they are calculated for each year in the experience period.
- A. The trended base class loss costs shown in column 7 are aggregated using the accident year weights in column 8 to determine the weighted average non-hurricane base class loss cost (row 9).

The credibility of the weighted average non-hurricane base class loss cost is evaluated for each MH(C) coverage based on coverage-specific full-credibility standards. To the extent the weighted average non-hurricane base class loss cost is not fully credible, the complement of credibility is determined based on loss cost estimates from the prior MH(C) rate filing and updated trends from this filing. More specifically, the credibility-weighted loss cost from the prior filing is trended to the proposed effective date of this filing using the selected loss trend and premium trend for the projection period in order to calculate the complement of credibility. The calculation of the complement of credibility for each MH(C) coverage can be found on page 67 of Section C. Using the weighted average non-hurricane base class loss cost (row 9), the credibility of that loss cost (row 10), and the complement of credibility (row 11), the *credibility-weighted loss cost* is calculated as shown in row 12.

#### Q. How is credibility determined in this filing?

- A. The credibility calculated in row 10 on page 2 of Section C is based on a consistent claims standard for full credibility (i.e., 271 claims) for each of the MH(C) coverages. However, that claims standard for full credibility is adjusted based on the frequency of claims for each coverage and the variability of the size of those claims. More details on this credibility procedure can be found in the Explanatory Memorandum included in Exhibit RB-1. The result of this adjustment for claims frequency and variability is a full-credibility standard using earned house years that is unique to each coverage. The resulting full-credibility standards for each of the MH(C) coverages, rounded up to the nearest 10,000 earned house years, are as follows:
  - Mobile Home Structures = 30,000
  - Adjacent Structures = 80,000
  - Personal Effects = 100,000
  - Liability = 1,970,000

To determine the credibility shown in row 10, the number of earned house years during the five-year experience period is compared to the coverage's full-credibility standard and, if a coverage's historical experience is not fully credible, the square

root rule is applied. Among the MH(C) coverages, only the Liability weighted average base class loss cost is not fully credible, with a credibility of 45.2%.

The above full-credibility standards for the MH(C) coverages are also applied in determining the indicated base class loss cost by territory group, which is discussed later in this testimony.

### Q. Please explain the amount shown in row 13 on page 2 of Section C, labeled as the *modeled hurricane base class loss cost*.

A. The amount shown in row 13 is the provision for prospective hurricane losses related to the coverage afforded by the MH(C) Mobile Home Structures coverage. The credibility-weighted loss cost shown in row 12 includes only non-hurricane losses, so an additional provision is necessary to account for the exposure to hurricane losses on a mobile homeowners policy.

### Q. What is the source of the *modeled hurricane base class loss cost* shown in row 13 of Section C, page 2?

A. The source of the modeled hurricane losses for each MH(C) coverage is an analysis completed for the Rate Bureau by Aon. In addition to Aon's analysis to support the net cost of reinsurance (described previously). Aon was also retained by the Rate Bureau to provide the statewide modeled hurricane losses for each of the MH(C) coverages as well as modeled hurricane losses for each territory. It should be noted that the modeled hurricane losses for Mobile Home Structures coverage include modeled hurricane losses attributable to Additional Living Expense (ALE) coverage since ALE coverage is automatically included when a policyholder purchases Mobile Home Structures coverage. This analysis from Aon is consistent with other recent property rate filings submitted by the Rate Bureau, except that the models were run with storm surge losses to reflect the fact that the mobile homeowners MH(C) policy covers flood losses. It is for this reason, as noted earlier, that when the filing and my testimony refer to "hurricane losses," that term means hurricane wind and storm surge losses, but not inland flood losses. In order to avoid double counting hurricane losses, historical hurricane wind and hurricane storm surge losses in the data underlying our analysis were removed. More details of Aon's analysis, including support for the catastrophe LAE provision of 6.0%, are included in Ms. Mao's testimony and exhibits.

To determine the *modeled hurricane base class loss cost* found in row 13 of Section C, page 2, the trended modeled hurricane loss and LAE for each MH(C) property coverage is divided by the corresponding number of 2021 earned house years, the 2021 average rating factor, and the 2021 premium trend factor. These calculations can be found on page 68 of Section C for each of the MH(C) property coverages.

Similar to the compensation for assessment risk and the net cost of reinsurance, a modeled hurricane base class loss cost is not included in the calculation of the MH(C) Liability indicated rate change.

### Q. Can you please explain why hurricane models are used to estimate the hurricane losses?

Α. Yes. Hurricane models are used to estimate the expected hurricane losses because they provide a more accurate way of quantifying the exposure to hurricanes than using prior insurance ratemaking methodologies. In addition, hurricane models include a storm surge component, which allows us to more accurately quantify the expected losses from storm surge caused by hurricanes as well as the expected hurricane wind losses. Hurricanes are highly variable in their frequency, severity, and place of occurrence. By simulating thousands of possible hurricane events, hurricane models provide a more complete perspective on the distribution of the types of hurricanes that could occur and avoid the volatility that could result from using actual hurricane losses. If only five years of historical experience were used to evaluate hurricane losses, similar to what we are using for the non-hurricane component of this rate indication, it would be feasible to have a five-year period with no hurricane losses or a five-year period with multiple severe hurricane events. Neither of those scenarios provides a reasonable representation of the expected exposure to hurricane losses in the prospective policy period and, as such, it would not be actuarially appropriate to rely on such a methodology. The use of hurricane models alleviates this issue and provides a more accurate estimate of expected hurricane losses.

#### Q. Did the Rate Bureau consider actual hurricane losses?

A. Yes. The actual hurricane losses during the five years of historical experience were reviewed and considered; however, as has been done in prior Bureau filings, those losses were excluded from the historical losses used in the filing and were replaced by modeled hurricane losses.

#### Q. What data did Milliman provide to Aon to enable Aon to perform its analysis?

A. Milliman provided Aon with a dataset containing all of the North Carolina mobile homeowners MH(C) insurance exposures. This data included the number of earned house years and the amount of earned insurance years for the most recent year in the experience period (i.e., 2021). The dataset also included several important risk characteristics such as the territory (and county and city, if available), occupancy code, MH(C) coverage, and whether the mobile home is tied down. Milliman also provided exposure trend information to Aon for Aon's use in trending the mobile homeowners MH(C) exposures that would be used as inputs in the hurricane models. The data provided to Aon by Milliman was correct to the best of my knowledge and information.

#### Q. Please describe how the exposure trend factors are developed.

A. Exposure trend data was evaluated separately for each of the property coverages in an analysis on page 62 of Section C.

For each of the property coverages, we calculated the average amount of insurance per policy on a 12-month moving basis from the 1<sup>st</sup> quarter of 2016 to the 4<sup>th</sup> quarter of 2021. After compiling the average amount of insurance by quarter, several different exponential trends were fit to the data in order to project potential future trends. Because the exposure trends were only needed by Aon to trend the MH(C) exposures into the future in order to be used as inputs in the hurricane models, the Rate Bureau did not select trends for the historical experience period.

The Rate Bureau reviewed the exponential trends fit to the average amounts of insurance and selected trends for the projection period. The exposure trend selections were then given to Aon for Aon's use in trending the modeled hurricane losses.

### Q. What model versions and modeling assumptions were used to develop estimated hurricane losses?

A. The current AIR model is Touchstone v9 and the current RMS model is RiskLink v21. To develop the expected hurricane losses, Aon relied on AIR's Standard event set and on RMS' Historical event set. These event sets were used instead of AIR's Warm Sea-Surface Temperature (WSST) event set and RMS' Medium-Term Rate event set. Although many primary insurance companies consider the WSST and Medium-Term Rate events sets when developing expected hurricane losses for indicated rates in states other than North Carolina, the event sets selected for this filing are reasonable and actuarially sound.

Both the AIR and RMS models were run with aggregate demand surge included, which was identified as loss amplification in the RMS model. This standard procedure accounts for the expected additional costs for labor, materials, and services after a very large hurricane occurs. Historical experience shows that, when major catastrophic events occur, the increased demand for building materials, labor, temporary housing, and other basic necessities can exceed the supply of these same items, which consequently increases their cost. Running models with demand surge is consistent with the Rate Bureau's prior filings, and is the common practice by insurance companies when developing rates based on modeled hurricane losses.

As discussed previously, the modeled hurricane losses also include losses from storm surge due to the fact that the mobile homeowners MH(C) policy includes coverage for flood losses.

### Q. Were any other calculations applied to the hurricane losses derived from the models?

A. Yes. Before providing the blended hurricane losses, Aon applied a hurricanespecific provision for loss adjustment expense. As noted previously, more details of Aon's analysis, including support for the catastrophe LAE provision of 6.0%, are included in Ms. Mao's testimony and exhibits.

# Q. In your opinion, is it appropriate to allocate modeled hurricane losses within North Carolina in a way that is proportional to risk?

A. Yes. The risk associated with insuring properties exposed to hurricane events varies geographically within North Carolina. As such, the cost for bearing that risk should be allocated proportional to the measurement of risk. In their analysis of modeled hurricane losses for this filing, Aon provided the statewide modeled hurricane losses and also allocated the modeled hurricane losses to each MH(C) coverage and each territory. This allocation is appropriate and consistent with the objective of producing rates that are fair, reasonable, and not unfairly discriminatory across policyholders.

### Q. Please explain the amount shown in row 14 on page 2 of Section C, labeled as the *total base class loss cost*.

A. The amount shown in row 14, that is the *total base class loss cost*, is the average amount of projected loss per exposure, including both non-hurricane and hurricane losses, for the risk identified as the base class for each respective MH(C) coverage. It is calculated as the sum of the credibility-weighted loss cost shown in row 12 and the modeled hurricane base class loss cost shown in row 13. Because a modeled hurricane base class loss cost is not included in the MH(C) Liability calculations, the total base class loss cost is equal to the credibility-weighted loss cost for this coverage.

As noted at the beginning of my testimony, it is the total base class loss cost that begins the calculation of the indicated rate change on page 1 of Section C. The total base class loss cost is copied into row 1 on page 1 so that additional adjustments and calculations can be completed to develop the statewide indicated rate change for each MH(C) coverage.

# Q. Up until now, your testimony has focused on the calculations on pages 1 through 3 of Section C. Please explain how pages 4 through 9 compare to pages 1 through 3.

A. As described in my testimony above, page 1 of Section C develops the statewide indicated rate changes for the major coverages offered in the mobile homeowners MH(C) program. As noted previously, those coverages include Mobile Home Structures, Adjacent Structures, Personal Effects, and Liability. The calculations

to develop the indicated rate change for each coverage begin with the *total base class loss cost*, which is derived on pages 2, 4, 6, and 8 of Section C, depending on the coverage. My testimony above discussed the calculations on page 2, which are further supported by additional calculations on page 3. The calculations on pages 2 and 3 of Section C all relate to Mobile Home Structures.

Pages 4 through 9 of Section C display comparable calculations for the three remaining MH(C) coverages: Adjacent Structures is documented on pages 4 and 5, Personal Effects is documented on pages 6 and 7, and Liability is documented on pages 8 and 9. The calculations and methodology on pages 4 and 6 are identical to the calculations and methodology on page 2 (except for the differences noted above in the exposure-based standards for full credibility). Similarly, the calculations and methodology on pages 5 and 7 are identical to the calculations and methodology on page 3.

The Liability calculations on page 8 are similar to page 2 with one exception – a modeled hurricane base class loss cost is not included in the calculation of the Liability total base class loss cost since modeled hurricane losses only relate to property coverages. As a result, the calculations on page 8 conclude with the credibility-weighted loss cost, which is conceptually equivalent to the total base class loss cost that can be found as the final calculation on pages 2, 4, and 6 for the MH(C) property coverages.

Similar to page 8, the Liability calculations on page 9 are comparable to page 3 except that adjustments for excess wind and excess flood loss and ALAE are not necessary. As a result, page 9 documents the application of loss and ALAE development factors and ULAE factors for each year in the experience period in order to derive the ultimate loss and LAE.

# Q. Does the filing review the indicated rate changes by territory or territory group?

A. Yes. The mobile homeowners MH(C) territory definitions are consistent with the territory definitions currently in use in homeowners and dwelling insurance in North Carolina. To increase the credibility and stability of the rates being evaluated, six territory groups are used in the mobile homeowners program. It should be noted that the rates for MH(C) Liability do not vary by territory group, but instead, a statewide base rate is used for all policies purchasing Liability coverage.

Beginning on page 10 of Section C, the Rate Bureau develops indicated rate changes by territory group for each MH(C) property coverage using a similar methodology as the statewide indication. Pages 10 through 20 document the Mobile Home Structures indicated rate changes by territory group, and the indicated rate changes by territory group for Adjacent Structures and Personal Effects are documented on pages 21 through 31 and pages 32 through 42, respectively.

For each of these MH(C) property coverages, a non-hurricane base class loss cost is calculated by territory group using the historical loss experience. A credibility value is assigned to each territory group for each coverage based on the number of house years underlying each loss cost and the same credibility standards discussed above. Using the credibility for each territory group, a credibility-weighted non-hurricane base class loss cost is determined by territory group. In addition, a modeled hurricane base class loss cost is developed by territory group for each coverage. The non-hurricane loss costs and modeled hurricane loss costs are combined to develop the indicated base class loss cost by territory group for each coverage. Additional calculations are applied to each territory group to reflect expenses, policyholder dividends, compensation for assessment risk, net cost of reinsurance, and net deviations in a similar manner as applied at a statewide level. The result of these calculations is an indicated rate change by territory group for each MH(C) property coverage.

Columns 14 and 15 on pages 10 (Mobile Home Structures), 21 (Adjacent Structures), and 32 (Personal Effects) of Section C show the proposed rate changes by territory group, as selected by the Rate Bureau in proposing to implement those changes over two years.

In my opinion, the methodology used to develop the indicated rate-level change by territory group and by MH(C) property coverage is reasonable and is consistent with widely-used actuarial ratemaking practices.

#### Q. Does the filing review the wind exclusion credits?

A. Yes. Based on the rates being proposed with this filing in territory groups 1 and 2 for each MH(C) property coverage, the wind exclusion credits are being updated in a corresponding manner, as can be seen on page 1 of Section D. Using the underlying formula for the statewide rate indication, an adjustment is made to the appropriate components of the indication formula to reflect the non-wind losses as a percent of the total losses. The indicated non-wind rate is subtracted from the indicated overall rate to determine the indicated wind exclusion credit for each territory group.

# Q. Does the filing include proposed changes to any rating variables used in the mobile homeowners MH(C) rating plan?

- A. Yes. With this filing, the Rate Bureau is proposing revisions to the wind exclusion credits as discussed above and revisions to the additive deductible debits and credits that correspond to the proposed base rate changes.
- Q. I understand that you are not providing an opinion concerning the underwriting profit (profit) provision or the development of the net cost of reinsurance (NCOR) provision. If I ask you to assume that the provisions for

profit and NCOR are reasonable and actuarially sound, then in your opinion, is the overall rate indication shown in the mobile homeowners MH(C) filing by the North Carolina Rate Bureau reasonable?

- A. Yes, if I assume that the provisions for profit and NCOR are reasonable, then in my opinion, the overall mobile homeowners MH(C) rate indication shown by the Rate Bureau, and the rate indications for each coverage, are reasonable and actuarially sound.
- Q. Again, assuming that the provisions for profit and NCOR are reasonable, do you have an opinion whether the proposed rates, as proposed to be implemented in the filing, reasonably provide for the expected costs for mobile homeowners MH(C) insurance in North Carolina?
- A. If I assume that the provisions for profit and NCOR are reasonable, then in my opinion, the proposed rates in this filing reasonably reflect the expected costs for mobile homeowners MH(C) insurance, except to the extent that the proposed rates are implemented over two years instead of one year. However, to the extent the loss trends and premium trends are not projected to the time period reflected by the year 2 change, the proposed rates may not reflect all expected costs for year 2. The expected costs for year 2 can be quantified by projecting the loss trends and premium trends to dates further in the future that correspond to year 2 and comparing the resulting indicated rate changes to the rate changes included in this filing.
- Q. Assuming that the provisions for profit and NCOR are reasonable, in your opinion, are the proposed mobile homeowners MH(C) rates not excessive, inadequate, or unfairly discriminatory?
- A. If I assume that the provisions for profit and NCOR are reasonable, then in my opinion, the proposed mobile homeowners MH(C) rates in this filing are not excessive or unfairly discriminatory. However, to the extent the loss trends and premium trends are not projected to the time period reflected by the year 2 change, and to the extent the selected projection period trends remain appropriate for year 2, the proposed rates are at risk of being slightly inadequate at the time the year 2 change is implemented.
- Q. Does this conclude your testimony?
- A. Yes, it does.

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### **SUMMARY**

Property & Casualty (P&C) actuary with more than 29 years of experience in actuarial applications and related fields including ratemaking, product development, predictive modeling, state pricing, field proposals, rate filings, actuarial and statistical research, classification analysis, data analytics, and economic modeling. Experienced in Private Passenger Automobile (including preferred, standard, and non-standard), Personal Property (including homeowners, renters, condominium owners, mobile home, and dwelling), other miscellaneous Personal Lines (including boats, motorcycles, recreational vehicles, and personal umbrella), and various Commercial Lines of Business. Has sound knowledge of product development, product pricing, product implementation, and project management for Personal Lines products. Has working knowledge of other key insurance functions including claims, corporate finance, marketing, reinsurance, sales, and underwriting. Has demonstrated the ability to lead and manage teams of employees to achieve desired business results in various capacities. Has unique combination of analytic ability, business intuition, project management, leadership, and communication skills.

### **EMPLOYMENT HISTORY**

Milliman, Inc. Brookfield, Wisconsin **2007 - Present** 

### **Principal and Consulting Actuary**

Specialize in personal lines insurance company clients and predictive analytics of both personal and commercial lines of insurance. Experience has included ratemaking and pricing analyses for insurance companies, product development and implementation, classification analysis using multivariate statistical techniques, catastrophe reinsurance analysis, loss reserving, segmentation analysis to support sales and marketing initiatives, impact analysis of proposed state and federal legislation, and merger and acquisition analysis. Has also provided expert testimony to support Auto and Property regulatory issues.

Allstate Insurance Company Northbrook, Illinois

1993 - 2007

# Senior Manager - Auto & Property Pricing (2006-2007)

Oversaw and directed all personal lines Auto and Property pricing, rate filings, and other actuarial work related to the pricing function for 10 states accounting for over \$4 billion of premium. Assisted in the oversight of all personal lines actuarial work related to the pricing function for an additional 12 states. Served as the primary department expert on all Property pricing initiatives. Directly managed a staff of 10 to 12 employees and participated in the leadership team that oversaw the management of a department with more than 130 employees.

### Team Leader - Property & Specialty Lines Research (2005-2006)

Managed all research projects for personal lines Property and for Specialty Lines, all of which were completed using multivariate statistical analyses. Measured the impact of rating algorithm changes as they were implemented in various states. Oversaw the enhancement and improvement of analysis techniques used within the team. Led a team of 8 to 10 staff.

### Research Manager (1999-2001, 2003-2005)

At different times, managed research teams for personal lines Auto, Economics & Modeling, and personal lines Property. Oversaw the development of countrywide pricing models based on multivariate statistical techniques, the evaluation of risk characteristics to be used as new rating elements, and the development of implementation tools to be used by pricing teams. Oversaw the development of Auto and Property economic models that measured the lifetime profitability of personal lines insurance customers. Led teams of staff ranging in size from 3 to 6 analysts.

### Pricing Manager (1997-1999, 2001-2003)

Managed all personal lines Auto and Property pricing, rate filings, and other actuarial work related to the pricing function for California. Managed all personal lines Property pricing, rate filings, and other actuarial work related to the pricing function for 14 states including Alabama, Florida, Louisiana, and Mississippi. Led teams of staff ranging in size from 3 to 6 analysts.

# Pricing Analyst, Research Analyst (1993-1997)

Produced rate proposals, rate filings, and quarterly rate-level indications for various states. Retrieved, manipulated, and analyzed large volumes of data to evaluate countrywide rating plans using multivariate statistical analyses.

### **EXPERT WITNESS EXPERIENCE**

Pre-filed Expert Testimony – Various Private Passenger Automobile and Residential Property Insurance Rate Filings submitted by the North Carolina Rate Bureau

- 2022 Dwelling Insurance Filing
- 2021 Mobile Homeowners MH(C) Insurance Filing
- 2021 Mobile Homeowners MH(F) Insurance Filing
- 2020 Dwelling Insurance Filing
- 2020 Homeowners Insurance Filing
- 2019 Dwelling Insurance Filing
- 2019 Mobile Homeowners MH(C) Insurance Filing
- 2019 Mobile Homeowners MH(F) Insurance Filing
- 2019 Private Passenger Automobile Insurance Filing
- 2018 Homeowners Insurance Filing
- 2018 Dwelling Insurance Filing
- 2017 Homeowners Insurance Filing
- 2016 Dwelling Insurance Filing

### **EDUCATION**

**BS in Actuarial Science from Drake University, Des Moines, Iowa** 

### **PROFESSIONAL QUALIFICATIONS**

**Certified Specialist in Predictive Analytics (CSPA), 2018** Fellow of the Casualty Actuarial Society (FCAS), 2002 Member of the American Academy of Actuaries (MAAA), 2002 Associate of the Casualty Actuarial Society (ACAS), 1998 **Member of the Midwest Actuarial Forum, 1998** 

### **PROFESSIONAL ACTIVITIES**

Volunteer Chairperson, CAS Crash Course Seminar Task Force, 2021 - Present Member, CAS Volunteer Resources Task Force, 2021 - Present Chairperson, CAS Crash Course in Vehicle Technology & Driverless Cars Committee, 2020 - 2021 **Member, CAS Volunteer Resources Advisory Committee, 2020 - 2021 Member, CAS Participation Survey Task Force, 2018 - 2019** Member, Vehicle Technology & Impact on Loss Trends Planning Committee, 2017 - 2018 Member, iCAS Predictive Analytics Syllabus Committee, 2017 - 2018 Member, CAS Volunteer Resources Committee, 2013 - 2020

Member, CAS Volunteer Support Task Force, 2012 - 2013

**Member, CAS Examination Committee, 2004 - 2006** 

### **PUBLICATIONS**

"Keep on trucking: COVID-19 and its impact on commercial auto," Milliman Insight, April 2020.

"PIP PIP hooray! The changing Michigan auto market," Milliman Insight, April 2020.

"Nowhere to drive: The impact of COVID-19 on the auto insurance industry," *Milliman Insight*, March 2020.

"Better Visibility: Predictive modeling helps to steady medical malpractice underwriting," Best's Review, February 2008.

### **PRESENTATIONS**

Numerous presentations at Casualty Actuarial Society (CAS) and other Property & Casualty insurance industry meetings and seminars from 2007 through the present with a focus on personal lines Auto and Property issues, as well as predictive analytics topics.

# NORTH CAROLINA MOBILE HOMEOWNERS MH(C) INSURANCE

# **Development of Compensation for Assessment Risk Provision**

	(1)	(2)	(3)	(4)
				Compensation
	Rate Review	NCRB	Date	for Assessment
	Season	Rate Filing	Submitted	Risk Provision
	2020-2021	2021 MH(C)	2/26/21	2.9%
		2021 MH(F)	2/26/21	
		2020 Dwelling	12/14/20	
		2020 HO	11/9/20	
	2019-2020	2019 Dwelling	8/14/19	3.4%
	2018-2019	2019 MH(C)	2/13/19	2.8%
		2019 MH(F)	2/13/19	
		2018 HO	12/20/18	
	2017-2018	2018 Dwelling	2/7/18	3.8%
		2017 HO	11/17/17	
(5)	Average Historical Compe	nsation for Assessment Risk F	Provision	3.2%
(6)	Estimated Market Share on NCIUA & NCJUA Asses	f Companies that Retain Expos sments	sure to	50.0%
(7)	Compensation for Asses	ssment Risk Provision		1.6%

<sup>(3), (4)</sup> From historical NCRB rate filings

<sup>(5) =</sup> Average of column (4)

<sup>(6)</sup> Estimated based on judgment

 $<sup>(7) = (5) \</sup>times (6)$ 

#### NORTH CAROLINA MOBILE HOMEOWNERS MH(C) INSURANCE

### Estimated Impact of Delays in Rate Filing Process

			(1)	(2)	(3)	(4)	(5)	(6)
								Estimated
NCRB Rate Filing	Policy Type / Coverage	Premium Weight	Assumed Effective Date	Actual Effective Date	# of Months of Delay	Selected Loss Trend	Selected Premium Trend	Impact of Delay in Filing Process
						·		
2020 HO	Owners Tenants	\$2,161,073,789	8/1/21 8/1/21	6/1/22 6/1/22	10 10	6.0%	1.1% -2.0%	4.0%
	Condos	76,318,464 31,251,398	8/1/21	6/1/22	10	0.5% 5.0%	-2.0% 0.0%	2.1% 4.1%
	Total	\$2,268,643,651	0/1/21	0/1/22	10	5.0%	0.076	4.0%
2021 MH(C)	Mobile Home Structures	\$55,402,780	11/1/21	5/1/22	6	-2.0%	2.7%	-2.3%
	Adjacent Structures	4,435,898	11/1/21	5/1/22	6	10.2%	4.4%	2.7%
	Personal Effects	10,600,963	11/1/21	5/1/22	6	-2.0%	4.4%	-3.1%
	Liability	2,198,331	11/1/21	5/1/22	6	8.0%	0.7%	3.5%
	Total	\$72,637,972						-1.9%
2021 MH(F)	Owners	\$41,984,133	11/1/21	5/1/22	6	1.0%	2.7%	-0.8%
	Tenants	95,516	11/1/21	5/1/22	6	-2.0%	1.0%	-1.5%
	Total	\$42,079,649						-0.8%
2020 Dwelling	Fire	\$71,555,474	9/1/21	11/1/21	2	0.0%	1.2%	-0.2%
	EC	229,061,439	9/1/21	11/1/21	2	9.0%	1.5%	1.2%
	Total	\$300,616,913						0.9%
0040 D	Fi	#00 000 <del>77</del> 4	7/4/00	7/4/00		0.00/	4.40/	0.00/
2019 Dwelling	Fire EC	\$83,923,771	7/1/20 7/1/20	7/1/20 7/1/20	0	2.0% 3.2%	1.1% 0.8%	0.0% 0.0%
	Total	241,506,295 \$325,430,066	7/1/20	7/1/20	U	3.276	0.676	0.0%
	rotai	ψ020, <del>4</del> 00,000						0.070
2019 MH(C)	Mobile Home Structures	\$52,069,226	2/1/20	6/1/20	4	3.5%	1.6%	0.6%
	Adjacent Structures	4,212,665	2/1/20	6/1/20	4	4.0%	2.8%	0.4%
	Personal Effects	10,255,303	2/1/20	6/1/20	4	2.0%	4.1%	-0.7%
	Liability Total	2,410,058 \$68,947,252	2/1/20	6/1/20	4	5.0%	n/a	1.6% 
	Total	\$00,947,232						0.5%
2019 MH(F)	Owners	\$51,661,941	2/1/20	6/1/20	4	0.7%	-0.5%	0.4%
	Tenants	66,881	2/1/20	6/1/20	4	2.0%	2.1%	0.0%
	Total	\$51,728,822						0.4%
2018 HO	Owners	\$2,017,285,314	10/1/19	5/1/20	7	4.6%	1.0%	2.0%
	Tenants	72,370,871	10/1/19	5/1/20	7	-3.1%	-1.4%	-1.0%
	Condos	29,047,171	10/1/19	5/1/20	7	1.9%	0.2%	1.0%
	Total	\$2,118,703,356						1.9%
2018 Dwelling	Fire	\$102,088,428	6/1/18	2/1/19	8	0.2%	2.3%	-1.3%
2016 Dwelling	EC	187,663,877	6/1/18	2/1/19	8	0.4%	2.1%	-1.1%
	Total	\$289,752,305	0/1/10	2/1/13	Ü	0.470	2.170	-1.2%
2017 HO	Owners	\$2,010,516,565	6/1/18	10/1/18	4	3.1%	1.1%	0.7%
	Tenants	62,551,401	6/1/18	10/1/18	4	-3.1%	-1.0%	-0.7%
	Condos Total	24,591,783 \$2,097,659,749	6/1/18	10/1/18	4	1.9%	0.5%	0.5%
	rotai	Ψ2,007,000,740						0.070
2014 HO	Owners	\$2,257,970,589	7/1/14	6/1/15	11	5.3%	2.3%	2.7%
	Tenants	45,065,871	7/1/14	6/1/15	11	2.9%	-1.0%	3.6%
	Condos	22,629,842	7/1/14	6/1/15	11	5.4%	0.0%	5.0%
	Total	\$2,325,666,302						2.7%
2014 MH(C)	Property	\$77,349,418	6/1/15	10/1/15	4	3.0%	2.8%	0.1%
	Liability	1,546,804	6/1/15	10/1/15	4	2.8%	n/a	0.9%
	Total	\$78,896,222						0.1%
2014 MH(F)	Owners	\$44,750,216	6/1/15	10/1/15	4	4.6%	2.2%	0.8%
,	Tenants	100,658	6/1/15	10/1/15	4	2.5%	-0.2%	0.9%
	Total	\$44,850,874						0.8%
			2444	=///0		= 404		
2012 HO	Owners	\$2,168,814,729	6/1/13	7/1/13	1	5.4%	3.0%	0.2%
	Tenants Condos	32,405,190 18,252,996	6/1/13 6/1/13	7/1/13 7/1/13	1 1	4.0% 4.0%	0.0% 2.0%	0.3% 0.2%
	Total	\$2,219,472,915	0/1/13	7/1/13	'	4.076	2.076	0.2%
2011 Dwelling	Fire	\$84,664,174	6/1/11	4/1/13	22	3.6%	2.9%	1.3%
	EC Total	150,823,062	6/1/11	4/1/13	22	4.1%	2.8%	2.3%
	Total	\$235,487,236						2.0%
2008 HO	Owners	\$1,498,766,325	1/1/09	5/1/09	4	4.4%	3.9%	0.2%
	Tenants	24,074,875	1/1/09	5/1/09	4	0.2%	2.7%	-0.8%
	Condos	13,213,524	1/1/09	5/1/09	4	0.2%	2.9%	-0.9%
	Total	\$1,536,054,724						0.1%
2008 MH(C)	Property	\$76,284,985	10/1/07	12/1/08	14	7.5%	2.4%	5.9%
\-/	Liability	1,161,840	10/1/07	12/1/08	14	4.0%	n/a	4.7%
	Total	\$77,446,825						5.9%
2008 MH/E/	Owners	\$43,659,180	10/1/07	12/1/08	14	6.6%	5.89/	0.00/
2008 MH(F)	Owners Tenants	\$43,659,180 158,638_	10/1/07 10/1/07	12/1/08 12/1/08	14 14	6.6% 0.4%	5.8% -4.1%	0.9% 5.5%
	Total	\$43,817,818	.5/1/01	.2,1700	. •	3.470	/0	0.9%
	. 5.61	Ţ.2,3.1,0.0						0.076

Average Estimated Impact of Delays in Filing Process:

 $<sup>\</sup>label{eq:continuous} \begin{tabular}{ll} (1), (3), (4) From historical NCRB rate filings \\ (2) From historical NCRB settlement agreements or circulars \\ (5) = {[1+(3)]/[1+(4)]}^{-(1)}^{-(1)}/365} - 1 \end{tabular}$ 

1	PRE-FILED DIRECT TESTIMONY OF MINCHONG MAO
2	
3	2022 MOBILE HOMEOWNERS INSURANCE RATE FILINGS
4	by the
5	NORTH CAROLINA RATE BUREAU
6	
7	
8 9	Q. Please state your full name and business address for the record.
10	A. My name is Minchong Mao. My business address is Aon, 200 East Randolph
11	Street, 11th Floor, Chicago, Illinois 60601.
12	
13 14	Q. What is your involvement in this matter?
15	A. My employer, Aon, has been retained by the North Carolina Rate Bureau
16	(NCRB) to provide catastrophe and reinsurance analytics with respect to the
17	expected hurricane losses and net cost of reinsurance provisions utilized in the
18	NCRB 2022 Mobile Homeowners Insurance MH(C) and MH(F) rate filings. I
19	manage the catastrophe analytics team at Aon that performed these services.
20	
21 22	Q. Who is Aon, and what are your primary responsibilities for them?
23	A. Aon is a leading global professional services firm that provides advice and
24	solutions to clients focused on risk, retirement, and health. Aon is one of the
25	world's largest reinsurance brokers and has extensive experience in catastrophe

1	modeling. I am a Senior Managing Director and a Catastrophe Actuary at Aon's
2	Reinsurance Solutions - Catastrophe Risk Analytics group. I manage an analytics
3	group within the Catastrophe Management area which focuses on catastrophe
4	actuarial and predictive analytics as it relates to ratemaking and underwriting.
5	I advise clients on catastrophe actuarial services, such as rate indications, rate
6	filing strategy, underwriting strategy, and use of catastrophe models in risk
7	management. I am responsible for Aon's compliance with ASOP 38 regarding
8	use of catastrophe models. I am a consulting actuary for Aon's in-house model,
9	Impact Forecasting, LLC. I work with a group of catastrophe modelers to provide
10	catastrophe modeling support for reinsurance placements. Our client services
11	include but are not limited to: support for multi-model analytics, customized view
12	of risks, catastrophe pricing, catastrophe risk selections, data augmentation,
13	model evaluation, real-time event response, portfolio optimization, actuarial
14	support, reinsurance cost allocations, and rating agency questionnaire support.
15	
16	Q. Describe your professional and educational background.
17	
18	A. I have been with Aon since September 2018. Prior to joining Aon, I worked at
19	State Farm Insurance Companies for over 17 years from 2001 to 2018 where I
20	led the catastrophe modeling functions since 2005. During my tenure at State
21	Farm, I was responsible for State Farm's use of catastrophe models in pricing,

underwriting, claims, reinsurance, securitization, enterprise risk management,

24

22

23

and rating agency reporting.

4	
1	

2 I have 2 years of ratemaking experience as a pricing actuary for Homeowner

3 lines at State Farm. I am familiar with the development and implementation of

4 property insurance rates and rules. I understand the challenges for an insurer to

balance rate adequacy, competitiveness, and meet financial objectives at the

6 same time.

7

9

10

5

8 I have a Bachelor's degree in Biochemical Engineering from Beijing University of

Chemical Technology, a Master's degree in Chemistry from Eastern Illinois

University, and a Master's degree in Computer Science from the University of

11 Missouri - Columbia.

12

# Q. Are you a member of any professional actuarial organizations?

14

17

18

19

20

21

13

15 A. Yes. I am a Fellow of the Casualty Actuarial Society (FCAS) and a Member of

the American Academy of Actuaries (MAAA). I am a Certified Catastrophe Risk

Management Professional (CCRMP), a new designation created by the CAS

Institute (iCAS) and International Society of Catastrophe Managers (ISCM). I am

currently serving on the Casualty Actuarial Society's Climate Change Committee,

the American Academy of Actuaries' Extreme Event Risk Committee, and on the

advisory board for CCRMP designation. I am in good standing with the

22 requirements of these organizations.

- 1 I am part of a working group that authored the following monographs for the
- 2 American Academy of Actuaries:
- The National Flood Insurance Program: Challenges and Solutions (2017)
- Uses of Catastrophe Model Output (2018)
- Wildfire: An Issue Paper Lessons Learned from the 2017–2018
- 6 California Events (2019)
- 7 I am one of the recipients of the Casualty Actuarial Society's Above and Beyond
- 8 Achievement Award in 2019 to recognize my leadership and contributions to
- 9 establish the CCRMP designation for the insurance industry.

11

- Q. Please describe your relevant experience and qualifications for this
- 12 proceeding.

- 14 A. I started practicing in the catastrophe risk management field in 2005. During
- my tenure at State Farm, I managed State Farm's catastrophe modeling function
- 16 from 2005 to 2018. I managed vendor relationships with AIR, EQECAT, ARA,
- and RMS. I provided filing support and helped my employer through many
- regulatory challenges related to the use of models in insurance operations. I
- 19 provided actuarial opinions on State Farm's use of catastrophe models. I
- 20 established the due diligence and model validation framework to ensure
- 21 catastrophe modeling practices at State Farm met the actuarial standards and
- 22 complied with laws and regulatory requirements. My team provided various
- 23 catastrophe risk measures and analytics for State Farm Fire and affiliates for

2	reinsurance and securitization purposes.
3	
4	From 2010 to 2013, I was a member of an advisory group to the Insurance
5	Bureau of Canada (IBC) and the Office of the Superintendent of Financial
6	Institutions (OSFI) to provide expert opinions on insurance and the economic
7	impact of major earthquakes in Canada. From 2011 to 2013, I was a member of
8	an advisory group for IBC and OSFI to revise OSFI Guideline B-9 (Earthquake
9	Exposure Management Sound Practice Guideline for insurance companies). I
10	led a State Farm team to establish the compliance framework to meet OSFI B-9
11	regulation requirements.
12	
13	In January 2015, I was appointed by Florida CFO Jeff Atwater to serve on the
14	Florida Commission on Hurricane Loss Projection Methodology (FCHLPM) as
15	the industry actuary. From January 2015 to September 2018, I represented the
16	property insurance industry on the FCHLPM to review and accept hurricane
17	models for use in ratemaking in the State of Florida. My term on the FCHLPM
18	ended in September 2018 due to my job change.
19	
20 21	Q. Are the hurricane models used in these filings certified by the FCHLPM?
22	A. Yes. The hurricane models used for these rate filings, AIR Touchstone V9
23	(a.k.a Touchstone 2021) and RMS RiskLink V21, are both certified by FCHLPM.
24	FCHLPM has scrutinized hurricane models over many years and authorized their

ratemaking, exposure management, claims, ERM, rating agency reporting,

use in Florida rate filings. FCHLPM retains experts in relevant fields who review the meteorological, wind engineering, damageability, claims, statistical, computer programming, economic and other aspects of modeling in great detail. Over the years, FCHLPM has recognized advancements in various scientific disciplines related to hurricane modeling and has required modelers to incorporate such advancements. FCHLPM approves only those models that meet its rigorous standards.

# Q. Please describe how ASOP 38 is applicable in these rate filings?

A. The Actuarial Standard of Practice Number 38 (ASOP 38), included as Exhibit RB-11, has been in effect since December 2000. ASOP 38 was created, to some extent, to address the use of stochastic computer hurricane simulation models in the insurance ratemaking process. ASOP 38 established certain requirements for actuaries who use output from a model that is outside of that actuary's area of expertise. Hurricane models are developed by a group of experts including meteorologists, structural engineers, actuaries, statisticians, and computer scientists. Some model components are outside of the area of expertise of actuaries. Due to the models' complexity and reliance on different science disciplines, many actuaries are not as knowledgeable about these models as they are about traditional ratemaking methodologies.

1	Hurricane models are utilized to establish the hurricane loss costs and
2	reinsurance cost allocations for these NCRB filings. Therefore, compliance with
3	ASOP 38 is relevant to these filings.
4	
5 6	Q. Is Aon's use of catastrophe models in compliance with ASOP 38?
7	A. Yes. Aon's catastrophe modeling practice in general and as it relates to these
8	NCRB filings is in compliance with ASOP 38. ASOP 38 provides guidance to the
9	actuary in using models that incorporate specialized knowledge outside the
10	actuary's own area of expertise when developing an actuarial work product.
11	When using such a model, the standard requires that the actuary perform five
12	specific tasks:
13	
14	a. Determine appropriate reliance on experts;
15	b. Have a basic understanding of the model;
16	c. Evaluate whether the model is appropriate for the intended application;
17	d. Determine that appropriate validation has occurred; and
18	e. Determine the appropriate use of the model.
19	
20	In addition to relying on vendors' experts, Aon has an in-house model evaluation
21	team. This team consists of members with advanced degrees in meteorology,
22	structural engineering, and statistics. Soon after models are released, the model
23	evaluation team performs sensitivity testing to identify key drivers of model
24	changes and potential anomalies. I work closely with the model evaluation team

1 at Aon to ensure the sensitivity testing covers all aspects of ASOP 38 2 requirements. I review the testing results through an analytics dashboard. I 3 document my reviews for each peril model. Upon completion of the review, I sign 4 an ASOP 38 attestation. Copies of the current ASOP 38 attestations for the AIR 5 and RMS models are included in these filings as Exhibits RB-12 and RB-13. 6 respectively. 7 8 Q. Describe the role of Aon Reinsurance Solutions Analytics and 9 Catastrophe Risk Analytics. 10 11 A. Aon Reinsurance Solutions Analytics (a.k.a Reinsurance Analytics) provides 12 consultative services to Aon's clients who place catastrophe reinsurance through 13 Aon. These clients are primary insurers selling property insurance products in 14 catastrophe prone areas. Aon Reinsurance Analytics provides a value-added 15 service that is above and beyond reinsurance brokering transactions. Our client 16 services include but are not limited to: support for multi-model analytics. 17 customized view of risks, catastrophe pricing, catastrophe risk selections, data 18 augmentation, model evaluation, real-time event response, portfolio optimization, 19 reinsurance cost allocations, actuarial support, and rating agency questionnaire 20 support. 21 22 Within the Reinsurance Analytics division, there is a team specialized in 23 catastrophe risk analytics. I am part of the Catastrophe Risk Analytics team that

1	provides clients with catastrophe risk management information and assists them
2	with their reinsurance purchasing decisions.
3	
4	Q. Describe your experience with catastrophe models.
5	
6	A. From 2005 to 2006, I performed the catastrophe modeling analyst's role at
7	State Farm, which includes hands-on experience with multiple models - from
8	data preparation to running the models to post model aggregation. My daily work
9	involved data preparation and converting exposure data into model input files. I
10	gained knowledge about how different models handle building characteristics and
11	insurance terms. I used RMS RiskLink, AIR Clasic/2, and EQECAT models on a
12	daily basis. I developed an understanding of the models' back-end database and
13	output. I performed post model analysis and wrote computer programs to
14	develop risk metrics such as probable maximum loss (PMLs), average annual
15	losses (AALs), and total value at risk (TVaR) to help State Farm assess and
16	manage catastrophe risks. Later in my career, I supervised many modeling tasks
17	that were delegated to my colleagues. I continued to provide guidance and
18	managed the day-to-day work of the catastrophe modeling unit.
19	
20 21	Q. Describe your experience with catastrophe reinsurance.
22	A. My experience with reinsurance started in 2005 at State Farm. State Farm is
23	a reinsurance buyer, and I was a part of the company's reinsurance buying team.

I supported the reinsurance function at multiple levels. My work included using

catastrophe model output and financial information to help my employer in structuring reinsurance, conducting technical pricing, drafting and reviewing reinsurance contracts, and participating in reinsurance buying trips. I evaluated catastrophe risks and cost of capital from both ceding and assuming parties. I worked closely with our reinsurance broker to validate our view of risks using external benchmarks. At Aon, I work directly with our clients who are seeking to purchase catastrophe reinsurance. Output from models is used by our brokers, clients, and capital markets to determine the reinsurance structure and pricing. We customize reinsurance solutions based on clients' risk appetite and risk profile.

# Q. Do you speak on topics pertaining to catastrophe modeling?

A. Yes. I have presented at CAS Ratemaking, Product and Modeling Conferences. I am a frequent speaker at Reinsurance Association of America's annual catastrophe modeling conference. My topics have included model blending, model regulation, and wildfire modeling, among others. From 2012 to 2018, I was a visiting instructor for the Illinois State University Math Department Actuarial Science program. I presented catastrophe modeling and regulatory topics to actuarial students. From 2016 to 2018, I was a member of the planning committee for the Reinsurance Association of America's annual catastrophe modeling conference. I organized and moderated panels and engaged speakers to cover a variety of catastrophe topics.

1	Q. What was Aon's role in these filings with respect to expected hurricane
2	losses?
3	
4	A. Aon performed data validation and shared control totals with NCRB. Aon's
5	catastrophe modelers ran the AIR Touchstone V9 and RMS RiskLink V21
6	models based on exposure data provided by NCRB. Aon blended the model
7	results for NCRB based on well-established methodology and provided the
8	modeled average annual loss to NCRB. Aon conducted industry research,
9	recommended, and applied catastrophe loss adjustment factors for NCRB.
10	
11	Let me add that the storm surge components of the models were included for
12	these filings. This is appropriate because the Mobile Homeowners MH(C) and
13	MH(F) programs provide insurance coverage for the flood peril.
14	
15	Q. Are catastrophe simulation models commonly used by insurers for
16	ratemaking in catastrophe-exposed lines and jurisdictions?
17	
18	A. Yes. Hurricane losses are so extreme and volatile that, for many years now,
19	the accepted actuarial procedure for estimating catastrophe risk in rate filings
20	and in the reinsurance market has been through the use of catastrophe models
21	rather than actual hurricane losses. Such volatility is greatly compounded in
22	hurricane prone states such as North Carolina. In North Carolina and other
23	hurricane prone states, a significant percentage of the prospective long-term
24	average annual losses in certain territories of the state are caused by intense
25	hurricanes, which are relatively infrequent but are devastating when they do

1	occur. It would be actuarially unsound to rely on a few years of actual hurricane
2	losses to estimate prospective hurricane losses because of the volatility of these
3	losses driven by low frequency and high severity. We have provided data and
4	analysis from catastrophe simulation models for Aon clients to use in their rate
5	filings in multiple states.
6	
7 8	Q. Did the NCRB ask Aon to run the AIR and RMS models?
9	A. Yes. Aon ran AIR Touchstone and RMS RiskLink for the NCRB at the
10	NCRB's request. AIR and RMS are the most commonly used catastrophe
11	models in the insurance and reinsurance industries. Aon runs these two models
12	on all of Aon clients' exposure data pertinent to reinsurance transactions. The
13	majority of Aon's clients use one or both of these two models when evaluating
14	their catastrophe risk.
15	
16 17	Q. Why did the NCRB ask Aon to run two models?
18	A. My understanding is that the NCRB has been using two models since 2016
19	and also that running two models complies with N.C.G.S. 58-36-10(3), which
20	became effective in 2017 and requires the NCRB to present data from more than
21	one model if it presents modeled hurricane losses based upon a commercial
22	hurricane simulation model. The NCRB weights the results of each model
23	equally.

Q. How are loss	es from the tw	o models b	lended?
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A. Model results are blended by taking a straight average toward the end of the
 process. This means that we run the individual models and determine the
 appropriate loss costs and reinsurance cost allocation independently for each

6 model. Then the outcome from the two models is averaged.

# Q. Is it common that modeled losses will differ between the various model vendors?

A. Yes. Catastrophe models are complex. When modeling vendors develop a hurricane model, they start with similar underlying information, such as the National Hurricane Center's historical hurricane dataset, land use/land cover database, similar wind engineering principles and statistical theories. However, there are differences between modeling vendors in their approaches to interpreting and supplementing the data to build a robust model. Different assumptions and judgments are made by model developers. Vendors may also use claims data from different data sources to calibrate their model. These varying assumptions, judgments, and methodologies will result in different model results. Model results deviate more at the location level than at the state level. When models generate different results, it does not necessarily mean any model is wrong. The spread among different views of the same risk reflects the inherent uncertainties of catastrophe modeling.

1 Given the number of variables involved in the development of a catastrophe 2 model and the degree of uncertainty associated with each variable, we would not 3 expect that two independently developed models would result in the same output 4 or conclusions on a given set of data. 5 6 Q. Does hurricane modeling produce artificially high rate levels? 7 8 A. No. Models help stabilize rate levels. Without modeling, rate levels would 9 fluctuate wildly following the occurrence or non-occurrence of significant 10 hurricanes. Modeling is relied upon by all stakeholders in insurance, 11 reinsurance, catastrophe bond, and other financial transactions to give the best 12 and most unbiased projection of future hurricane losses. Different parties to 13 those transactions often have opposing economic interests, but, nevertheless, 14 uniformly rely on models in their negotiations with each other. 15 16 Q. How do the models change over time? 17 18 A. Catastrophe models are built based on state-of-the art science and 19 technology. As science continues to evolve and computing powers continue to 20 advance, modeling technology is updated and improved. In addition, research 21 into historical and recent events, updates to building practices and building 22 codes, and data from engineering experiments also provides insight to enable

model developers to enhance their models. Each modeling vendor takes a

different approach on how frequently it updates its models and which perils and

23

1	regions will be updated. As noted above, because different assumptions and
2	judgments are made when information is applied, the impact of an update could
3	vary greatly between models. Changes due to model updates are to be
4	expected.
5	
6 7 8	Q. Is using multiple models to determine catastrophe risk actuarially sound?
9	A. Yes. Using multiple models allows users to incorporate different views of risk
10	into their exposure management. Using multiple models can effectively mitigate
11	modeling volatility and smooth out significant model changes. Using multiple
12	models is a practice endorsed by major rating agencies such as AM Best and
13	S&P.
14	
15 16	Q. How does the NCRB exposure data impact model output?
17	A. The following data factors impact model output:
18	Changes in coverage and/or policy conditions such as deductible and
19	limits, and the underlying policies-in-force
20	Changes in an insurer's portfolio composition, such as geographic
21	concentration
22	Changes in building characteristics, such as loss mitigation features and
23	age of roof

 Changes in data quality, such as replacing unknown building characteristics with known building characteristics

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Q. Please describe the client data that was used as input for the modelruns?

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A. The underlying exposure data was provided to Aon by the NCRB. To the best of my knowledge, the data was compiled on behalf of the NCRB by Milliman, Inc. NCRB's exposure data sent to Aon consisted of the aggregate exposure information for all residential Mobile Home risks in North Carolina at program, zip code, county and territory level. Data with invalid zip codes or county designations was disaggregated and reassigned to valid zip codes/counties within the given territory using mobile home unit count by CBG (census block group) from the 2020 American Community Survey maintained by the United States Census Bureau. Territory was populated, except for data that was part of zip codes split across two territories, and the exposure in the split zip code was proportionally assigned to territories based on mobile home unit count by CBG. The number of risks was derived from accrued earned exposures with partial numbers. Any partial numbers of risk count that were greater than zero were rounded to at least 1 because the models require the number of risks to be input as an integer. Rounding up resulted in slight increasing of the risk count. NCRB (through Milliman) provided exposure trend factors to Aon, which Aon applied to the aggregated data provided to Aon by NCRB. NCRB instructed Aon to run the models using the aggregate data at zip code and territory level for the entire

North Carolina portfolio in a single model run. Model results were aggregated at
 the territory level.

Q. Please describe what Aon Reinsurance Solutions then did with the data
 provided by the NCRB.

A. We reviewed the data for completeness and reasonableness before we input it into the AIR and RMS models. Since the two models have different formats for inputting data, we worked with the NCRB to ensure that the exposure data was properly and consistently mapped in the required format for each model. NCRB provided earned insurance years (EIY), which is the sum of primary coverage amount expressed in thousands, and earned house years (EHY), which is the number of risks. Limit by coverage is calculated from EIY and EHY as instructed by the NCRB. A comparison of this year's data with the data in the last Mobile Homeowners filings was conducted. Any anomalies were investigated.

The next step was to input the data and run the models. We ran the AIR

Standard model using the 100K event catalogue and the RMS Historical model

(both are long term views of the hurricane risk) to determine the modeled

hurricane loss costs. We also ran the AIR Warm Sea Surface Temperature

(WSST) model using the 10K event catalogue and the RMS Medium Term Rate

model (both are near term views of hurricane risk) to analyze the cost of

reinsurance. It is a standard practice throughout the reinsurance industry to rely

upon the models we used to determine modeled hurricane loss costs and
 reinsurance placements, and this has been true since the 1990s.

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After the models were run, we reviewed each model's output separately to ensure data integrity. We then blended the results of the two models by taking a straight average of the results. Additional reviews were conducted of the blended results to ensure that the blending procedures were correctly performed and that the blended results were reasonable. The blended modeled hurricane loss results were provided to the NCRB for use in its Mobile Homeowners rate review. The NCRB Mobile Homeowners rate review includes separate filings for MH(C) and MH(F), and the model results were utilized for both filings. At the NCRB's request, we also provided the results to Milliman for its use in its work as part of the NCRB's Mobile Homeowners MH(C) and MH(F) rate reviews. Exhibit RB-10 sets forth the blended modeled hurricane losses resulting from the work I have described. Based on my knowledge and experience, and the input data provided by the NCRB, these modeled hurricane losses are reasonable and appropriate projections of expected hurricane losses for use by the NCRB in its Mobile Homeowners rate reviews and rate filings for MH(C) and MH(F).

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21

Also, we employed the modeled hurricane losses as part of our work in determining and allocating the cost of reinsurance for these rate reviews and rate filings.

23

1	Q. What are the differences and similarities between using the AIR
2	Touchstone's 10K event set and the 100K event set?
3	
4	A. AIR Touchstone's 10K hurricane event set is a subset of the 100K event set.
5	These two event sets are designed to have the same theoretical frequency and
6	intensity distributions in coastal segments, and to produce similar results with
7	minimal variabilities. Using the 10K event set provides benefits in performance
8	and storage. AIR Touchstone's 10K event set is standard for use in a majority of
9	catastrophe modeling exercises – including reinsurance renewal data distribution
10	for quoting and placement purposes. The 100K event set is used to determine
11	hurricane loss costs for ratemaking purposes.
12	
13	Q. Did Aon make adjustments to the modeled results?
14	
15	A. Yes. A 6% catastrophe loss adjustment expense (LAE) factor was applied to
16	modeled losses. This factor was recommended by Aon based on a broad
17	industry study at the state level. The results of that study are shown in Exhibit
18	RB-16. The application of the LAE factor was reviewed and approved by the
19	NCRB, and the 6% catastrophe LAE factor was selected by the NCRB.
20	
21	Q. What is demand surge?
22	
23	A. Demand surge is a social economic phenomenon defined by ASOP 39,
24	Treatment of Catastrophe Losses in Property/Casualty Insurance Ratemaking,
25	as "a sudden and usually temporary increase in the cost of materials, services

1	and labor due to the increased demand for them following a catastrophe."
2	Demand surge usually occurs after large-scale disasters such as earthquakes,
3	tsunamis, cyclones or flooding. The models incorporate demand surge into their
4	loss estimates.
5	
6	Q. Should model output in the NCRB filings for MH(C) and MH(F) include
7	demand surge?
8	
9	A. Yes. All applications of catastrophe model output should reflect demand
10	surge. Demand surge is a real social economic phenomenon. There is no
1	reason to underestimate the impact of large events by ignoring the increase in
12	demand for labor and materials as a result of those events. In our experience,
13	the vast majority of insurance companies run the models with demand surge. In
14	fact, the only times we have ever run a model without demand surge at Aon are
15	to measure the impact of demand surge for testing purposes and where
16	specifically requested. Insurance companies' claims experience includes the
17	effect of demand surge. Excluding demand surge would underestimate
18	catastrophe losses.
19	
20 21 22	Q. Does the model output for the NCRB MH(C) and MH(F) filings include demand surge?
23	A. Yes. As is the customary and accepted practice in the insurance, reinsurance,
24	and catastrophe bond industries, the models were run with aggregate demand

1	surge (AIR) and loss amplification (RMS) included. The FCHLPM has approved
2	the use of aggregate demand surge and loss amplification for the AIR and RMS
3	models, respectively. These aspects of the models account for the expected
4	additional cost for supplies and labor if a very large hurricane event or series of
5	events occurs. Experience demonstrates that when such catastrophic events
6	have occurred, there is significant increase in demand for the limited supply of
7	plywood, shingles, labor, hotel rooms and other necessities. The high demand
8	for specialized labor often requires contractors to come in from out of state.
9	Fundamental economic principles dictate that such a spike in demand increases
10	prices, and, consequently, results in increased claims payments in the
11	aggregate. Additionally, there are delays in repairing properties, which can
12	directly lead to longer stays in hotels, and there are other increased costs beyond
13	those that occur after smaller hurricanes. Loss amplification also factors in
14	claims inflation. Claims adjusters may not investigate every claim if it is under a
15	certain threshold, given the volume of claims they have to settle post-event in a
16	limited amount of time.
17	

18

19

# Q. Does any state prohibit the inclusion of demand surge in modeled losses for rate filings?

20

21 A. I am not aware of any prohibitions against the use of demand surge in rate 22 filings in any jurisdiction. The South Carolina Department of Insurance Bulletin 23 2014-03 states "Demand surge may be included in the modeled results as long

1	as the company provides the impact it has on the modeled losses." The
2	FCHLPM's actuarial standards require hurricane models to incorporate demand
3	surge based on relevant data and actuarially sound methods and assumptions.
4	
5	Q. North Carolina has laws prohibiting "price gouging" following a
6	hurricane. Does that eliminate demand surge?
7	
8	A. No. Florida has a similar law (Fla. Stat. Ann. § 501.160). Demand surge
9	occurs due to supply and demand economics in situations that would not be
10	considered price gouging and/or that would not be prevented by statutes
11	prohibiting price gouging.
12	
13	Q. Does it make sense for North Carolina hurricane losses to include
14	demand surge for very large events impacting other states even if those
15	events were less significant in North Carolina?
16	
17	A. Yes. The intent of the model is to reflect economic conditions that will
18	influence construction prices and other aspects of insured losses (for example,
19	the increased period of time a carrier has to pay for hotel rooms for insureds
20	while their damaged homes are repaired) in the time period shortly after a
21	catastrophe event occurs. Since labor and materials resources are exchanged
22	by people across state lines, it is logical that the effect of demand surge on prices
23	in other states will impact North Carolina.
24	

# Q. Is the net cost of reinsurance considered in the Filings?

A. Yes. Large catastrophe losses present a very real risk to the long-term viability of Mobile Homeowners insurers and their ability to follow through on their promise to policyholders to pay losses when they occur. There are numerous scenarios where the potential losses due to a single hurricane are far greater than the entire premium collected by all the companies for the entire state of North Carolina. To remain viable long-term and protect against insolvency, and thereby to keep their commitment to policyholders, the industry must purchase reinsurance to help cover this risk. The costs associated with such reinsurance are costs of doing business in the state. To reflect the portion of those costs that is not already covered in the MH(C) and MH(F) fillings, a provision for the net cost or reinsurance is included in both fillings.

# Q. What is reinsurance?

A. Simply, reinsurance is insurance for insurers. When insurers are aware of scenarios in which the potential losses are greater than the company is willing to tolerate or able to absorb, they will frequently purchase reinsurance to mitigate the risk in those situations. Additionally, insurers may issue catastrophe bonds to protect themselves in those situations. Essentially the insurers will use a portion of the premium to purchase reinsurance. This is common across the industry.

Q. What was your role in these filings with respect to Net Cost of

2 Reinsurance?

A. I worked with my colleagues within the Aon Catastrophe Actuarial team to determine a suitable provision for the net cost of reinsurance for the state overall and an allocation of that cost by territory. The net cost of reinsurance provision used exposure data from all the Mobile Home risks in the state, so that a cost provision would be appropriate to use in a uniform rate schedule applicable to all insurers in the state.

# Q. What is catastrophe reinsurance, who buys it, and why do they buy it?

A. Catastrophe reinsurance is a contract purchased by a primary insurance company and sold by a reinsurer, or a group of reinsurers, to transfer risk from loss due to large catastrophic events. The most common type of contract used for catastrophe risk is called "Portfolio Excess of Loss" ("Portfolio XOL"), or just "XOL." A single XOL contract has an "attachment" and a "limit." An XOL covers the amount of portfolio loss caused by a single event in the amount which exceeds the XOL attachment with a maximum equal to the XOL limit. In some instances, there is co-participation, which means that only a percentage of the amount of loss in the XOL layer is covered. Portfolio XOL contracts, which are often referred to as "treaties" since there are typically multiple reinsurers involved, cover the first event within a year of coverage. It is standard for treaties to include a provision for the primary carrier to automatically purchase a

1	"reinstatement" if it has a loss which triggers a reinsurance payment. The
2	reinstatement premium allows for the full limit to be reinstated after the first event
3	exhausts the limit provided. There are cases where a limit is provided, and if an
4	event exhausts that limit, then there is no coverage available for the remainder of
5	the contract period. It is typical for primary carriers to buy multiple treaties that
6	stack on top of each other. In other words, a treaty will have an attachment
7	equal to the attachment plus limit of another treaty. Primary carriers select
8	reinsurance programs that best fit their particular needs and buy reinsurance to
9	ensure that money is available to pay claims and remain financially viable after
10	very large and uncommon to rare events.
11	
12	Q. Are the reasons that member companies purchase reinsurance similar
13	to the reasons that the hypothetical one company must purchase
13 14	to the reasons that the hypothetical one company must purchase reinsurance?
14	
14 15	reinsurance?
14 15 16	reinsurance?  A. Yes. The hypothetical one company for which the NCRB makes rates in North
14 15 16 17	reinsurance?  A. Yes. The hypothetical one company for which the NCRB makes rates in North Carolina must purchase reinsurance for the same reasons that individual carriers
14 15 16 17	reinsurance?  A. Yes. The hypothetical one company for which the NCRB makes rates in North Carolina must purchase reinsurance for the same reasons that individual carriers purchase reinsurance. That hypothetical one company is faced with numerous
14 15 16 17 18	reinsurance?  A. Yes. The hypothetical one company for which the NCRB makes rates in North Carolina must purchase reinsurance for the same reasons that individual carriers purchase reinsurance. That hypothetical one company is faced with numerous
14 15 16 17 18 19	reinsurance?  A. Yes. The hypothetical one company for which the NCRB makes rates in North Carolina must purchase reinsurance for the same reasons that individual carriers purchase reinsurance. That hypothetical one company is faced with numerous realistic hurricane loss scenarios that far exceed its ability to pay.
14 15 16 17 18 19 20 21	A. Yes. The hypothetical one company for which the NCRB makes rates in North Carolina must purchase reinsurance for the same reasons that individual carriers purchase reinsurance. That hypothetical one company is faced with numerous realistic hurricane loss scenarios that far exceed its ability to pay.  The annual earned premium at current manual level for the two filings combined

1	collected premium, it would first look to its surplus and reinsurance to meet its
2	obligations to policyholders. If the surplus and reinsurance were not sufficient,
3	then that company would become insolvent. There has been a history of
4	company insolvencies following major hurricanes in the United States. Following
5	Hurricane Hugo that hit Charleston, South Carolina and Hurricane Andrew that
6	hit Florida, there were multiple insolvencies. It is too soon to know at this point,
7	but there certainly could be company insolvencies as a result of the tremendous
8	catastrophe losses caused by Hurricane Ian in Florida in late September.
9	
10	It would be irresponsible and imprudent for the hypothetical one company not to
11	purchase reinsurance. The net cost of reinsurance analysis prepared by Aon
12	reflects the need for that hypothetical one company to purchase and maintain
13	reinsurance.
14	
15	Q. Please describe how the reinsurance program was designed and priced
16	for purposes of NCRB rate filings? Do you think it is reasonable?
17	
18	A. Aon advises the Bureau as to the parameters of the reinsurance program that
19	the hypothetical one company for which rates are being made in these filings
20	would reasonably select. The parameters reflect the amount of reinsurance that
21	the hypothetical one company should purchase to protect its solvency. The Aon
22	Catastrophe Actuarial team, under my management, designed the reinsurance
23	program for these rate filings and advised the Bureau as to the parameters of the

reinsurance program that the hypothetical one company would reasonably select.

- 1 The basis of the reinsurance program structure and pricing is determined by an
- 2 analysis of reinsurance programs placed by Aon for its reinsurance clients. I
- 3 believe the design and price of the reinsurance program designed for the NCRB
- 4 is reasonable. Three components of the analysis are described below:

- 6 **Program attachment and total limit** describes the total amount of reinsurance
- 7 coverage. Since companies vary substantially in size, so does their limit
- 8 purchase and attachment for their bottom layers. To normalize for company size,
- 9 we looked at the frequency with which a single event would trigger a recovery
- 10 and the frequency with which a single event would exhaust the limit of the entire
- 11 reinsurance program for each company. This was calculated separately for the
- 12 AIR and the RMS models. We then calculated the median attachment and
- exhaustion (exhaustion = bottom layer attachment + total program limit)
- 14 frequencies by model and by region (Southeast and nationwide). The
- 15 frequencies for attachment and exhaustion were averaged across the regions,
- which resulted in an attachment and exhaustion frequency by model. We used
- 17 the portfolio loss distributions by model to calculate the dollar amount of
- 18 attachment and exhaustion (and therefore limit) by model. The attachment of the
- 19 reinsurance program in these filings is the average of the AIR indicated
- 20 attachment and the RMS indicated attachment. The exhaustion of the
- 21 reinsurance program in these filings is the average of the AIR indicated
- 22 exhaustion and the RMS indicated exhaustion.

1	Reinsurance Market Pricing Model. For AIR and RMS, a log-linear regression
2	model was built to calculate the fitted reinsurance price based on modeled
3	expected ceded loss. Using these regression models, an indicated price for any
4	layer can be calculated based on each catastrophe model (AIR and RMS). The
5	selected prices by layer used in these rate filings are the averages of the AIR
6	indicated prices and the RMS indicated prices.
7	
8	Note: Because insight into reinsurance market pricing is an important proprietary
9	asset for Aon, the log-linear models are considered a trade secret and, therefore,
10	are not disclosed in these public filings.
11	
12	Program Structure. After the market pricing model and the program's
13	attachment and limit are determined, the program is then broken into layers. We
14	run an optimization analysis to find the five-layer cat program that has the lowest
15	possible deposit premium. This method is designed to calculate an indicated
16	reinsurance premium that is as low as possible, subject to the market pricing
17	model and program attachment and limit specifications.
18	
19	The reinsurance structure determined by the method described above is shown
20	in Exhibit RB-14. The pricing with loss analysis is shown in Exhibit RB-15.
21	
22	Q. Have you done anything different for these filings on reinsurance
23	analysis?
24	

1	A. The global reinsurance market has experienced some extraordinary volatilities
2	since 2019. Aon noticed the price of reinsurance has increased significantly in
3	the Southeast region for the past three years. The main driver of the increase is
4	Florida, which has distinct insurance challenges due to things like its one-way
5	attorney fee statute, its high rate of litigated property loss claims, and its wide
6	abuse of the assignment of benefits provision in the insurance policy. For
7	example, from 2019 to 2020, many FL-only insurers' reinsurance Rate on Line
8	increased about 25% for the 6/1/2020 placements. The other non- FL southeast
9	insurers experienced only low to mid-range single digit increases. A similar
10	trend continued in year 2021. We believe it is prudent to apply a smoothing
11	methodology to stabilize North Carolina's reinsurance analysis, so it is not unduly
12	influenced by Florida. The two smoothing techniques we used are:
13	
14	The Program Layers (structure) used for the 2021 NCRB Mobile Homeowners
15	filings was carried forward to 2022. This decision was made after we evaluated
16	some non-FL insurers' year-over-year reinsurance structures and annual
17	statements.
18	
19	The Rate on Line (ROL) for the 2022 rate flings was determined by credibility
20	weighting the 2022 and 2021 market pricing parameters. Equal credibility was
21	applied to the ROL used in the 2021 Mobile Homeowners filings and the ROL
22	developed in 2022 based on Reinsurance Market Pricing Model.
23	

# Q. How was the reinsurance premium allocated?

4 territory's share of expected ceded loss and loss adjustment expense (LAE) by

A. Reinsurance premium by layer is allocated to a territory based on that

5 layer. Exhibit RB-15 shows the total expected ceded loss and LAE by layer.

6 Exhibit RB-17 shows the proportion of hurricane peril reinsurance premium,

ceded average annual loss, and reinsurance margin ("net cost of reinsurance")

allocated to each territory segment for each layer. Other perils were used in the

calculation, but because they contributed such a small amount of expected

ceded loss, they were not shown on the exhibits. Exhibit RB-18 shows the dollar

amount of reinsurance margin allocated by territory.

### Q. How was the net cost of reinsurance calculated?

A. Net cost of reinsurance is Deposit Premium plus Expected Reinstatement Premium less Expected Ceded Loss & Loss Adjustment Expense (LAE). The reinsurance program, the loss distribution from the portfolio as determined by event loss tables (ELTs) from cat models, and the LAE assumptions are input into a DFA (Dynamic Financial Analysis) program to calculate the average ceded loss and LAE and average reinstatement premium over a specified number of simulated years. The loss distribution produced by the AIR model is already in the form of simulated loss experience for 100,000 years. The DFA program calculates for each year the total reinsurance recoveries and reinstatement premium paid. The DFA program then calculates the average annual ceded loss

1	& LAE and the average reinstatement premium. The loss distribution from the
2	RMS model is a list of possible catastrophic events. Unlike the AIR model, which
3	provides the specific year and amount of loss from each event, each event in the
4	RMS model has a parametric distribution for frequency and severity. The DFA
5	program creates a simulation of 1,000,000 years of loss experience to make a
6	table containing year, event id, and specific amount of loss. From that point, the
7	calculation works the same as for the AIR model.
8	
9	For the NCRB filings combined, our analysis shows that expected reinsurance
10	premium is \$52,671,773, expected ceded loss & LAE is \$14,353,446, and the net
11	cost of reinsurance is \$38,318,327, as shown on Exhibits RB-15 and RB-18.
12	Allocation by territory is done using the method described in response to the
13	previous question. The net cost of reinsurance amounts for the separate filings
14	are as follows: \$18,237,701 for MH(C) and \$20,080,626 for MH(F).
15	
16	Q. Given your experience in catastrophe reinsurance, do you find this
17	approach to be reasonable?
18 19	A. Yes. Aon's approach is based on detailed information on current reinsurance
20	market rates and the underlying model output. The smoothing techniques we
21	used this year helped stabilize the results.
22	
23	Q. Do you know whether the Rate Bureau has used in its 2022 Mobile
24	Homeowners filings the Aon net cost of reinsurance results you provided?
25	

1	A. Yes. I am advised that the Rate Bureau has used in the filings both our
2	statewide net cost of reinsurance results and those results allocated to the
3	territory level.
4	
5	Q. Are you aware of the following North Carolina statute N.C.G.S. 58-36-
6	10(7):
7	Property insurance rates established under this Article may include a provision to
8	reflect the cost of reinsurance to protect against catastrophic exposure within this
9	State. Amounts to be paid to reinsurers, ceding commissions paid or to be paid
10	to insurers by reinsurers, expected reinsurance recoveries, North Carolina
11	exposure to catastrophic events relative to other states' exposure, and any other
12	relevant information may be considered when determining the provision to reflect
13	the cost of reinsurance.
14	
15	A. Yes, I am. The above North Carolina statute is consistent with ASOP 53,
16	Estimating Future Costs of Prospective Property/Casualty Risk Transfer and Risk
17	Retention, which "applies to actuaries when performing actuarial services with
18	respect to developing or reviewing future cost estimates (commonly known as
19	actuarial indications) for prospective property/casualty risk transfer and risk
20	retention. For example, this standard applies when actuaries are developing
21	future cost estimates underlying product prices, estimating funding requirements
22	for self-insured programs and captives, and developing reinsurance prices."
23	

1	Q. Do you have an opinion whether the net cost of reinsurance analysis
2	you performed on behalf of the Rate Bureau for these filings has
3 4	considered the provisions of that statute?
5	A. Yes. Based on my experience with hurricane models, catastrophe
6	reinsurance, and determining catastrophe reinsurance costs for rate filings, it is
7	my opinion that the net cost of reinsurance analysis for these mobile
8	homeowners filings properly considers all of the items set forth by the statute.
9	Further, based on my experience in the marketplace, it is my opinion that a
10	reasonable and appropriate provision for the net cost of reinsurance must be
11	incorporated into North Carolina Mobile Homeowners insurance rates to properly
12	reflect and protect against the catastrophe exposure in this state.
13	
14	Q. Do you have an opinion regarding the appropriateness of the net cost of
15	reinsurance provision incorporated into these Mobile Home filings?
16	
17	A. Yes. Based on my experience with hurricane models, catastrophe
18	reinsurance, and determining catastrophe reinsurance costs for rate filings, it is
19	my opinion that the provision for the net cost of reinsurance in these filings, at the
20	statewide and territory levels, is reasonable and appropriate.
21	
22	Q. Does that conclude your testimony?
23	
24	A. Yes.

## Minchong Mao, FCAS, CCRMP, MAAA, Actuary

Reinsurance Solutions, Aon plc 200 E Randolph Street Chicago, IL 60601

Phone: 312-381-2009(O) 312-581-7425 (C)

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#### **Summary**

- Over twenty years of experience with insurance, reinsurance, catastrophe risk management, actuarial pricing and management at State Farm Insurance Companies and Aon plc
- Commission Member, actuary representing the property insurance industry on the Florida Commission on Hurricane Loss Projection Methodology (FCHLPM) 2015-2018
- Strong leadership, work ethic, communication and teamwork skills
- Deep knowledge and experience in Insurance operations, including Actuary, Underwriting, and Claims.
- Extensive experience and understanding with catastrophe models, underlying science and methodologies

#### **Experience**

Senior Managing Director, Actuary Aon Reinsurance Solutions April 2021– Present

Managing Director, Actuary Aon Reinsurance Solutions September 2018– April 2021

#### Major Responsibilities include:

- Manage the catastrophe actuarial and predictive analytics group within Aon Reinsurance Solutions which focuses on supporting Aon clients' ratemaking and underwriting needs.
- Implement and sign off Aon's ASOP 38 compliance framework.
- Provide rate filing support for Aon's clients through regulatory challenges.
- Serve on Impact Forecasting leadership steering committee to oversee Impact Forecasting's product strategies and priorities.
- Serve as Aon Impact Forecasting's signatory actuary during Florida Commission on Hurricane Loss Projection Methodology submissions.
- Manage Homeowner Return on Equity (ROE) Outlook study. Aon's
  Homeowners ROE Outlook calculates risk-adjusted returns for the US
  homeowners industry, provides the insurance industry with market reality
  diagnostics and profitability insights.
- Manage Residual Market Industry study. This product provides a holistic view of the residual market's impact on the property insurance industry and the individual company's risk profile.
- Serve as Aon's key corporate contact for China business development and expansion.

## Catastrophe Modeling Manager, Actuary State Farm Insurance Companies

Feb. 2005 – Sept. 2018 Major Responsibilities included:

- Manage State Farm's catastrophe modeling unit. State Farm's catastrophe modeling practice grew into the industry's leading practice with high quality and productivity under my leadership.
- Manage vendor relationships with AIR, EQECAT, ARA, and RMS. Negotiate contract terms and conditions, engage vendors' support through regulatory challenges.
- Provide Actuarial opinions on State Farm's use of catastrophe models. Oversee the
  due diligence and model validation work to ensure catastrophe modeling practices
  at State Farm meet the Actuarial Standards and comply with laws and regulatory
  requirements.
- Serve as a resource to the Corporate Law department for litigation and legislative issues.
- Provide various catastrophe risk measures and analytics (PML, TVaR, Standard Deviations, etc.) for State Farm Fire and Affiliates for exposure management and reinsurance purposes.
- Provide catastrophe information to rating agencies such as AM Best, S&P and Moody's.
- Develop and deploy hazard analysis tools across the Enterprise for exposure underwriting and management.
- Utilize catastrophe data in Dynamic Financial Analysis projects to analyze capital adequacy and capital allocation; develop simulation tools to incorporate catastrophe risk into Enterprise Risk Management.
- Provide exposure information, technical support, risk analysis and documentation reviews for all State Farm's issuances of catastrophe bonds.
- Lead State Farm's compliance work to meet Office of the Superintendent of Financial Institutions (OSFI) B-9 - Earthquake Sound Practice requirements.
- Monitor modeling regulations in several jurisdictions (FL, LA, SC, HI, MD, etc.). Work with State Farm counsel to provide revisions to bills related to coastal issues and catastrophe risk management during legislative sessions.
- Represent the Actuarial department on State Farm Enterprise Catastrophe Response Team. Provide real time analysis for actual catastrophe events to assist Catastrophe Claims' resources deployment, Catastrophe Reserving and communicate with Senior Management about the potential impact.
- Serve as a homeowner pricing manager for Mississippi for two years, with major responsibilities including:
  - Manage the development and implementation of rates and rules for several personal lines which satisfy the financial objectives of the enterprise.
  - Coordinate the analyses of actuarial ratemaking process.
  - Review rate proposals.
  - Serve as a key Actuarial resource for Market Areas and regulators.

## **Actuarial/Statistics/Modeling Analyst**

Jan 2001- Feb. 2005

- Conducted homeowner rate revisions for Maine, Kansas, and Mississippi.
- Developed and maintained State Farm's rate revision tool for property lines.

#### Other Professional Activities

• 2015 – 2018, Commission Member, Industry Actuary, Florida Commission on

- Hurricane Loss Projection Methodology (FCHLPM). I was appointed by Florida CFO Jeff Atwater to this position in Jan. 2015.
- 2010 2013, advisory group member to the Insurance Bureau of Canada (IBC) and Office of the Superintendent of Financial Institutions (OSFI) to provide expert opinions on a study for insurance and economic impact of major earthquakes in Canada.
- 2011- 2013, advisory group member for the Insurance Bureau of Canada (IBC) and Office of the Superintendent of Financial Institutions (OSFI) to revise OSFI Guideline B-9 (Earthquake Exposure Management Sound Practice Guideline for insurance companies).
- 2012-2016, organized nine State Farm senior executives delegation (including State Farm's CEO, COO, CFO, CMO, General Counsel, CTO, CSO) visits to China. Established relationship and set up meetings with Chinese regulators and senior executives of top Chinese insurance companies. Participated in discussions, served as advisor and interpreter for State Farm delegations.
- 2012-2018, visiting instructor for Illinois State University Math Department Actuarial Science program. Present catastrophe modeling and regularity topics to actuarial graduate students.
- 2014-2018, board member of the International Society of Catastrophe Managers (ISCM). Promote education and career development for Catastrophe Modeling professionals.
- 2016- Present, co-chair of a taskforce to create a credential and certificate program for catastrophe risk management professionals on behalf of Institute of Casualty Actuarial Society (iCAS) and International Society of Catastrophe Managers (ISCM).
- 2016- Present, Member of Property / Casualty Extreme Events Committee, American Academy of Actuaries. This committee identifies issues relevant to the treatment of extreme catastrophe risks including sizing, insurability, pricing, funding, reserving, capital management, and loss mitigation. The committee also monitors federal and state catastrophe legislation and interacts with NAIC on these issues.
- 2016 2018, member of planning committee for the Reinsurance Association of America's annual catastrophe modeling conference.
- 2016 Present, member of CAS Climate Change Committee. This committee recommends, supports and performs research on climate change and assesses the potential risk management implications for the insurance industry.

#### **Designations**

- Fellow of Casualty Actuarial Society (FCAS, 2007)
- Certified Catastrophe Risk Management Professional (CCRMP, 2019)
- Associate of Society of Actuaries (ASA, 2010) Currently, I am not an active member at SOA
- Member of American Academy of Actuaries (MAAA,2005)
- Microsoft Certified Solution Developer (MCSD)
- Microsoft Certified Professional (MCP)

#### Education

- Master's degree in Computer Science, University of Missouri-Columbia, 2000
- Master's degree in Chemistry, Eastern Illinois University, 1997
- Bachelor's degree in Chemical Engineering, Beijing University of Chemical Technology, 1993

#### **Award**

- Special Achievement awards for excellent performance and exceptional business achievements, Property and Casualty Actuarial Department, State Farm Insurance in 2002, 2009, 2011, 2012, 2014, 2015, and 2016
- Casualty Actuarial Society (CAS) Above and Beyond Achievement Award in 2019 to recognize my leadership role to establish Certified Catastrophe Risk Management Professional (CCRMP) designation for CAS Institute. The "Above & Beyond Achievement Award" is made annually, to one or more members of the CAS, who have made extraordinary contributions to the society.

#### **Publications**

- As a member of the American Academy of Actuaries Flood Working Group, I am one of the authors for the Monograph on Issues Surrounding National Flood Insurance Program The National Flood Insurance Program: Challenges and Solutions. *American Academy of Actuaries*, April, 2017
- Akram Hazeen, Yan Zhang, Minchong Mao, Kraig A. Wheeler, a and Mark E. McGuire, 6-[(4-Hy-droxy-phen-yl)diazenyl]-1,10-phenanthrolin-1-ium chloride monohydrate, *US National Library of Medicine, National Institutes of Health (NIH)*, Dec. 1, 2011.
- As a member of the American Academy of Actuaries Flood Working Group, I am one of the authors of the following Monographs:

The National Flood Insurance Program: Challenges and Solutions (2017) American Academy of Actuaries, April, 2017

Uses of Catastrophe Model Output (2018). American Academy of Actuaries, July, 2018

Wildfire: An Issue Paper - Lessons Learned from the 2017–2018 California Events (2019), American Academy of Actuaries, June, 2019

#### Reference

Available upon request.

NCRB CY21 Mobile Homeowners Gross Modeled Hurricane Expected Losses Including Cat LAE and Trend

Territory	MH(C)-A+D	MH(C)-B	MH(C)-C	MH(C)-Total	MH(F)-O	MH(F)-R	MH(F)-Total	MH C+F Total
110	74,155	4,572	18,710	103,283	121,902	0.000	121,902	225,185
120	191,431	9,927	33,752	249,217	668,424	7	668,432	917,648
130	144,580	11,663	36,979	204,816	364,032	106	364,138	568,954
140	902,945	65,393	135,755	1,170,339	2,626,449	655	2,627,103	3,797,442
150	498,092	44,075	101,380	682,161	1,027,159	510	1,027,669	1,709,830
160	439,841	37,923	57,439	567,314	1,101,242	96	1,101,338	1,668,652
170	99,221	9,787	9,664	125,793	116,557	55	116,612	242,405
180	878,513	84,011	88,090	1,113,651	1,055,986	1,229	1,057,215	2,170,866
190	500,149	54,443	53,067	644,118	643,877	931	644,809	1,288,926
200	234,814	19,837	22,512	293,792	524,182	0.000	524,182	817,974
210	310,296	32,607	27,884	393,034	355,710	284	355,993	749,028
220	482,098	43,320	45,020	604,664	649,561	82	649,643	1,254,307
230	490,727	41,965	44,702	612,038	1,054,331	325	1,054,655	1,666,694
240	1,106,135	114,273	93,496	1,392,738	807,388	829	808,217	2,200,955
250	385,486	38,368	33,607	484,910	513,936	520	514,455	999,365
260	438,289	47,646	32,083	549,099	292,154	78	292,232	841,331
270	334,079	30,297	27,051	414,913	222,449	208	222,657	637,571
280	107,866	11,119	8,693	135,339	79,510	90	79,600	214,939
290	144,831	11,165	10,392	176,370	251,269	144	251,413	427,784
300	92,554	7,119	6,825	112,887	189,347	76	189,423	302,310
310	365,456	37,885	28,862	458,135	323,929	184	324,113	782,248
320	448,274	47,598	35,716	563,483	339,476	226	339,702	903,185
330	25,196	2,796	2,102	31,899	27,820	7	27,827	59,726
340	347,373	35,732	27,362	435,095	242,558	207	242,765	677,860
350	236,453	23,551	17,754	294,424	174,193	197	174,389	468,813
360	271,932	26,398	19,811	337,230	248,627	174	248,801	586,031
370	9,030	732	550	10,931	8,823	5	8,827	19,758
380	38,326	3,467	2,569	47,024	34,774	19	34,793	81,817
390	44,541	3,961	2,809	54,389	29,243	20	29,263	83,652
Total	9,642,684	901,631	1,024,637	12,263,089	14,094,908	7,260	14,102,168	26,365,257

Modeled hurricane expected losses for North Carolina Rate Bureau, net of limits and deductibles. Results include demand surge and storm surge. Losses represent 50/50 blend of AIRv9 100k Standard event set and RMS v21 Historical event set. Results also include provisions for LAE and loss trend.



Actuarial Standard of Practice No. 38

**Revised Edition** 

**Catastrophe Modeling** (for All Practice Areas)

Developed by the Catastrophe Modeling Task Force of the General Committee of the Actuarial Standards Board

> Adopted by the Actuarial Standards Board July 2021

> > **Doc. No. 201**

## ASOP No. 38—Doc. No. 201

## **EXHIBIT RB-11**

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ASOP No. 38—Doc. No. 201

**EXHIBIT RB-11** 

July 2021

**TO:** Members of Actuarial Organizations Governed by the Standards of Practice of the

Actuarial Standards Board and Other Persons Interested in Catastrophe Modeling

(for All Practice Areas)

**FROM:** Actuarial Standards Board (ASB)

**SUBJ:** Actuarial Standard of Practice (ASOP) No. 38

This document contains the revision of ASOP No. 38, *Catastrophe Modeling (for All Practice Areas)*.

### History of the Standard

The ASB first began work on a standard for modeling in the late 1990s. Motivated primarily to address the role catastrophe modeling of earthquakes and hurricanes played in casualty ratemaking, this work was focused on the use of specialized models where the actuary would have to rely on a model that was developed by professionals other than actuaries. As a result of this work, the ASB approved ASOP No. 38, *Using Models Outside the Actuary's Area of Expertise*, in June 2000 with the scope of the standard limited to the Property/Casualty area of practice. At the time, this was the only ASOP that specifically addresses modeling.

Over the ensuing years, the number and importance of modeling applications in actuarial science has increased, with the results of actuarial models often entering financial statements directly. Recognizing this trend, the ASB asked the Life Committee in 2010 to begin work on an ASOP focused on modeling. The Life Committee formed a task force to address this issue and, in February 2012, a discussion draft titled *Modeling in Life Insurance and Annuities* was released. Nineteen comment letters were received.

Based upon this feedback and numerous other discussions on the topic of modeling, in December 2012 the ASB created two multidisciplinary task forces under the direction of the General Committee: i) a general Modeling Task Force, charged with developing an ASOP to address modeling applications in all practice areas, and ii) a Task Force to consider expanding ASOP No. 38 to all practice areas while focusing exclusively on using catastrophe models.

An exposure draft titled *Modeling* was released in June 2013 with a scope that provides guidance to actuaries when selecting, designing, building, modifying, developing, or using models when performing actuarial services. ASOP No. 56, *Modeling*, was adopted by the ASB in December 2019. Changes have been made to this exposure draft of ASOP No. 38 to be consistent with ASOP No. 56 and other recent ASOPs.

The exposure draft of this revision of ASOP No. 38 was the work of the Catastrophe Modeling Task Force, whose membership has experience in life insurance, health insurance, property/casualty insurance, and enterprise risk management.

At the direction of the ASB, this standard was developed to apply to all practice areas and all forms of catastrophe models, including natural catastrophes such as hurricanes, earthquakes, and severe convective storms, and other catastrophes such as terrorist acts and pandemics.

#### **Exposure Draft**

The exposure draft was approved in September 2020 with a comment deadline of January 15, 2021. Four comment letters were received and considered in making changes that were reflected in the final ASOP.

#### Notable Changes from the Exposure Draft

Notable changes made to the exposure draft are summarized below. Additional changes were made to improve readability, clarity, or consistency.

- 1. Section 1.2, Scope, was revised to provide additional guidance to actuaries whose actuarial services involve reviewing or evaluating models.
- 2. In section 2, Definitions, the definition of "catastrophe model" was expanded to include a definition of model.
- 3. Section 3.2, Appropriate Reliance on Experts (now titled Catastrophe Models Developed by Experts), was revised to adopt language from ASOP No. 56, section 3.5(b).
- 4. An existing ASOP No. 38 example regarding validation to evaluate results derived from other models was reinserted into section 3.5.
- 5. A disclosure requirement for the extent of reliance on experts was added to section 4.1(b) and (c).

#### Notable Changes from the Existing ASOP

A cumulative summary of the notable changes from the existing ASOP are summarized below. Notable changes do not include additional changes made to improve readability, clarity, or consistency.

- 1. The ASOP was revised to apply to catastrophe models only and to all practice areas.
- 2. The scope was expanded to include the activities "selecting, reviewing, and evaluating" models in addition to the existing activity of "using" a model when performing actuarial services.
- 3. The scope was expanded to clarify that if the actuary determines that the guidance in the ASOP conflicts with the guidance in ASOP No. 56, the guidance of this ASOP will govern.

- 4. A new section specifically addressing reliance on data or other information supplied by others (section 3.8) was added.
- 5. The guidance on documentation (section 3.9) was updated and expanded to be consistent with current ASOPs.

The ASB thanks everyone who took the time to contribute comments and suggestions on the exposure draft.

The ASB would like to posthumously thank Martin M. Simons for his contribution to the ASOP No. 38 task force.

The ASB voted in July 2021 to adopt this standard.

## ASOP No. 38—Doc. No. 201

#### **EXHIBIT RB-11**

## Catastrophe Modeling Task Force

Shawna S. Ackerman, Chairperson

David A. Brentlinger Bradley J. Davis

#### General Committee of the ASB

## Susan E. Pantely, Chairperson

Geoff Bridges Brian J. Mullen
Andrew M. Erman Keith A. Passwater

Julianne H. Fried Hal Tepfer

Robert S. Miccolis Christian J. Wolfe

### **Actuarial Standards Board**

## Darrell D. Knapp, Chairperson

Elizabeth K. Brill Cande J. Olsen
Robert M. Damler Kathleen A. Riley
Kevin M. Dyke Judy K. Stromback
David E. Neve Patrick B. Woods

The Actuarial Standards Board (ASB) sets standards for appropriate actuarial practice in the United States through the development and promulgation of Actuarial Standards of Practice (ASOPs). These ASOPs describe the procedures an actuary should follow when performing actuarial services and identify what the actuary should disclose when communicating the results of those services.

#### **ACTUARIAL STANDARD OF PRACTICE NO. 38**

## CATASTROPHE MODELING (FOR ALL PRACTICE AREAS)

#### STANDARD OF PRACTICE

#### Section 1. Purpose, Scope, Cross References, and Effective Date

- 1.1 <u>Purpose</u>—This actuarial standard of practice (ASOP or standard) provides guidance to actuaries when performing actuarial services with respect to selecting, using, reviewing, or evaluating **catastrophe models**.
- 1.2 <u>Scope</u>—This ASOP applies to actuaries in any practice area when performing actuarial services with respect to selecting, using, reviewing, or evaluating **catastrophe models** to assess risk, including but not limited to **models** of hurricanes, earthquakes, severe convective storms, terrorist acts, and pandemics. This standard applies to the selection, use, review, or evaluation of **catastrophe models**, whether or not they are proprietary in nature.

If the actuary's actuarial services involve reviewing or evaluating **catastrophe models**, the reviewing or evaluating actuary should apply the guidance in this standard to the extent practicable within the scope of the actuary's assignment.

In addition to this standard, the actuary should follow the guidance in ASOP No. 56, *Modeling*, when selecting, using, reviewing, or evaluating **catastrophe models**. If the actuary determines that the guidance in this ASOP conflicts with the guidance in ASOP No. 56, the guidance of this ASOP will govern.

This standard does not apply to **models** of operational risks. This standard also does not apply to **models** of economic risks that deal with instances of extreme events such as hyperinflation or a stock market collapse.

This standard also does not apply when the actuary is only designing, developing, or modifying a **catastrophe model** (or a portion of a **catastrophe model**).

If the actuary departs from the guidance set forth in this ASOP in order to comply with applicable law (statutes, regulations, and other legally binding authority), or for any other reason, the actuary should refer to section 4. If a conflict exists between this standard and applicable law, the actuary should comply with applicable law.

- 1.3 <u>Cross References</u>—When this ASOP refers to the provisions of other documents, the reference includes the referenced documents as they may be amended or restated in the future, and any successor to them, by whatever name called. If any amended or restated document differs materially from the originally referenced document, the actuary should consider the guidance in this ASOP to the extent it is applicable and appropriate.
- 1.4 <u>Effective Date</u>—This standard is effective for work performed on or after December 1, 2021.

#### Section 2. Definitions

The terms below are defined for use in this actuarial standard of practice and appear in bold throughout the ASOP.

- 2.1 <u>Assumption</u>—A type of explicit **input** to a **catastrophe model** that is derived from **data**, represents possibilities based on professional judgment, or may be prescribed by law or others. When derived from **data**, an **assumption** may be statistical, financial, economic, mathematical, or scientific in nature, and may be described as a **parameter**.
- 2.2 <u>Catastrophe Model</u>—A **model** of low-frequency events with high-severity or widespread potential effects. **Catastrophe models** may be used to explain a system, to study effects of different components, or to derive estimates.
- 2.3 <u>Data</u>—Facts or information that are either direct **input** to a **catastrophe model** or inform the selection of **input. Data** may be collected from sources such as records, experience, experiments, surveys, observations, benefit plan or policy provisions, or **output** from other **models**.
- 2.4 <u>Expert</u>—One who is qualified by knowledge, skill, experience, training, or education to render an opinion concerning the matter at hand.
- 2.5 <u>Input</u>—Data or assumptions used in a catastrophe model to produce output.
- 2.6 <u>Intended Purpose</u>—The goal or question, whether generalized or specific, addressed by the **catastrophe model** within the context of the assignment.
- 2.7 <u>Model</u>—A simplified representation of relationships among real world variables, entities, or events using statistical, financial, economic, mathematical, non-quantitative, or scientific concepts and equations. A **model** consists of three components: an information **input** component, which delivers **data** and **assumptions** to the **model**; a processing

- component, which transforms **input** into **output**; and a results component, which translates the **output** into useful business information.
- 2.8 Output—The results of the **catastrophe model** including, but not limited to, point estimates, likely or possible ranges, and **data** or **assumptions** (as **input** for other **models**), behavioral expectations, or qualitative criteria on which decisions could be based.
- 2.9 <u>Parameter</u>—A type of statistical, financial, economic, mathematical, or scientific value that is used as **input** to **catastrophe models**. Examples of **parameters** include expected values in probability distributions and coefficients of formula variables.

## Section 3. Analysis of Issues and Recommended Practices

- 3.1 <u>Introduction</u>—In performing actuarial services, the actuary may find it appropriate to select, use, review, or evaluate **catastrophe models**. When selecting, using, reviewing or evaluating a **catastrophe model**, the actuary should do the following:
  - a. determine the appropriate level of reliance on **experts**;
  - b. have a basic understanding of the **catastrophe model**;
  - c. evaluate whether the **catastrophe model** is appropriate for the **intended purpose**;
  - d. determine that appropriate validation of the **catastrophe model** and **output** has occurred; and
  - e. determine the appropriate use of the **catastrophe model** and **output**.

The actuary's level of effort in understanding and evaluating a **catastrophe model** should be consistent with the **intended purpose** and the **catastrophe model output's** materiality to the results of the actuarial analysis.

- 3.2 <u>Catastrophe Models Developed by Experts</u>—When selecting, using, reviewing, or evaluating a **catastrophe model** developed by **experts**, the actuary should take into account the following:
  - a. whether the individual or individuals who developed the **catastrophe model** are **experts** in the applicable field;
  - b. the extent to which the **catastrophe model** has been reviewed or validated by **experts** in the applicable field, including known differences of opinion among

- **experts** concerning aspects of the **catastrophe model** that could be material to the actuary's use of the **catastrophe model**; and
- c. whether there are industry or regulatory standards that apply to the **catastrophe** model or to the testing or validation of the **catastrophe** model, and whether the **catastrophe** model has been certified as having met such standards.

The actuary may rely on **experts** in the applicable field in the evaluation of items in section 3.2(a)-(c) and should disclose the extent of such reliance.

- 3.3 <u>Understanding of the Catastrophe Model</u>—The actuary should be familiar with the basic components of the **catastrophe model** and understand both the user **input** and the **catastrophe model output**, as discussed below.
  - 3.3.1 <u>Catastrophe Model Components</u>—The actuary should be familiar with the basic components of the **catastrophe model** and have an understanding of how such components interrelate within the **catastrophe model**. In addition, the actuary should identify which fields of expertise were used in developing or updating the **catastrophe model** and should make a reasonable effort to determine if the **catastrophe model** is based on generally accepted practices within the applicable fields of expertise. The actuary should also be familiar with how the **catastrophe model** was tested or validated and the level of independent **expert** review and testing.
  - 3.3.2 <u>User Input</u>—The actuary should take reasonable steps to confirm that the precision and accuracy of the user **input** are consistent with the **intended purpose** and should refer, as applicable, to ASOP No. 23, *Data Quality*, when selecting, using, or evaluating **data** used in the **catastrophe model**. Certain user **input** may be required to produce **catastrophe model output** for the specific application. User **input** can include **assumptions** or **data**. If the **catastrophe model** requires user **input**, the actuary should evaluate the reasonableness of the user **input** and should have an understanding of the relationship between the user **input** and **catastrophe model output**.
  - 3.3.3 <u>Catastrophe Model Output</u>—The actuary should determine that the **catastrophe model output** is consistent with the **intended purpose**.
- 3.4 <u>Appropriateness of the Catastrophe Model for the Intended Purpose</u>—The actuary should evaluate whether the **catastrophe model** is appropriate for the **intended purpose** and take into account the following:

- 3.4.1. <u>Applicability of Historical Data</u>—To the extent historical **data** are used in the development of the **catastrophe model** or the establishment of **catastrophe model** parameters, the actuary should take into account the adequacy of the historical **data** in representing the range of reasonably expected outcomes consistent with current knowledge about the phenomena being analyzed.
- 3.4.2. <u>Developments in Relevant Fields</u>—The actuary should make a reasonable effort to be aware of significant developments in relevant fields of expertise that are likely to materially affect the **catastrophe model**.
- 3.5 <u>Output Validation</u>— The actuary should validate that the **output** reasonably represents that which is being modeled. Depending on the **intended purpose**, **output** validation may include the following:
  - a. comparing **output** to those of an alternative **model(s)**, where appropriate;
  - b. comparing the **output** produced by the **catastrophe model** with historical observations, if applicable;
  - c. comparing the consistency and reasonableness of relationships within the **output**; and
  - d. evaluating the reasonableness of changes in the **output** due to variations in the user **input**.
- Appropriate Use of the Catastrophe Model and Output—The actuary should evaluate the reasonableness of the catastrophe model output, considering the input and the intended purpose. The actuary should take into account the limitations of the catastrophe model and use professional judgment to determine whether it is appropriate to use the catastrophe model output. The actuary should also use professional judgment to determine whether any adjustments to the catastrophe model output are needed to meet the intended purpose. The actuary should disclose any such adjustments in accordance with section 4.1.
- 3.7 <u>Reliance on Another Actuary</u>—The actuary may rely on another actuary who has selected, used, reviewed, or evaluated the **catastrophe model**. However, the relying actuary should be reasonably satisfied that the other actuary is qualified to select, use, review, or evaluate the **catastrophe model** in accordance with applicable ASOPs, and the **catastrophe model** is appropriate for the **intended purpose**. The actuary should disclose the extent of any such reliance.

- 3.8 <u>Reliance on Data or Other Information Supplied by Others</u>—When relying on **data** or other information supplied by others, the actuary should refer to ASOP No. 23 and ASOP No. 41, *Actuarial Communications*, for guidance.
- 3.9 <u>Documentation</u>—The actuary should consider preparing and retaining documentation to support compliance with the requirements of section 3 and the disclosure requirements of section 4. If preparing documentation, the actuary should prepare such documentation in a form such that another actuary qualified in the same practice area could assess the reasonableness of the actuary's work and should document the steps taken to comply with this standard in light of proprietary aspects of the **catastrophe model**, if any. The degree of such documentation should be based on the professional judgment of the actuary and may vary with the complexity and purpose of the actuarial services. In addition, the actuary should refer to ASOP No. 41 for guidance related to the retention of file material other than that which is to be disclosed under section 4.

#### Section 4. Communications and Disclosures

- 4.1 <u>Required Disclosures in an Actuarial Report</u>—When issuing an actuarial report to which this standard applies, the actuary should refer to ASOP Nos. 23, 41, and 56. In addition, the actuary should disclose the following in such actuarial reports, as appropriate:
  - a. the **catastrophe model** used and the **intended purpose**;
  - b. the methodology used to validate the **catastrophe model** developed by **experts** (see section 3.2);
  - c. the extent of reliance on **experts** (see section 3.2);
  - d. a description of the user **input** that was incorporated into the **catastrophe model** (see section 3.3.2);
  - e. a description of adjustments made to the **catastrophe model output** (see section 3.6); and
  - f. the extent of any reliance placed upon the work of another actuary (see section 3.7).
- 4.2 <u>Additional Disclosures in an Actuarial Report</u>—The actuary also should include disclosures in accordance with ASOP No. 41 in an actuarial report for the following circumstances:
  - a. if any material **assumption** or method was prescribed by applicable law;

- b. if the actuary states reliance on other sources and thereby disclaims responsibility for any material **assumption** or method selected by a party other than the actuary; and
- c. if in the actuary's professional judgment, the actuary has deviated materially from the guidance of this ASOP.
- 4.3 <u>Confidential Information</u>—Nothing in this ASOP is intended to require the actuary to disclose confidential information.

## **Appendix 8**

## **Background and Current Practices**

*Note:* This appendix is provided for informational purposes and is not part of the standard of practice.

## **Background**

Hurricane Andrew in 1992 and the Northridge Earthquake in 1994 led actuaries involved in evaluating hurricane and earthquake exposures to recognize the severe inadequacy of the traditional, empirical actuarial methods used for ratemaking for these exposures. Recognizing the need to replace these methods, many actuaries began using stochastic computer simulation models for their actuarial analysis of hurricane and earthquake exposure. Computer simulation models had been commonly used for some time by actuaries and others for the purpose of evaluating probable maximum loss but had not been widely used for ratemaking.

Over time, the output from catastrophe models became commonly used by property/casualty actuaries in developing rates for catastrophic perils as well as many other risk management purposes.

## **Current Practices**

Catastrophe models are now widely used by actuaries in all practice areas for risk management analyses and calculating expected losses due to hurricanes, earthquakes, and terrorist acts. More recently, catastrophe models have also been developed to simulate wildfires, severe convective storms, tsunamis, and pandemics.

In addition, due to changes in regulations and financial reporting requirements, the number and importance of modeling applications in actuarial science has increased, with the results of actuarial models often entering financial statements directly.

Lastly, due to the evolution of enterprise risk management (ERM) practices and regulations, there has been increased use of catastrophe modeling as part of insurer stress testing and risk management across all practice areas. This trend is likely to continue to evolve and heighten in light of the emergence of the novel coronavirus and the COVID-19 pandemic.

## Appendix 2

#### **Comments on the Exposure Draft and Responses**

The exposure draft of the proposed revision of ASOP No. 38, *Catastrophe Modeling* (*for All Practice Areas*), was issued in September 2020 with a comment deadline of January 15, 2021. Four comment letters were received, some of which were submitted on behalf of multiple commentators, such as by firms or committees. For purposes of this appendix, the term "commentator" may refer to more than one person associated with a particular comment letter. The ASOP No. 38 Task Force carefully considered all comments received, and the ASB reviewed (and modified, where appropriate) the changes proposed by the ASOP No. 38 Task Force and the ASB General Committee.

Summarized below are the significant issues and questions contained in the comment letters and the responses. Minor wording or punctuation changes that were suggested but not significant are not reflected in the appendix, although they may have been adopted.

The term "reviewers" in appendix 2 includes the ASOP No. 38 Task Force, the ASB General Committee, and the ASB. Also, the section numbers and titles used in appendix 2 refer to those in the exposure draft, which are then cross referenced with those in the final ASOP.

Sl	SECTION 1. PURPOSE, SCOPE, CROSS REFERENCES, AND EFFECTIVE DATE				
Section 1.2	Section 1.2, Scope				
Comment	One commentator requested a clearer definition of what is excluded from the scope of ASOP No. 38, noting that catastrophe models can be used to infer economic impacts beyond direct claims and that novel catastrophic perils may fall into a gray area in which ASOP No. 38 may or may not apply.				
Response	The reviewers believe the guidance is appropriate and made no change in response to this comment. The reviewers note that section 1.2 does not limit the reason why a catastrophe model is used to perform actuarial services or whether the catastrophe model is a mature or novel catastrophe model.				
Comment	One commentator suggested that section 1.2 should state that the guidance in the standard applies to the extent practicable within the scope of the actuary's assignment when the actuary is reviewing or evaluating a catastrophe model.				
Response	The reviewers agree and made the change.				
Comment	One commentator suggested that "review or evaluation" be removed from the scope of the standard or alternatively that the scope be changed to exclude an actuary performing a regulatory review.				
Response	The reviewers believe the revised guidance is appropriate and made no change in response to this comment.				

Comment	One commentator recommended that section 1.2 should state that the application of the standard be based on the actuary's professional judgement as to the materiality of the model output for the intended user.			
Response	comment. The reviewers note that section 3.1 addresses materiality.			
Comment	One commentator recommended that section 1.2 should state that the guidance in the standard applies only to the extent of the actuary's responsibilities and adopt the language from ASOP No. 56 section 1.2.			
Response	The reviewers believe the guidance is appropriate and made no change in response to this comment.			
Comment	One commentator suggested that the scope of the standard be expanded to include elements similar to ASOP No. 56.			
Response	The reviewers believe the revised guidance is appropriate and made no change in response to this comment.			
Comment	Several commentators questioned what constituted a conflict between ASOP No. 38 and ASOP No. 56 versus what constituted a difference and asked how potential conflicts are meant to be resolved.			
Response The reviewers believe the revised guidance is appropriate and made no change in response comment. The reviewers note that ASOP No. 1, <i>Introductory Standard of Practice</i> , sectistates, "When an actuary believes that multiple ASOPs have conflicting provisions when to a specific situation and none provide explicit guidance concerning which governs, the should apply professional judgment and may wish to contact the ABCD for confidential guidance on appropriate practice."				
SECTION 2. DEFINITIONS				
Section 2.2,	Catastrophe Model			
Comment	Two commentators suggested clarifying the definition of catastrophe model.			
Response	The reviewers agree and made changes similar to those suggested by the commentators to improve clarity.			
Comment	nment One commentator suggested a definition for "model" be added to ASOP No. 38.			
Response	Response The reviewers agree and made the change.  SECTION 3. ANALYSIS OF ISSUES AND RECOMMENDED PRACTICES			
Section 3.1	Introduction			
Comment	One commentator suggested that the use of the term "validation" used in sections 3.1(d) and 3.5			
Comment	be clarified to distinguish if the terms are being used differently.			
Response	The reviewers believe the guidance is appropriate and made no change in response to this comment. The reviewers note section 3.1 introduces validation and section 3.5 provides details on the validation of catastrophe model output.			

Section 3.2	, Appropriate Reliance on Experts (now titled Catastrophe Models Developed by Experts)
Comment	One commentator recommended changing "should consider" to "may consider" regarding the appropriate level of reliance on experts to be consistent with the corresponding language in ASOP No. 56, section 3.5.
Response	The reviewers believe the guidance is appropriate and made no change in response to this comment.
Comment	One commentator recommended changing the language in section 3.2(b) to mirror ASOP No. 56, section 3.5(b).
Response	The reviewers agree and made the change.
Comment	One commentator noted that this section, does not include the language of ASOP No. 56, section 3.5(d), which considers whether the science underlying the expertise is likely to produce useful models for the intended purpose.
Response	The reviewers believe the guidance is appropriate and made no change in response to this comment.
Comment	One commentator recommended that ASOP No. 38 be expanded to require disclosure of reliance on experts.
Response	The reviewers agree and made the change.
Comment	One commentator suggested that the ASOP be expanded to explicitly allow reliance on an expert to select, use, review, or evaluate the catastrophe model.
Response	The reviewers believe the guidance is appropriate and consistent with the suggestion, and made no change in response to this comment.
Section 3.5	Appropriate Validation (now titled Output Validation)
Comment	One commentator requested that results derived from alternate models or methods, where available and appropriate, which is part of current ASOP No. 38, be added.  The reviewers partially agree and modified the language.
Response	The reviewers partially agree and modified the language.
	Reliance on Another Actuary
Comment	One commentator suggested that ASOP No. 56 be added to the requirements for reliance on another actuary.
Response	The reviewers believe the revised guidance is appropriate and made no change in response to this comment.



# Statement of Compliance with Actuarial Standard of Practice 38 Minchong Mao, FCAS, MAAA

# Background

Actuarial Standard of Practice 38 provides guidance to the actuary in using models that incorporate specialized knowledge outside the actuary's own area of expertise when developing an actuarial work product. When using such a model, the standard requires that the actuary perform five specific tasks, as described below using the numbering system of the standard. This document certifies that Minchong Mao, FCAS, MAAA, has performed these tasks for the catastrophe loss model(s) relied upon in the actuarial work product to which it is attached. It is intended that actuaries utilizing the actuarial work product in their insurance ratemaking efforts can rely on my model evaluation in accordance with Section 3.7 of the standard of practice. In July 2021, Actuarial Standards Board(ASB) adopted revision of ASOP No. 38. This document reflected the most current requirements in the 2021 revision.

# Model Versions Covered by this document

- AIR Hurricane model for the United States v1.0.0 utilized in Touchstone versions 2020, 2021 and later, released in 2021
- AIR Severe Thunderstorm Model for the United States v7.0 implemented in Touchstone version 5, 6, 7, 8, 2020, 2021 and later
- AIR Winter Storm Model for the United States v1.5 implemented in Touchstone version 5, 6, 7, 8, 2020, 2021 and later
- AIR Wildfire Model for the United States v2 implemented in Touchstone version 6, 7, 8, 2020, 2021 and later
- AIR Earthquake and Fire Following Model for the United States v10.1 implemented in Touchstone version 6, 7, 8, 2020, 2021 and later. This version included Time Dependent Earthquake Hazard Adjustment.

## 3.2 Appropriate Reliance on Experts

Catastrophe Models Developed by Experts—When selecting, using, reviewing, or evaluating a catastrophe model developed by experts, the actuary should take into account the following:

- a. whether the individual or individuals who developed the catastrophe model are experts in the applicable field;
- b. the extent to which the catastrophe model has been reviewed or validated by experts concerning aspects of the catastrophe model that could be material to the actuary's use of the catastrophe model; and
- c. whether there are industry or regulatory standards that apply to the catastrophe model or to the testing or validation of the catastrophe model, and whether the catastrophe model has been certified as having met such standards.



For those aspects of the model that are outside my area of expertise, I have relied on the list of experts provided by the modeler. Please see the modeler's ASOP 38 document and supporting documentation for additional information.

- a. The individuals listed as employees of the modeler appear to be experts in their respective fields.
- b. The modeler has provided documentation of reviews by outside experts. Many of these reviewers are well-recognized experts in their fields. I have reviewed the findings of the outside experts and found no significant differences of opinion with respect to the validity of the model.
- c. Standards for catastrophe loss models have been promulgated by a few states. Most notably, the Florida Commission on Hurricane Loss Projection Methodology was created to review catastrophe loss models. The model(s) used in this work product, or derivatives thereof, have been certified by the Florida Commission on Hurricane Loss Projection Methodology.

# 3.3 Understanding of the Model

The actuary should be familiar with the basic components of the catastrophe model and understand both the user input and the catastrophe model output, as discussed below.

I have reviewed the modeler's ASOP 38 document and supporting documentation describing the model's components, input, and output, as well as other documentation, to comply with this requirement. In addition, I have specialized in actuarial applications of catastrophe model output since 2005.

3.3.1 Catastrophe Model Components—The actuary should be familiar with the basic components of the catastrophe model and have an understanding of how such components interrelate within the catastrophe model. In addition, the actuary should identify which fields of expertise were used in developing or updating the catastrophe model and should make a reasonable effort to determine if the catastrophe model is based on generally accepted practices within the applicable fields of expertise. The actuary should also be familiar with how the catastrophe model was tested or validated and the level of independent expert review and testing.

I am reasonably familiar with the basic components of the model and have a basic understanding of how such components interrelate with in the model. I have identified the fields of expertise used in developing and updating the model and have determined that the model is based on generally accepted practices within the applicable fields of expertise. I am reasonably familiar with how the model was validated and have reviewed the documentation of reviews by outside experts.

3.3.2 User Input—The actuary should take reasonable steps to confirm that the precision and accuracy of the user input are consistent with the intended purpose and should refer, as applicable, to ASOP No. 23, Data Quality, when selecting, using, or evaluating data used in the catastrophe model. Certain user input may be required to produce catastrophe model output for the specific application. User input can include assumptions or data. If the catastrophe model requires user input, the actuary should evaluate the reasonableness of the user input and should have an understanding of the relationship between the user input and catastrophe model output.

I understand the user input required to produce model output, including the level of detail required to produce results that are consistent with insurance ratemaking and risk management applications.



3.3.3 Catastrophe Model Output—The actuary should determine that the catastrophe model output is consistent with the intended purpose.

I have determined that the model output is consistent with the insurance ratemaking applications for which it was used. We most often use event loss detail in our work, so we are always careful that our results balance to the model's prepared exhibits.

# 3.4 Appropriateness of the Model for the Intended Application

The actuary should evaluate whether the catastrophe model is appropriate for the intended purpose and take into account the following:

- 3.4.1. Applicability of Historical Data—To the extent historical data are used in the development of the catastrophe model or the establishment of catastrophe model parameters, the actuary should take into account the adequacy of the historical data in representing the range of reasonably expected outcomes consistent with current knowledge about the phenomena being analyzed.
- 3.4.2. Developments in Relevant Fields—The actuary should make a reasonable effort to be aware of significant developments in relevant fields of expertise that are likely to materially affect the catastrophe model.

The catastrophe model(s) we have relied upon were developed for purposes related to the management of risk. I have evaluated the model(s) in light of available alternatives and determined that the catastrophe loss model is the most appropriate method of estimating expected catastrophe loss distributions for insurance ratemaking.

Some additional considerations include the following:

- 3.4.1. Applicability of Historical Data: Historical data is relied upon extensively in the development and validation of catastrophe loss models. Smoothing procedures are applied in cases where reasonably foreseeable events are underrepresented in the historical data.
- 3.4.2. Developments in Relevant Fields: Catastrophe loss models are typically updated on an annual basis in order to incorporate the most current scientific research and information from recent catastrophe events.

I have made a reasonable effort to be aware of significant developments in the relevant fields of expertise. In particular, meteorological studies related to the current period of elevated hurricane activity are important in determining which of a model's frequency assumptions should be utilized in insurance ratemaking applications involving hurricane-exposed risk portfolios. Aon maintains a documentation library containing current research in the science of catastrophe perils.

# 3.5 Output Validation

The actuary should validate that the output reasonably represents that which is being modeled. Depending on the intended purpose, output validation may include the following:



- a. comparing output to those of an alternative model(s), where appropriate;
- b. comparing the output produced by the catastrophe model with historical observations, if applicable;
- c. comparing the consistency and reasonableness of relationships within the output; and
- d. evaluating the reasonableness of changes in the output due to variations in the user input.
- a. Aon conducts extensive testing of each model that we license whenever a new model is released. Output from Model output is checked for reasonability against other models and for consistency with the modeler's representations as to changes incorporated in the current version. I have reviewed the results of these tests and found the model used in this analysis to provide reasonable output.
- b. Catastrophes, by their nature, involve significant uncertainty in the amount of insured losses they produce. In light of this uncertainty, the model has been shown to produce reasonable estimates of losses incurred from historical events.

I have reviewed the modeler's ASOP 38 document and supporting documentation describing comparisons of model output to historical observations and found that the model produces reasonable estimates.

- c. I have reviewed the relationships among output results and found them to be consistent and reasonable.
- d. Aon conducts extensive testing of each model that we license with respect to the sensitivity of model output to variations in the user input and model assumptions. I have reviewed the results of these tests and obtained an understanding of the model's sensitivity.

# 3.6 Appropriate Use of the Model

The actuary should evaluate the reasonableness of the catastrophe model output, considering the input and the intended purpose. The actuary should take into account the limitations of the catastrophe model and use professional judgment to determine whether it is appropriate to use the catastrophe model output. The actuary should also use professional judgment to determine whether any adjustments to the catastrophe model output are needed to meet the intended purpose. The actuary should disclose any such adjustments in accordance with section 4.1.

In my professional judgment, it is appropriate to use the model results, without adjustment, for the purposes of the actuarial work product to which this document is attached.

# 3.7 Reliance on Another Actuary

The actuary may rely on another actuary who has selected, used, reviewed, or evaluated the catastrophe model. However, the relying actuary should be reasonably satisfied that the other actuary is qualified to select, use, review, or evaluate the catastrophe model in accordance with applicable ASOPs, and the



catastrophe model is appropriate for the intended purpose. The actuary should disclose the extent of any such reliance.

Actuaries utilizing the actuarial work product to which this document is attached can rely on my complete evaluation of the model(s) used as described above. In doing so, they should document the extent of such reliance in their work.

Minchong Mao FCAS, MAAA

Nov. 1 2021



# Statement of Compliance with Actuarial Standard of Practice 38 Minchong Mao, FCAS, MAAA

# Background

Actuarial Standard of Practice 38 provides guidance to the actuary in using models that incorporate specialized knowledge outside the actuary's own area of expertise when developing an actuarial work product. When using such a model, the standard requires that the actuary perform five specific tasks, as described below using the numbering system of the standard. This document certifies that Minchong Mao, FCAS, MAAA, has performed these tasks for the catastrophe loss model(s) relied upon in the actuarial work product to which it is attached. It is intended that actuaries utilizing the actuarial work product in their insurance ratemaking efforts can rely on my model evaluation in accordance with Section 3.7 of the standard of practice. In July 2021, Actuarial Standards Board(ASB) adopted revision of ASOP No. 38. This document reflected the most current requirements in the 2021 revision.

## Model Versions Covered by this document

- RMS North Atlantic Hurricane Model v21, released in 2021, implemented in RiskLink V21
- RMS North America Earthquake Model v17.0, released in 2017, implemented in RiskLink V17, 18, 18.1 and 21
- RMS Sever Convective Strom Model for the United States, released in 2014, implemented in RiskLink V17,18, 18.1 and 21
- RMS Winter Storm Model for the United States, release in 2013, implemented in RiskLink V17,18, 18.1 and 21

# 3.2 Appropriate Reliance on Experts

Catastrophe Models Developed by Experts—When selecting, using, reviewing, or evaluating a catastrophe model developed by experts, the actuary should take into account the following:

- a. whether the individual or individuals who developed the catastrophe model are experts in the applicable field;
- b. the extent to which the catastrophe model has been reviewed or validated by experts concerning aspects of the catastrophe model that could be material to the actuary's use of the catastrophe model; and
- c. whether there are industry or regulatory standards that apply to the catastrophe model or to the testing or validation of the catastrophe model, and whether the catastrophe model has been certified as having met such standards.

For those aspects of the model that are outside my area of expertise, I have relied on the list of experts provided by the modeler. Please see the modeler's ASOP 38 document and supporting documentation for additional information.

a. The individuals listed as employees of the modeler appear to be experts in their respective fields.



- b. The modeler has provided documentation of reviews by outside experts. Many of these reviewers are well-recognized experts in their fields. I have reviewed the findings of the outside experts and found no significant differences of opinion with respect to the validity of the model.
- c. Standards for catastrophe loss models have been promulgated by a few states. Most notably, the Florida Commission on Hurricane Loss Projection Methodology was created to review catastrophe loss models. The model(s) used in this work product, or derivatives thereof, have been certified by the Florida Commission on Hurricane Loss Projection Methodology.

# 3.3 Understanding of the Model

The actuary should be familiar with the basic components of the catastrophe model and understand both the user input and the catastrophe model output, as discussed below.

I have reviewed the modeler's ASOP 38 document and supporting documentation describing the model's components, input, and output, as well as other documentation, to comply with this requirement. In addition, I have specialized in actuarial applications of catastrophe model output since 2005.

3.3.1 Catastrophe Model Components—The actuary should be familiar with the basic components of the catastrophe model and have an understanding of how such components interrelate within the catastrophe model. In addition, the actuary should identify which fields of expertise were used in developing or updating the catastrophe model and should make a reasonable effort to determine if the catastrophe model is based on generally accepted practices within the applicable fields of expertise. The actuary should also be familiar with how the catastrophe model was tested or validated and the level of independent expert review and testing.

I am reasonably familiar with the basic components of the model and have a basic understanding of how such components interrelate with in the model. I have identified the fields of expertise used in developing and updating the model and have determined that the model is based on generally accepted practices within the applicable fields of expertise. I am reasonably familiar with how the model was validated and have reviewed the documentation of reviews by outside experts.

3.3.2 User Input—The actuary should take reasonable steps to confirm that the precision and accuracy of the user input are consistent with the intended purpose and should refer, as applicable, to ASOP No. 23, Data Quality, when selecting, using, or evaluating data used in the catastrophe model. Certain user input may be required to produce catastrophe model output for the specific application. User input can include assumptions or data. If the catastrophe model requires user input, the actuary should evaluate the reasonableness of the user input and should have an understanding of the relationship between the user input and catastrophe model output.

I understand the user input required to produce model output, including the level of detail required to produce results that are consistent with insurance ratemaking and risk management applications.

3.3.3 Catastrophe Model Output—The actuary should determine that the catastrophe model output is consistent with the intended purpose.

I have determined that the model output is consistent with the insurance ratemaking applications for which it was used. We most often use event loss detail in our work, so we are always careful that our results balance to the model's prepared exhibits.



# 3.4 Appropriateness of the Model for the Intended Application

The actuary should evaluate whether the catastrophe model is appropriate for the intended purpose and take into account the following:

- 3.4.1. Applicability of Historical Data—To the extent historical data are used in the development of the catastrophe model or the establishment of catastrophe model parameters, the actuary should take into account the adequacy of the historical data in representing the range of reasonably expected outcomes consistent with current knowledge about the phenomena being analyzed.
- 3.4.2. Developments in Relevant Fields—The actuary should make a reasonable effort to be aware of significant developments in relevant fields of expertise that are likely to materially affect the catastrophe model.

The catastrophe model(s) we have relied upon were developed for purposes related to the management of risk. I have evaluated the model(s) in light of available alternatives and determined that the catastrophe loss model is the most appropriate method of estimating expected catastrophe loss distributions for insurance ratemaking.

Some additional considerations include the following:

- 3.4.1. Applicability of Historical Data: Historical data is relied upon extensively in the development and validation of catastrophe loss models. Smoothing procedures are applied in cases where reasonably foreseeable events are underrepresented in the historical data.
- 3.4.2. Developments in Relevant Fields: Catastrophe loss models are typically updated on an annual basis in order to incorporate the most current scientific research and information from recent catastrophe events.

I have made a reasonable effort to be aware of significant developments in the relevant fields of expertise. In particular, meteorological studies related to the current period of elevated hurricane activity are important in determining which of a model's frequency assumptions should be utilized in insurance ratemaking applications involving hurricane-exposed risk portfolios. Aon maintains a documentation library containing current research in the science of catastrophe perils.

# 3.5 Output Validation

The actuary should validate that the output reasonably represents that which is being modeled. Depending on the intended purpose, output validation may include the following:

- a. comparing output to those of an alternative model(s), where appropriate;
- b. comparing the output produced by the catastrophe model with historical observations, if applicable;
- c. comparing the consistency and reasonableness of relationships within the output; and



d. evaluating the reasonableness of changes in the output due to variations in the user input.

- a. Aon conducts extensive testing of each model that we license whenever a new model is released. Output from Model output is checked for reasonability against other models and for consistency with the modeler's representations as to changes incorporated in the current version. I have reviewed the results of these tests and found the model used in this analysis to provide reasonable output.
- b. Catastrophes, by their nature, involve significant uncertainty in the amount of insured losses they produce. In light of this uncertainty, the model has been shown to produce reasonable estimates of losses incurred from historical events.

I have reviewed the modeler's ASOP 38 document and supporting documentation describing comparisons of model output to historical observations and found that the model produces reasonable estimates.

- c. I have reviewed the relationships among output results and found them to be consistent and reasonable.
- d. Aon conducts extensive testing of each model that we license with respect to the sensitivity of model output to variations in the user input and model assumptions. I have reviewed the results of these tests and obtained an understanding of the model's sensitivity.

## 3.6 Appropriate Use of the Model

The actuary should evaluate the reasonableness of the catastrophe model output, considering the input and the intended purpose. The actuary should take into account the limitations of the catastrophe model and use professional judgment to determine whether it is appropriate to use the catastrophe model output. The actuary should also use professional judgment to determine whether any adjustments to the catastrophe model output are needed to meet the intended purpose. The actuary should disclose any such adjustments in accordance with section 4.1.

In my professional judgment, it is appropriate to use the model results, without adjustment, for the purposes of the actuarial work product to which this document is attached.

# 3.7 Reliance on Another Actuary

The actuary may rely on another actuary who has selected, used, reviewed, or evaluated the catastrophe model. However, the relying actuary should be reasonably satisfied that the other actuary is qualified to select, use, review, or evaluate the catastrophe model in accordance with applicable ASOPs, and the catastrophe model is appropriate for the intended purpose. The actuary should disclose the extent of any such reliance.

Actuaries utilizing the actuarial work product to which this document is attached can rely on my complete evaluation of the model(s) used as described above. In doing so, they should document the extent of such reliance in their work.



Minchong Mao FCAS, MAAA

May Man

Nov. 1 2021

# Support for Selected Reinsurance Structure

	Return Periods		
Layer	Attachment	Exhaustion	
201M XS 461M	97	202	
175M XS 286M	42	97	
100M XS 186M	22	42	
75M XS IIIM	12	22	
50M XS 61M	7	12	

The table above shows the All Peril 50/50 RMSv21 Historical/TSv9 Standard blend attachment and exhaustion points with Catastrophe LAE for the North Carolina Rate Bureau portfolio, along with the selected reinsurance program.

## Reinsurance Program Summary

Reinsurance Layer	Rate-On-Line	Deposit Premium	Reinstatement Premium	Expected Total Premium	Expected Ceded Loss	Net Cost of Reinsurance
201M XS 461M	4.48%	9,004,800	68,899	9,073,699	1,555,775	7,517,923
175M XS 286M	6.82%	11,935,000	177,388	12,112,388	2,643,023	9,469,364
100M XS 186M	10.06%	10,060,000	271,604	10,331,604	2,772,362	7,559,242
75M XS 111M	13.99%	10,492,500	473,011	10,965,511	3,517,673	7,447,839
50M XS 61M	18.99%	9,495,000	693,571	10,188,571	3,864,612	6,323,958
Total		50,987,300	1,684,473	52,671,773	14,353,446	38,318,327

The table above shows indicated rates-on-line for the filing's reinsurance structure along with analysis of modeled catastrophe losses. Rate-on-Line values have been selected using the current Loss-On-Line approach, which is a benchmarking analysis done using reinsurance treaties placed by Aon.

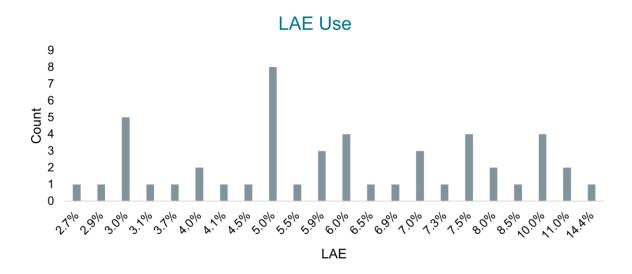
Deposit Premium is Rate-On-Line \* Layer Limit

Expected Ceded Loss and Expected Reinstatement premium are the average annual amounts of each based on a simulation of catastrophe losses subject to the reinsurance program.

Expected Total Premium = Deposit Premium + Expected Reinstatement Premium

Net Cost of Reinsurance = Expected Total Premium - Expected Ceded Loss

## North Carolina Rate Bureau Mobile Home Insurance Rate Filing Support for Selected Catastrophe LAE Factor



This chart shows Catastrophe LAE factors applied to modeled catastrophe event losses in AM Best SRQ Submissions by Aon clients in 2021.

- Factors were rounded to the nearest 0.5
- A weighted average was used where factors varied by peril
- Multiple factors were counted where factors varied by company within a group
- Reflects all clients that included a provision for LAE

The mean factor is 6.40%, the median is 6.00%, and the mode is 5.00%.

Layer 1: 50M XS 61M

		MH(C)			MH(F)	
Peril/territory	Premium	Ceded AAL	Reins Margin	Premium	Ceded AAL	Reins Margin
HU	43.51%	43.63%	43.44%	49.29%	49.60%	49.11%
110	0.16%	0.17%	0.16%	0.19%	0.19%	0.18%
120	0.66%	0.68%	0.65%	1.89%	1.95%	1.85%
130	0.45%	0.46%	0.45%	0.83%	0.85%	0.82%
140	3.89%	4.01%	3.82%	8.79%	9.09%	8.60%
150	1.96%	2.00%	1.93%	3.01%	3.07%	2.97%
160	2.00%	2.02%	1.99%	3.97%	4.02%	3.94%
170	0.47%	0.47%	0.47%	0.44%	0.44%	0.43%
180	4.39%	4.35%	4.41%	4.13%	4.12%	4.15%
190	2.56%	2.53%	2.58%	2.55%	2.52%	2.56%
200	1.17%	1.14%	1.19%	2.08%	2.03%	2.12%
210	1.56%	1.55%	1.57%	1.41%	1.39%	1.41%
220	2.29%	2.24%	2.32%	2.45%	2.41%	2.48%
230	2.33%	2.29%	2.35%	3.99%	3.93%	4.02%
240	5.31%	5.26%	5.35%	3.10%	3.07%	3.12%
250	1.80%	1.76%	1.82%	1.92%	1.87%	1.95%
260	2.00%	2.01%	2.00%	1.06%	1.06%	1.06%
270	1.51%	1.50%	1.52%	0.81%	0.81%	0.82%
280	0.46%	0.46%	0.45%	0.27%	0.27%	0.27%
290	0.63%	0.62%	0.64%	0.91%	0.89%	0.92%
300	0.41%	0.40%	0.41%	0.69%	0.68%	0.70%
310	1.49%	1.53%	1.47%	1.06%	1.08%	1.05%
320	1.90%	1.93%	1.88%	1.14%	1.16%	1.14%
330	0.11%	0.11%	0.10%	0.09%	0.09%	0.09%
340	1.52%	1.54%	1.50%	0.84%	0.86%	0.83%
350	1.04%	1.07%	1.01%	0.62%	0.64%	0.60%
360	1.14%	1.20%	1.10%	0.84%	0.88%	0.81%
370	0.04%	0.04%	0.03%	0.03%	0.03%	0.03%
380	0.14%	0.16%	0.14%	0.11%	0.12%	0.10%
390	0.14%	0.15%	0.13%	0.08%	0.08%	0.07%
EQFF	0.23%	0.20%	0.24%	0.00%	0.00%	0.00%
OW	0.76%	0.87%	0.69%	0.55%	0.63%	0.50%
SS	2.12%	1.92%	2.24%	3.46%	3.09%	3.68%
WT	0.05%	0.04%	0.05%	0.04%	0.03%	0.04%
Grand Total	46.66%	46.65%	46.67%	53.34%	53.35%	53.33%

Layer 2: 75M XS 111M

		MH(C)			MH(F)	
Peril/territory	Premium	Ceded AAL	Reins Margin	Premium	Ceded AAL	Reins Margin
HU	44.76%	45.01%	44.64%	49.52%	50.08%	49.26%
110	0.12%	0.12%	0.12%	0.14%	0.14%	0.14%
120	0.59%	0.61%	0.58%	1.69%	1.78%	1.65%
130	0.37%	0.38%	0.36%	0.68%	0.70%	0.67%
140	3.62%	3.81%	3.54%	8.24%	8.70%	8.02%
150	1.72%	1.77%	1.69%	2.66%	2.75%	2.62%
160	1.96%	2.01%	1.94%	3.92%	4.03%	3.87%
170	0.42%	0.42%	0.42%	0.39%	0.39%	0.39%
180	4.36%	4.34%	4.37%	4.09%	4.09%	4.09%
190	2.58%	2.57%	2.59%	2.57%	2.57%	2.58%
200	1.17%	1.14%	1.19%	2.09%	2.03%	2.11%
210	1.61%	1.60%	1.62%	1.46%	1.45%	1.46%
220	2.46%	2.41%	2.48%	2.63%	2.59%	2.65%
230	2.45%	2.41%	2.47%	4.19%	4.15%	4.22%
240	5.76%	5.70%	5.79%	3.33%	3.30%	3.35%
250	1.98%	1.93%	2.00%	2.11%	2.04%	2.14%
260	2.24%	2.24%	2.23%	1.20%	1.19%	1.20%
270	1.71%	1.70%	1.72%	0.92%	0.91%	0.93%
280	0.53%	0.54%	0.53%	0.31%	0.31%	0.31%
290	0.71%	0.69%	0.72%	1.03%	0.99%	1.04%
300	0.44%	0.43%	0.44%	0.75%	0.73%	0.76%
310	1.73%	1.77%	1.72%	1.24%	1.25%	1.23%
320	2.12%	2.15%	2.10%	1.29%	1.30%	1.29%
330	0.12%	0.12%	0.12%	0.10%	0.11%	0.10%
340	1.60%	1.62%	1.58%	0.89%	0.91%	0.89%
350	1.02%	1.06%	1.00%	0.61%	0.63%	0.60%
360	1.10%	1.17%	1.06%	0.81%	0.86%	0.79%
370	0.04%	0.04%	0.03%	0.03%	0.03%	0.03%
380	0.13%	0.14%	0.12%	0.09%	0.10%	0.09%
390	0.11%	0.12%	0.11%	0.06%	0.06%	0.06%
EQFF	0.17%	0.14%	0.19%	0.00%	0.00%	0.00%
ow	0.14%	0.17%	0.12%	0.09%	0.12%	0.08%
SS	2.00%	1.70%	2.14%	3.29%	2.76%	3.55%
WT	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
<b>Grand Total</b>	47.08%	47.03%	47.11%	52.92%	52.97%	52.89%

Layer 3: 100M XS 186M

		MH(C)			MH(F)	
Peril/territory	Premium	Ceded AAL	Reins Margin	Premium	Ceded AAL	Reins Margin
HU	45.60%	45.93%	45.49%	49.38%	50.18%	49.09%
110	0.09%	0.09%	0.09%	0.10%	0.10%	0.10%
120	0.52%	0.55%	0.50%	1.49%	1.60%	1.45%
130	0.30%	0.30%	0.30%	0.56%	0.58%	0.55%
140	3.34%	3.60%	3.25%	7.65%	8.29%	7.42%
150	1.50%	1.55%	1.48%	2.34%	2.44%	2.31%
160	1.89%	1.98%	1.85%	3.81%	4.00%	3.74%
170	0.37%	0.37%	0.38%	0.34%	0.34%	0.35%
180	4.26%	4.25%	4.26%	3.98%	4.00%	3.98%
190	2.56%	2.58%	2.55%	2.56%	2.58%	2.55%
200	1.16%	1.13%	1.17%	2.07%	2.02%	2.08%
210	1.63%	1.62%	1.63%	1.47%	1.47%	1.48%
220	2.60%	2.56%	2.61%	2.77%	2.74%	2.78%
230	2.54%	2.52%	2.55%	4.36%	4.33%	4.37%
240	6.07%	5.99%	6.10%	3.49%	3.44%	3.51%
250	2.14%	2.07%	2.16%	2.27%	2.18%	2.31%
260	2.43%	2.42%	2.43%	1.31%	1.29%	1.32%
270	1.88%	1.85%	1.89%	1.01%	0.99%	1.02%
280	0.60%	0.61%	0.60%	0.36%	0.36%	0.36%
290	0.78%	0.76%	0.79%	1.14%	1.09%	1.16%
300	0.48%	0.46%	0.48%	0.81%	0.77%	0.82%
310	1.99%	2.02%	1.98%	1.42%	1.43%	1.42%
320	2.35%	2.36%	2.34%	1.45%	1.44%	1.45%
330	0.13%	0.13%	0.13%	0.12%	0.12%	0.12%
340	1.69%	1.71%	1.69%	0.96%	0.96%	0.95%
350	1.02%	1.06%	1.00%	0.60%	0.62%	0.60%
360	1.07%	1.14%	1.04%	0.79%	0.84%	0.77%
370	0.04%	0.04%	0.03%	0.03%	0.03%	0.03%
380	0.11%	0.11%	0.10%	0.08%	0.09%	0.08%
390	0.09%	0.09%	0.09%	0.05%	0.05%	0.05%
EQFF	0.11%	0.08%	0.12%	0.00%	0.00%	0.00%
OW	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%
SS	1.84%	1.45%	1.98%	3.06%	2.36%	3.32%
<b>Grand Total</b>	47.55%	47.46%	47.59%	52.45%	52.54%	52.41%

Layer 4: 175M XS 286M

		MH(C)			MH(F)	
Peril/territory	Premium	Ceded AAL	Reins Margin	Premium	Ceded AAL	Reins Margin
HU	46.19%	46.62%	46.07%	49.12%	50.05%	48.86%
110	0.07%	0.07%	0.07%	0.08%	0.07%	0.08%
120	0.45%	0.49%	0.44%	1.30%	1.42%	1.27%
130	0.25%	0.25%	0.25%	0.47%	0.48%	0.46%
140	3.06%	3.37%	2.97%	7.03%	7.79%	6.82%
150	1.32%	1.37%	1.31%	2.08%	2.17%	2.06%
160	1.82%	1.94%	1.79%	3.69%	3.95%	3.62%
170	0.34%	0.32%	0.34%	0.31%	0.30%	0.32%
180	4.14%	4.15%	4.13%	3.86%	3.89%	3.85%
190	2.53%	2.58%	2.52%	2.54%	2.59%	2.52%
200	1.15%	1.12%	1.16%	2.05%	2.00%	2.07%
210	1.62%	1.62%	1.62%	1.47%	1.47%	1.47%
220	2.71%	2.69%	2.72%	2.88%	2.88%	2.89%
230	2.64%	2.61%	2.64%	4.53%	4.49%	4.54%
240	6.28%	6.24%	6.29%	3.60%	3.56%	3.61%
250	2.27%	2.21%	2.29%	2.42%	2.30%	2.45%
260	2.57%	2.57%	2.57%	1.40%	1.38%	1.41%
270	2.01%	2.00%	2.01%	1.08%	1.07%	1.09%
280	0.67%	0.68%	0.67%	0.40%	0.40%	0.40%
290	0.86%	0.83%	0.86%	1.25%	1.18%	1.27%
300	0.51%	0.49%	0.52%	0.87%	0.81%	0.88%
310	2.23%	2.26%	2.22%	1.60%	1.60%	1.60%
320	2.56%	2.55%	2.56%	1.59%	1.57%	1.60%
330	0.14%	0.14%	0.14%	0.13%	0.13%	0.13%
340	1.77%	1.76%	1.77%	1.00%	1.00%	1.01%
350	1.00%	1.02%	0.99%	0.59%	0.60%	0.59%
360	1.04%	1.09%	1.02%	0.77%	0.80%	0.75%
370	0.03%	0.04%	0.03%	0.03%	0.03%	0.03%
380	0.09%	0.10%	0.09%	0.07%	0.07%	0.07%
390	0.07%	0.07%	0.07%	0.04%	0.04%	0.04%
EQFF	0.07%	0.04%	0.08%	0.00%	0.00%	0.00%
SS	1.71%	1.24%	1.85%	2.91%	2.04%	3.15%
Grand Total	47.98%	47.90%	48.00%	52.02%	52.10%	52.00%

Layer 5: 201M XS 461M

		MH(C)			MH(F)	
Peril/territory	Premium	Ceded AAL	Reins Margin	Premium	Ceded AAL	Reins Margin
HU	46.72%	47.26%	46.60%	48.93%	49.85%	48.74%
110	0.05%	0.05%	0.05%	0.06%	0.06%	0.06%
120	0.40%	0.43%	0.40%	1.17%	1.27%	1.15%
130	0.21%	0.21%	0.21%	0.40%	0.40%	0.40%
140	2.84%	3.13%	2.77%	6.54%	7.27%	6.39%
150	1.18%	1.20%	1.18%	1.88%	1.93%	1.87%
160	1.77%	1.90%	1.75%	3.61%	3.89%	3.55%
170	0.31%	0.29%	0.32%	0.29%	0.26%	0.29%
180	4.03%	4.01%	4.03%	3.76%	3.76%	3.76%
190	2.50%	2.55%	2.49%	2.52%	2.57%	2.51%
200	1.13%	1.09%	1.14%	2.02%	1.96%	2.03%
210	1.61%	1.60%	1.62%	1.47%	1.46%	1.47%
220	2.80%	2.81%	2.80%	2.98%	3.02%	2.97%
230	2.68%	2.67%	2.68%	4.62%	4.61%	4.62%
240	6.48%	6.44%	6.48%	3.70%	3.65%	3.71%
250	2.38%	2.35%	2.39%	2.53%	2.43%	2.55%
260	2.68%	2.69%	2.68%	1.47%	1.45%	1.47%
270	2.12%	2.13%	2.12%	1.15%	1.14%	1.15%
280	0.73%	0.75%	0.73%	0.43%	0.44%	0.43%
290	0.92%	0.90%	0.92%	1.34%	1.28%	1.35%
300	0.54%	0.51%	0.54%	0.91%	0.85%	0.92%
310	2.42%	2.48%	2.41%	1.74%	1.75%	1.74%
320	2.75%	2.77%	2.75%	1.72%	1.71%	1.73%
330	0.15%	0.16%	0.15%	0.13%	0.14%	0.13%
340	1.82%	1.83%	1.82%	1.04%	1.04%	1.04%
350	0.98%	1.01%	0.97%	0.58%	0.59%	0.58%
360	1.03%	1.10%	1.02%	0.76%	0.80%	0.75%
370	0.03%	0.04%	0.03%	0.03%	0.03%	0.03%
380	0.09%	0.09%	0.09%	0.07%	0.07%	0.06%
390	0.06%	0.06%	0.06%	0.03%	0.03%	0.03%
EQFF	0.07%	0.03%	0.08%	0.00%	0.00%	0.00%
SS	1.57%	1.07%	1.68%	2.71%	1.78%	2.90%
Grand Total	48.36%	48.37%	48.36%	51.64%	51.63%	51.64%

Territory	MH(C)-A+D	MH(C)-B	MH(C)-C	MH(C)-Total	MH(F)-O	MH(F)-R	MH(F)-Total	MH C+F Total
110	37,646	2,452	9,124	49,223	59,159	0	59,159	108,381
120	229,501	11,908	45,683	287,092	775,205	7	775,212	1,062,304
130	152,976	12,979	46,815	212,770	385,640	71	385,711	598,481
140	1,118,289	80,260	189,551	1,388,100	3,106,719	947	3,107,666	4,495,766
150	659,676	58,631	161,343	879,650	1,353,471	851	1,354,322	2,233,972
160	622,559	53,952	80,383	756,894	1,488,183	150	1,488,333	2,245,227
170	130,917	12,832	15,244	158,992	146,788	81	146,869	305,861
180	1,382,724	132,130	150,447	1,665,300	1,560,041	2,026	1,562,067	3,227,367
190	799,422	87,028	89,836	976,286	972,179	1,550	973,729	1,950,014
200	378,428	31,882	39,421	449,731	797,477	0	797,477	1,247,209
210	516,985	54,309	48,150	619,444	559,904	481	560,385	1,179,829
220	845,236	75,773	80,247	1,001,256	1,061,026	147	1,061,173	2,062,429
230	832,649	71,007	78,655	982,311	1,676,419	550	1,676,969	2,659,280
240	1,952,340	202,026	167,200	2,321,566	1,334,275	1,478	1,335,753	3,657,319
250	696,657	69,401	61,304	827,361	881,203	936	882,139	1,709,500
260	787,043	85,292	58,333	930,667	504,569	141	504,709	1,435,376
270	612,861	55,539	49,156	717,556	387,293	370	387,663	1,105,219
280	196,741	20,268	15,377	232,386	137,394	157	137,550	369,937
290	266,395	20,506	18,998	305,900	445,212	259	445,471	751,371
300	161,456	12,411	12,036	185,904	315,272	130	315,402	501,305
310	650,001	67,316	50,244	767,561	549,164	311	549,475	1,317,036
320	767,842	81,598	60,866	910,306	560,805	390	561,195	1,471,500
330	42,165	4,676	3,452	50,292	44,236	11	44,247	94,539
340	552,157	56,696	43,913	652,766	367,504	336	367,840	1,020,606
350	330,587	32,928	25,312	388,828	228,684	282	228,966	617,794
360	359,517	35,097	29,200	423,814	308,099	257	308,356	732,170
370	11,358	918	671	12,946	10,470	5	10,475	23,422
380	36,704	3,338	2,695	42,737	31,064	18	31,082	73,819
390	34,031	3,016	3,015	40,062	21,210	21	21,230	61,292
Total	15,164,862	1,436,169	1,636,669	18,237,701	20,068,663	11,963	20,080,626	38,318,327

## PREFILED TESTIMONY OF GEORGE ZANJANI

#### MOBILE HOMEOWNERS MH(C) INSURANCE RATE FILING NORTH CAROLINA RATE BUREAU OCTOBER, 2022

#### I. Qualifications and Summary

- Q: What is your name, occupation, and business address?
- A: My name is George Zanjani. I am Professor of Finance and the holder of the Frank Park Samford Chair of Insurance at the University of Alabama. My business address is 1074 Alderwood Lane NE, Marietta, Georgia 30068.
- Q: Please describe your educational and employment background.
- A: A complete curriculum vitae is attached as Exhibit RB-20 with this testimony. To summarize, my undergraduate studies were at Stanford University from 1987-1990, where I earned an A.B./B.S. in Economics and Biology. I joined the commercial lines actuarial department of Fireman's Fund Insurance Companies in 1990 as an Assistant Actuarial Analyst. Upon leaving in 1994, I was a Senior Actuarial Analyst, an Associate of the Casualty Actuarial Society, and the head of the company's Workers Compensation actuarial unit. I did my graduate studies in Economics at the University of Chicago, earning a Ph.D. in 2000. I joined the Research Department of the Federal Reserve Bank of New York in the Capital Markets Function as a Research Economist in 2000, leaving as a Senior Economist in 2008. I joined the Robinson College of Business of Georgia State University in 2008 as an Associate Professor of Risk Management and Insurance and was honored as the inaugural holder of the AAMGA Distinguished Chair in Risk Management and Insurance in 2011. I started my current position in 2017.
- Q: Please elaborate on some of your professional activities.
- A: My professional career has been focused on insurance. After four years of actuarial work in commercial lines insurance, my dissertation addressed the economics of insurance pricing. I specialized on insurance issues while at the Federal Reserve Bank of New York. In particular, I served for the Bank on the Presidential Working Group on Financial Markets during its review of the renewal of the Terrorism Risk Insurance Act in 2006 and on the Committee on the Global Financial System Task Force on Institutional Investors, Global Savings, and Asset Allocation.

My academic service activities include 1) service as referee for various academic journals, 2) service as an associate editor of the *Journal of Insurance Issues*, and 3) (current) service as a senior editor for the *Journal of Risk and Insurance* and as an associate editor for *Insurance*: *Mathematics and Economics*. In addition, I have served on the Board of the American Risk and Insurance Association and served as President of that association. I have also served as

President of the Risk Theory Society. I currently serve on the International Research Advisory Board of National Chengchi University.

As an academic, I continue to write on insurance pricing, participate in academic conferences on insurance, and engage in various sponsored research and consulting activities related to insurance. The latter activities include two research projects on capital allocation sponsored by the Casualty Actuarial Society during the last decade and a project on the financial crisis and the insurance industry sponsored by the Society of Actuaries in 2009. In addition, I have taught various courses at the undergraduate and graduate levels over the past decade, including classes on financial risk management, risk modeling, and property-casualty insurance.

- Q: Have you published any papers or books?
- A: Yes. I have published various articles, book chapters, reviews, and white papers on insurance pricing and other aspects of insurance markets. Published or forthcoming work includes articles on insurance topics in the *American Economic Review, Insurance: Mathematics and Economics*, the *Journal of Banking and Finance*, the *Journal of Financial Economics*, the *Journal of Public Economics*, the *Journal of Risk and Insurance, Management Science, North American Actuarial Journal*, and *Variance*. My co-authors and I have two chapters in the 2013 edition of the <u>Handbook of Insurance</u>, one on capital allocation for insurance companies, and the other on the financial pricing of insurance. Two papers have won awards for their contributions to the field of actuarial science: I received the 2010 ARIA award from the Casualty Actuarial Society and shared the 2015 Charles A. Hachemeister Prize (also from the Casualty Actuarial Society) with a co-author.
- Q: Are you a member of any professional organizations?
- A: I am a member of the American Economic Association, the American Finance Association, the American Risk and Insurance Association, and the Risk Theory Society. I am also an Associate of the Casualty Actuarial Society. I served on the Board of Directors of the American Risk and Insurance Association from 2007 to 2014 and served as President in 2012-2013. I served as President of the Risk Theory Society in 2012.
- Q: Have you ever testified in insurance rate regulatory proceedings?
- A: Yes. I have offered testimony in Workers Compensation insurance rate filings in Florida (2015 and 2017), Massachusetts (2020 and 2022), and Virginia (2016). In addition, I have supplied testimony for various rate filings in North Carolina starting in 2019, including Workers Compensation, Private Passenger Auto, Homeowners, Mobile Homeowners, Flood, and Dwelling.
- Q: What was the nature of your testimony in those previous cases?
- A: In the Florida, Massachusetts, and Virginia cases, I offered testimony on the underwriting profit factors used in the rates. Specifically, I evaluated the suitability of the methods and assumptions used to develop those factors, as well as whether the rate of return on capital implied by those factors was reasonable. For the North Carolina filings, I estimated the rate of

return on capital implied by the selected underwriting profit factors and assessed whether that rate of return was reasonable.

- Q: What is the purpose of your testimony in this proceeding?
- A: I was asked by the North Carolina Rate Bureau, as a financial economist with expertise in insurance, 1) to assist the Bureau committee with the underwriting profit factor selection, 2) to determine the expected return on insurance net worth implicit in the filing, and 3) to assess whether the expected return on net worth constitutes a reasonable rate of return and thus whether the selected underwriting profit factor satisfies North Carolina's statutory requirements.
- Q; Please summarize the main findings of your testimony.
- A: The first task was to determine the range for a reasonable rate of return on capital. I started by creating a set of estimates of the cost of insurance equity relevant for the North Carolina Mobile Homeowners insurance market. I consulted various third party estimates of the cost of equity for the property-casualty insurance industry. I also generated my own estimates using a single-factor risk premium approach, where the cost of equity was determined by 1) the historical excess return of the overall stock market over bonds, 2) the historical correlation of the equity prices of the firms serving the North Carolina Mobile Homeowners market with the overall stock market, and 3) the current level of bond yields. Finally, I adjusted the cost of equity to account for the significant presence of private companies in the North Carolina market. The cost of equity estimates resulting from this exercise ranged from about 6.9% to 18.5%.

Next, I calculated a weighted average cost of capital (WACC) by estimating the fraction of debt in the typical insurance holding company capital structure and weighting together the cost of equity with cost of debt based on this fraction. The resulting range for the WACC was about 6.2% to 15.6%.

The next task was to determine the projected rate of return on capital associated with the selected underwriting profit provision. Using a pro forma return model similar to that used in previous filings, I analyzed how the selected underwriting profit provisions used in the filing translate into expected returns on net worth. Consistent with previous filings, and with North Carolina law stipulating that the investment income earned on capital and surplus is not to be considered in determining the appropriate rate of return for the insurance industry, I refer to the expected return on net worth without including investment income on capital and surplus as the *statutory return*. When calculating the expected return on net worth including investment income earned on capital and surplus, I refer to the figure as the *total return*. My calculations for Mobile Homeowners MH(C) are detailed in Exhibits RB-21 and RB-22 and are summarized below:

Return Definition	Ex Liability	Liability
Statutory Return	7.19%	7.26%
Total Return	10.68%	10.79%

I next considered two adjustments to the model that I believe produce a more accurate representation of the rate of return produced by the selected underwriting profit factor. First, I adjusted the asset portfolio allocations (across bonds, stocks, and various other investments) to reflect the allocations actually supporting North Carolina Mobile Homeowners business, rather than the overall average industry allocations. Second, I adjusted the prospective portfolio yields to reflect current market conditions, as opposed to the average of current market yields and embedded yields. The combined effect of these changes is to reduce the statutory returns by approximately 10 to 20 basis points and the total return by approximately 40 to 50 basis points.

I then compared the projected returns on capital associated with the selected underwriting factor with the cost of equity and WACC ranges described above. The projected statutory returns and the projected total returns both fell within the range of cost of equity estimates, and they also fell within the range of WACC estimates. This conclusion still holds after adjusting the portfolio allocations and prospective yields as described above. I therefore conclude that the expected returns implied by the underwriting profit provisions used in the filing are reasonable and not excessive.

#### II. Expected Return on Net Worth

- Q: In general terms, how did you determine the expected return on net worth implied by the underwriting profit provision used in the filing?
- A: I used a *pro forma* return model similar to that used in previous filings in North Carolina. The model accounts for underwriting income, installment payment income, investment income on unearned premium and loss/loss adjustment expense (LAE) reserves, and taxes as a percentage of premium. Total after-tax income from these sources (as a percentage of premium) is then related to net worth (as a percentage of premium) to obtain an expected return on net worth.
- Q: What do you mean by *pro forma*?
- A: The model is *pro forma* in the sense that it assumes 1) that the indicated rate change will be implemented and 2) that all loss, expense, and investment return realizations will coincide with their projected expected values.
  - The results of the model and supporting information are presented in Exhibits RB-21 and RB-22.
- Q: Could you state what you mean by "net worth"?
- A: Net worth is the book value of equity of a company under Generally Accepted Accounting Principles (GAAP) rather than Statutory Accounting Principles (SAP).
- Q: Did you account for investment income on capital and surplus in calculating the expected return?
- A: It is my understanding that North Carolina law provides that insurance rates are to be set such that those rates are expected to provide a return to insurers that is equal to the returns of

industries of comparable risk and that, in calculating that expected return, the investment income on capital and surplus is to be excluded from consideration. Therefore, I present the expected return projected to result from the selected underwriting profit provision excluding investment income on capital and surplus. However, for informational purposes, I also present the expected return projected to result from the selected underwriting profit provision including investment income on capital and surplus.

- Q: Would you please elaborate on the elements of the return and how they are calculated?
- A: The return is composed of underwriting profit (Line 2 of Exhibits RB-21 and RB-22, Pages 1 and 1A), installment fee income (Line 3 of Exhibits RB-21 and RB-22, Pages 1 and 1A) and investment gain on insurance transaction (Line 7 of Exhibits RB-21 and RB-22, Pages 1 and 1A). In the calculation that includes investment income on surplus for informational purposes, I additionally include investment gain on surplus (Line 8 of Exhibits RB-21 and RB-22, Page 1A). (Please note that, in my exhibits and sometimes in my testimony, I refer to investment income on surplus as a shorthand reference to investment income on capital and surplus.) All of the foregoing income components are adjusted for taxes. The components are discussed in greater detail below:

Underwriting profit and installment fee income - As a matter of arithmetic and definition, the underwriting profit as a percentage of premium matches the underwriting profit provision selected by the NCRB. It is the percentage of premium left over after accounting for the loss and expense provisions, with the projected loss and LAE ratio and fixed expense ratios being adjusted to reflect the indicated rate change. Installment fee income is based on the average installment charges as a percentage of premium over the past five years (Exhibits RB-21 and RB-22, Page 3). The underwriting profit income and installment fee income are both assumed to be taxed at the current corporate rate of 21% (Line 4 of Exhibits RB-21 and RB-22, Pages 1 and 1A), as revised in the Tax Cut and Jobs Act of 2017. I also account for additional tax liabilities relating to IRS rules regarding the treatment of unearned premium reserves and of loss reserves (Line 5 of Exhibits RB-21 and RB-22, Pages 1 and 1A). Details of the calculation of these additional tax liabilities are found on Pages 4 to 6 of Exhibits RB-21 and RB-22.

Net Investment Gain on Insurance Transaction – This portion of the return reflects investment income on investible funds generated by the insurance transaction. Specifically, this quantity is calculated as the product of an investment yield and the average loss/LAE and unearned premium reserves that are actually held at the insurance company. An adjustment is made for investment income on agents balances (specifically, to account for the fact that agents balances, which are premiums held by agents and not yet remitted to the company, are not available for investment by the insurance company). I also adjust for investment income on reinsurance balances in the case of Mobile Homeowners MH(C) excluding Liability insurance, accounting for the additional income that the company receives on funds that have not yet been remitted to the reinsurer, as well as the investment income that it is not able to collect on funds that have not yet been recovered from the reinsurer. The details of the estimation of investible reserves and the investment income generated from those reserves are found on Pages 7 to 9 of Exhibits RB-21 and RB-22, with the adjustments for balances shown on Pages 1 and 2. The tax liability is

based on a weighted average of estimated tax rates on the different sources of investment income, with the weights based on the composition of the overall property-casualty industry portfolio.

Investment Gain on Surplus – This portion of the return would reflect investment income generated from surplus. The investment yield is applied to investible surplus, the amount of which is based on the ten-year average premium-to-surplus ratio for groups writing Mobile Homeowners insurance in North Carolina from Page 14 of Exhibits RB-21 and RB-22. The tax liability is again based on a weighted average of estimated tax rates on the different sources of investment income, with the weights based on the composition of the overall North Carolina industry portfolio.

These components of after-tax return, all denominated as a percent of premium, are then summed and related to net worth. This is accomplished by multiplying the returns as a percent of premium by the product of the premium-to-surplus ratio from Page 14 of Exhibits RB-21 and RB-22 and the inverse of the industry-wide net worth-to-surplus ratio from Page 15 of Exhibits RB-21 and RB-22.

- Q: Please explain how the investment yield is calculated.
- A: My understanding is that the accepted approach in North Carolina, based on a decision by the Commissioner in the 1990's, is to estimate the investment yield as an average of the "embedded yield" based on the industry statutory annual statement reports and a "current yield" based on current market rates. I have followed this convention in the analysis presented in Exhibits RB-21 and RB-22, though I contemplate the consequences of this convention in more detail later in my testimony.

For the current yield, I start with the overall weighted average invested asset portfolio for the North Carolina insurance market (using total North Carolina DPW for weights) and use various sources to estimate the current market yields for those assets. Sources for current market rates, and a summary of the overall calculation, are provided on Page 11 of Exhibits RB-21 and RB-22. For each of the bond subcategories, I obtain a maturity distribution for the North Carolina industry portfolio in that subcategory from the Schedule D summary exhibits and match each maturity level from the exhibits to a corresponding bond yield of similar maturity, so that the average yield shown on Page 11 is a weighted average across maturities according to the North Carolina industry portfolio. The overall pre-tax current yield on the industry portfolio as thus determined is 4.70%. The embedded yield calculations, based on the actual investment income reported by the industry, are shown on Pages 12 and 13 of Exhibits RB-21 and RB-22; the pre-tax embedded yield is 3.32%. For the pro forma calculations, I average these two figures to obtain 4.01% (shown on Page 10 of Exhibits RB-21 and RB-22).

The tax liability for investment income is determined for each asset class, reflecting tax advantages as appropriate on municipal bond interest, preferred and common stock dividends, and capital gains on stock. The expected return on equity is split into a capital gain and dividend component, for tax purposes, based on the experience of the S&P 500 over the 1998-2021 period.

- Q: What is the expected return on net worth?
- A: To calculate the implied return on insurance company equity, components of after-tax return are summed and related to net worth, which, as a percentage of premium, is calculated based on the product of the premium-to-surplus ratio from Page 14 of Exhibits RB-21 and RB-22 and the inverse of the industry-wide net worth-to-surplus ratio from Page 15 of Exhibits RB-21 and RB-22. This approach indicates that the selected underwriting profit factor of 6.5% for Mobile Homeowners MH(C) excluding Liability insurance, if achieved, would yield an expected statutory return on net worth of 7.19% (without including investment income on surplus) and a total return on net worth of 10.68% (when including investment income on surplus). For Mobile Homeowners MH(C) Liability insurance, the selected underwriting profit factor of 6.0%, if achieved, would yield an expected statutory return on net worth of 7.26% (without including investment income on surplus) and a total return on net worth of 10.79% (when including investment income on surplus).
- Q: Have you considered the impact of any other alternative assumptions on your estimates?
- A: Yes, I have considered the impact of an alternative investment yield calculation.

Specifically, I considered the combined impact of two changes.

First, I based the asset distribution on a premium-weighted average of the portfolio allocations used by the companies writing Mobile Homeowners insurance in North Carolina. The pro forma model relied on the weighted average invested asset distribution for the North Carolina insurance industry. While I have followed this convention in Exhibits RB-21 and RB-22, the assumption may not be suitable for the case of Mobile Homeowners because the North Carolina industry portfolio reflects heavy common stock allocations by certain personal lines carriers and other companies that do not underwrite Mobile Homeowners. The high common stock allocation tends to inflate the estimated investment yields, particularly current yields, where the expected rate of return on common stock is much higher than typical bond yields (see Page 11 of Exhibits RB-21 and RB-22). Basing the allocation assumption on the portfolios of the companies actually writing Mobile Homeowners business in North Carolina, in my opinion, offers a much closer approximation to the average investment portfolio supporting North Carolina Mobile Homeowners underwriting.

Second, I based the investment yield solely on the current yield. The practice of averaging embedded yields with current yields makes little difference when the yields are relatively close together. But there is a significant divergence between the current yields on investments and embedded yields, with the pre-tax current yield being nearly 140 basis points higher than the embedded yield. The current yield, in my opinion, is the better indicator of investment yields for a prospective ratemaking exercise, where the relevant questions concern the terms on which money will be invested today and in the future.

The combined effect of these two changes is to drop the statutory returns by 10 to 20 basis points and the total returns by 40 to 50 basis points.

- Q: How was the underwriting profit factor determined?
- A: The Bureau selected the 6.5% provision for Mobile Homeowners MH(C) excluding Liability insurance and the 6.0% provision for Mobile Homeowners MH(C) Liability insurance. I participated in the Bureau's Mobile Home Subcommittee meeting for the discussion of the profit portion of the rate review. I described for the committee my pro forma profit analysis and provided arrays of underwriting profit provisions and their associated returns on net worth, both without including investment income on surplus and including investment income on surplus. The returns shown in those arrays spanned the range for the cost of capital that I had provided. Following my presentation and the committee discussion, the committee selected the underwriting profit factors.

#### III. Rate of Return on Capital

- Q: What steps did you take in the course of assessing whether the returns described above would produce a reasonable rate of return on equity?
- A: I first established ranges for reasonable estimates of the cost of capital. I then compared the estimated statutory and total returns on net worth determined in Section II above to these cost of capital ranges.
- Q: How did you establish ranges for reasonable estimates of the cost of capital?
- A: The cost of capital for an industry is a difficult figure to pin down, and part of my approach is based on a belief in the wisdom of crowds. I started by gathering various third-party estimates of the cost of capital for property-casualty firms associated with publicly traded holding companies. I also made an independent set of estimates of the same tailored specifically for the North Carolina Mobile Homeowners market. I then made adjustments to all of these estimates to account for the presence of private companies in the North Carolina market.
- Q: Please describe the third-party estimate sources and methodologies.
- A: Kroll (formerly Duff & Phelps) and Damodaran Online (an open-access website maintained by Aswath Damodaran, a valuation expert affiliated with New York University) both publish estimates for the property-casualty industry. Kroll updates the estimates quarterly (the estimates reported below are from 6/30/2022), while Damodaran Online updates the estimates annually (1/1/2022).

Kroll reports estimates from a variety of methodologies. Some estimates are produced using factor models, where the industry's sensitivity to a pricing factor (or sensitivities to a set of factors) are measured and used to generate a cost of capital. For example, single factor models (such as the CAPM) typically mark the overall stock market return in excess of a "base" fixed income return as the pricing factor. The cost of capital is generated in this case by estimating a risk premium for each factor, adjusting that risk premium to account for the sensitivity of the

industry in question to that factor, and then adding the adjusted risk premium to the current yield of the "base" fixed income instrument to produce a cost of capital. In addition to CAPM estimates, Kroll also reports a "CAPM + size premium" estimate to recognize the higher cost of capital endured by smaller firms and thus correct for the average size of firms within an industry. The "Buildup Method" employs a related approach, adding a size premium and an industry premium to the standard market risk premium. The Fama-French-5-factor model extends the single risk factor framework of the CAPM to a five factor risk framework, thus pricing an industry's equity on the basis of its sensitivity to four additional factors in addition to overall market returns. Kroll also utilizes discounted cash flow (DCF) models, where free cash flow or dividends are forecasted into the future, with the cost of capital estimate being the implied discount rate on the future cash flows that explains the current equity valuation. In general, the two classes of methods---factor models and DCF models---are perhaps the two most widely accepted and widely deployed methods for estimating the cost of equity.

Damodaran reports estimates from a single-factor CAPM model. However, rather than estimating the risk premium associated with the stock market on the basis of simple averages of historical excess returns (as is typically done), he attempts to modify the premium to account for the current level of stock market valuation. This distinction is one example of the substantial variation in implementation of factor models, which can have significant effects on the estimates. There is also substantial methodological variation in implementation of the DCF model, which is estimated with different time period stages, with time-varying growth rates. All of this underscores the importance of consulting multiple sources of estimates and testing sensitivities where possible.

The approaches described above all produce estimates of the cost of equity. This cost of equity is then weighted together with an estimated cost of debt for the industry to produce a WACC for publicly traded firms. The weights are based on the composition of the capital structure (equity versus debt) for the industry.

- Q: Please describe how you derived your independent estimates of the cost of equity capital for publicly traded firms.
- A: I used a single factor model, also referred to as a "risk premium" approach in previous filings in North Carolina. This approach estimates the cost of equity as

$$r + \beta * (ERP)$$

where r is the current yield on a reference fixed income instrument, ERP is the estimated expected excess return of the stock market over that fixed income yield, and  $\beta$  is the estimated covariation between the equity of the property-casualty industry and the overall stock market (more precisely, the covariance of property-casualty equities with the S&P 500, divided by the variance of the S&P 500).

For the reference interest rate, I tried four different fixed income assets---the 3-month Treasury Bill, the 10-year Treasury Note, the Moody's Seasoned Aaa Corporate Bond Index, and the Moody's Seasoned Baa Corporate Bond Index. In each case, I estimated the equity risk premium as the average excess return of the S&P 500 over the return on the reference fixed income asset

over the 1928-2021 period. To calculate the average returns, I used the formula from Blume (1974)<sup>1</sup> by weighting together the arithmetic average and the geometric average, as in:

$$\left[\frac{N-T}{N-1}(1+\pi_A) + \frac{T-1}{N-1}(1+\pi_G)\right]^{\frac{1}{T}}$$

where N is the sample size, T is the return horizon (corresponding to the maturity of the fixed income asset),  $\pi_A$  is the arithmetic average return in the sample, and  $\pi_G$  is the geometric average return in the sample.

For  $\beta$  (beta), I estimated a weighted average beta for the North Carolina Mobile Homeowners market. For each publicly traded holding company associated with an operating subsidiary underwriting Mobile Homeowners insurance in North Carolina in 2021, I pulled the beta provided by S&P Global (based on 1-year and 3-year daily returns). I then calculated a weighted average based on 2021 North Carolina Mobile Homeowners DPW.

Given current yields for the reference fixed income assets and estimates for the equity risk premium and beta, I then calculate a cost of equity according to the formula given above.

Next, I estimated a WACC for the North Carolina market. For the capital structure, I estimated a weighted average debt percentage for the North Carolina Mobile Homeowners market. For each publicly traded holding company, I calculated the percentage of debt in the capital structure based on the latest fiscal year report. For the cost of debt, I used the figure from Damodaran Online, based on a 2.84% 10-year Treasury rate.

Q: What were the results?

A: The following table lists the cost of equity and the WACC for publicly traded companies, including the estimates I produced and those reported by Kroll and Damodaran Online for the property-casualty industry.

<sup>&</sup>lt;sup>1</sup> Blume, M.E. (1974), "Unbiased Estimates of Long-Run Expected Rates of Return," *Journal of the American Statistical Association* (September), pp. 634-8.

	Cost of Capital for Publicly Traded Companies									
		<b>Current Yield</b>	Equity Risk	Cos	st of					
Source	Method	(8/12/2022)	Premium	Eq	uity	WA	ACC			
Kroll	CAPM			7.	6%	6.8	8%			
Kroll	CAPM + Size Premium			8.	.0%	7.:	1%			
Kroll	Build-Up			8.	8%	7.	7%			
Kroll	Fama-French 5-factor			7.	5%	6.7%				
Kroll	DCF (1-stage)			15	.4%	13.	.1%			
Kroll	DCF (3-stage)			17	.5%	14.	.8%			
Damodaran Online	Implied Premium			6.4	49%	5.8	88%			
				Low	High	Low	High			
Zanjani	Risk Premium over T-Bill	2.63%	8.49%	9.08%	11.49%	7.94%	9.88%			
Zanjani	Risk Premium over T-Note	2.84%	6.57%	7.82%	9.69%	6.93%	8.43%			
Zanjani	Risk Premium over Aaa Bond	4.07%	5.74%	8.42%	10.05%	7.42%	8.73%			
Zanjani	Risk Premium over Baa Bond	5.16%	4.49%	8.57%	9.84%	7.53%	8.56%			

I have also shown the current yield and equity risk premium elements for each of my own estimates to facilitate reconstruction. Other parameters I used were calculated as described above: 1) the weighted average beta for the North Carolina industry (0.7589 to 1.0432), 2) the cost of debt (3.28%), and 3) the percentage of debt in the capital structure (19.60%).

To illustrate, the higher cost of equity for my "Risk Premium over T-Bill" method is:

$$2.63\% + 1.0432 \times 8.49\% = 11.49\%$$
,

and the WACC is:

$$(1 - .1960) \times 11.49\% + .1960 \times 3.28\% = 9.88\%$$
.

Note that the estimates for capital structure and the cost of debt differ across sources, so the relationship between the cost of equity and the WACC for Kroll and Damodaran Online will not follow the exact formula listed above.

- Q: Do you believe any adjustments are necessary to the estimated cost of equity in the context of this filing?
- A: Yes. All of the foregoing estimates are based on the data of publicly traded companies, which have the easiest access to financing and thus the lowest costs of capital. However, I found that operating companies affiliated with publicly traded holding companies wrote only 82.3% of the 2021 Mobile Homeowners direct premiums written for North Carolina. The remainder was underwritten by companies associated with private, often mutual, ownership---a segment well known to have more difficulty in accessing the capital markets. The industry average cost of equity needs to be adjusted upward to account for this non-public ownership.
- Q: How much higher is the cost of equity for non-public firms?

A: Research dating back at least as far as the 1960's has demonstrated that private equity trades at a substantial discount to public equity. The discount is thought to derive from a variety of factors, including the illiquid nature of private equity stakes (also known as a "lack of marketability") as well as information, monitoring, and control issues. The discount translates into a higher cost of equity. For example, if a public firm's cost of equity is estimated at 10% and the equity of a comparable private firm is selling at a 20% discount to that of the public firm, the private firm's cost of equity would be estimated as:

$$12.5\% = 10\% / (1 - 20\%)$$

The discount is difficult to estimate. Exhibit RB-23 summarizes some of the academic research on the private firm discount. Studies have taken a variety of approaches to measurement. "IPO" studies compare the prices of pre-IPO share transactions in a private company with post-IPO share prices after the company is public. "Acquisition" studies compare the valuations of acquired private companies versus the valuations of acquired public companies. "Restricted stock" and "private placement" studies compare the prices of restricted stock issued by public companies with the prices of their traded shares.

All the approaches have their flaws. IPO studies, for example, are thought to have a bias toward overstating the discount because of the differences in timing of transactions. Restricted stock and private placement studies tend to understate the discount: Since they confine their attention to public companies, they do not account for factors other than the discount for lack of marketability (DLOM), and, moreover, the actual restrictions on marketability for private placements have been loosened significantly over the years by the Securities and Exchange Commission.

On balance, however, the studies point to a substantial discount. For purposes of this testimony, I use a discount of 25%, which is somewhat below the average of the averages of the three groups in Exhibit RB-23 (when taking the midpoint of the ranges for the studies with ranges of estimates).

- Q: How would this affect the estimated cost of equity for the industry?
- A: Assuming a 25% private company discount and a 17.7% market share for non-public companies, I calculate adjusted estimates of the private cost of equity and the public cost of equity:

$$17.7\% * \left(\frac{COE}{(1-0.25)}\right) + (82.3\%) * (COE),$$

where COE is the estimated cost of equity for public companies. The adjusted estimates are as follows:

Cost of	Cost of Capital, Adjusted for Non-Public Ownership									
		Co	st of							
Source	Method	Eq	uity	W	ACC					
Duff & Phelps	CAPM	8.	.0%	7.	2%					
Duff & Phelps	CAPM + Size Premium	8.	5%	7.	5%					
Duff & Phelps	Build-Up	9.	9.3%		1%					
Duff & Phelps	Fama-French 5-factor	7.9%		7.	1%					
Duff & Phelps	DCF (1-stage)	16.3%		13	.8%					
Duff & Phelps	DCF (3-stage)	18.5%		15	.6%					
Damodaran Online	Implied Premium	6.8	87%	6.1	L9%					
		Low	High	Low	High					
Zanjani	Risk Premium over T-Bill	9.61%	12.17%	8.37%	10.43%					
Zanjani	Risk Premium over T-Note	8.28%	10.26%	7.30%	8.89%					
Zanjani	Risk Premium over Aaa Bond	9.07%	10.42%	7.82%	9.20%					
Zanjani	Risk Premium over Baa Bond	8.92%	10.65%	7.94%	9.02%					

- Q: How do these figures speak to the issue of whether or not the pro forma expected return on net worth is reasonable?
- A: There are at least two schools of thought on this issue.

The first is that the "net worth" in the pro forma return exhibit should be interpreted as an equity investment akin to the equity considered in the cost of equity analysis. Thus, it should be entitled to a similar rate of return. Under this school of thought, the return on net worth calculated in the previous section should be compared directly with the figures in the table above. If one does this, the projected returns are, in my opinion, clearly not excessive, even when including investment income on surplus in the calculation of the return. Even before making the adjustments to the investment return projections that I believe are appropriate for the North Carolina Mobile Homeowners MH(C) excluding Liability insurance market, the projected total return of 10.68% is within the span of estimates, which range from 6.9% to 18.5%. If one instead focuses on the statutory return by excluding investment income on surplus, the projected return of 7.19% falls toward the lower end of the range of estimates. Similar conclusions apply to Mobile Homeowners MH(C) Liability insurance, where the total return was 10.79% and the statutory return was 7.26%. When testing robustness by 1) adjusting the investment portfolio to the allocations matched to the North Carolina Mobile Homeowners market and 2) substituting current yields for embedded yields, the total returns and statutory returns in both markets drop but still fall within the range.

A second school of thought is that, although the capital of the operating subsidiaries may be fully financed by equity, the holding companies are the source of that equity. Thus, one should "look through" the operating subsidiaries to the level of the holding companies to determine a cost of capital, which is important because the holding companies---unlike the insurance

subsidiaries---typically hold significant debt in the capital structure. Holding companies that are typically classified as property-casualty companies have, in recent history and on average, had in the neighborhood of 20% debt. Thus, the cost of capital for the holding company is, under this school of thought, calculated as a weighted average of the cost of equity and the cost of debt, with the weights based on each component's share of the capital structure. The result is the WACC discussed above, which, as can be seen above, is typically lower than the cost of equity due to the lower cost of debt.

On the other hand, the market value of the capital of the holding company will be different from the book value of the capital invested in the insurance subsidiaries. Thus, a particular return on net worth at the level of the operating subsidiary will translate into a lower (higher) return on holding company capital if the market value of the holding company capital exceeds (is less than) the net worth of the insurance subsidiaries.

Stock market valuations at current levels put the market-to-net worth ratio of the public companies that own the major underwriters of Mobile Homeowners insurance in North Carolina, on average, well above one. However, even if one assumes that the market value of holding company capital is equal to the net worth of the operating subsidiaries, the table demonstrates that a total return on net worth of 10.68% for the Mobile Homeowners MH(C) excluding Liability insurance market is reasonable and not excessive; it falls toward the middle of the span of estimates (6.2% to 15.6%). The same characterization---of reasonable and not excessive---applies to the statutory return on net worth of 7.19%, which falls toward the lower end of the span of estimates. Similar conclusions apply to the Mobile Homeowners MH(C) Liability insurance market, where the total return was 10.79% and the statutory return was 7.26%. The conclusions hold after adjusting projected returns to account for the investment portfolio of companies serving the North Carolina Mobile Homeowners market and the current level of investment yields.

In summary, the expected returns on net worth calculated in Section II are, in my opinion, consistent with a reasonable and not excessive return on invested capital.

#### IV. Conclusion

- Q: Based on your knowledge and experience and on the studies and analyses you have performed, have you come to any conclusions regarding the underwriting profit factor selected by the Bureau and used in its indicated rate level calculations in this filing?
- A: Yes. Based on my pro forma return analysis detailed in Exhibits RB-21 and RB-22, I found that the expected statutory return on net worth implied by the selected 6.5% underwriting profit factor for Mobile Homeowners MH(C) excluding Liability insurance was 7.19% (not including investment income on surplus). The expected total return on net worth was 10.68% (including investment income on surplus). The expected statutory return for Mobile Homeowners MH(C) Liability insurance was 7.26%, and the total expected total return was 10.79%. When making adjustments that I regard as appropriate to account for the asset distribution relevant for this line of business and the yields currently in the marketplace, the expected statutory and total

returns fell by 10 to 20 basis points and 40 to 50 basis points, respectively. After reviewing the cost of capital estimates for the industry produced by third parties and producing my own estimates tailored to the North Carolina market, I found the expected returns on net worth resulting from the selected underwriting profit factors to be consistent with a reasonable and not excessive return on invested capital. Thus, I believe that the selected underwriting profit factor is reasonable and not excessive.

An important caveat to this analysis, however, is that all conclusions are predicated on the assumption that the indicated rate level is achieved. In the event that a lower rate level is implemented, the expected rate of return could be inadequate.

Q: Does that conclude your testimony?

A: Yes.

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## George Zanjani

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Tuscaloosa, AL 35487

#### **Education**

**Ph.D.**, Economics, University of Chicago, 2000 **ACAS**, Casualty Actuarial Society, 1994 **A.B./B.S.**, Economics and Biology, Stanford University, 1990

#### **Work Experience**

University of Alabama (Tuscaloosa, Alabama)

Professor of Finance and Frank Park Samford Chair of Insurance, 2017-

#### Georgia State University (Atlanta, Georgia)

AAMGA Distinguished Chair in Risk Management & Insurance, 2011-2017 Associate Professor, 2008-2017

#### Nanyang Technological University (Singapore)

Visiting Senior Research Fellow, 2011-12, 2013-2014

#### Federal Reserve Bank of New York (New York, New York)

Senior Economist, 2006-2008 Economist, 2000-2006

#### Fireman's Fund Insurance Companies (Novato, California)

Senior Actuarial Analyst, 1993-94 Actuarial Analyst, 1991-1993 Assistant Actuarial Analyst, 1990-1991

#### **Publications: Refereed Scholarly**

"Economic Capital and RAROC in a Dynamic Model," (with Daniel Bauer), *Journal of Banking and Finance*, 125: Article 106071, (2021) [Winner of Casualty Actuarial Society Hachemeister Prize, 2015]

"Capital Allocation Techniques: Review and Comparison," (with Daniel Bauer and Qiheng Guo), *Variance*, 14(2), (2021)

- "Dynamic Capital Allocation with Irreversible Investments," (with Daniel Bauer, Shinichi Kamiya, and Xiaohu Ping), *Insurance: Mathematics and Economics* 85: 138-52, (2019)
- "What Drives Tort Reform Legislation? Economics and Politics of the State Decisions to Restrict Liability Torts," (with Yiling Deng), *Journal of Risk & Insurance* 85: 959-991, (2018)
- "Egalitarian Equivalent Capital Allocation," (with Shinichi Kamiya), *North American Actuarial Journal* 21: 382-96, (2017)
- "The Marginal Cost of Risk, Risk Measures, and Capital Allocation," (with Daniel Bauer), *Management Science* 62: 1431-1457 (2016)
- "Economic Analysis of Risk and Uncertainty Induced by Health Shocks: A Review and Extension," (with Tomas J. Philipson), in *Handbook of the Economics of Risk and Uncertainty*, Volume 1, Mark J. Machina and W. Kip Viscusi (eds.), North Holland: Elsevier (2014)
- "Capital Allocation and Its Discontents," (with Daniel Bauer), in *Handbook of Insurance* (2<sup>nd</sup> edition), Georges Dionne (ed.), New York: Springer (2013)
- "Financial Pricing of Insurance," (with Daniel Bauer and Richard D. Phillips), in Handbook of Insurance (2<sup>nd</sup> edition), Georges Dionne (ed.), New York: Springer (2013)
- "Insurance Risk, Risk Measures, and Capital Allocation: Navigating a Copernican Shift," (with Michael R. Powers), *Annual Review of Financial Economics* 5: 201-223 (2013)
- "Catastrophe Bonds, Reinsurance, and the Optimal Collateralization of Risk Transfer," (with Darius Lakdawalla), *Journal of Risk & Insurance* 79, pp. 449-76 (2012)
- "An Economic Approach to Capital Allocation," *Journal of Risk and Insurance* 77, pp. 523-549 (2010) [Winner of Casualty Actuarial Society ARIA Award, 2010]
- "Federal Financial Exposure to Catastrophic Risk," (with J. David Cummins and Michael Suher), in *Measuring and Managing Federal Financial Risk*, Deborah Lucas (ed.), Chicago: University of Chicago Press (2010)
- "Public versus Private Underwriting of Catastrophe Risk: Lessons from the California Earthquake Authority," in *Risking House and Home: Disasters, Cities, Public Policy*, John M. Quigley and Larry A. Rosenthal (eds.), Berkeley: Berkeley Public Policy Press (2008)
- "Regulation, Capital, and the Evolution of Organizational Form in U.S. Life Insurance," *American Economic Review* 97, pp. 973-983 (2007)

- "Insurance, Self Protection, and the Economics of Terrorism," (with Darius Lakdawalla), *Journal of Public Economics* 89, pp. 1891-1905 (2005)
- "Terrorism Insurance Policy and the Public Good," (with Darius Lakdawalla), *St. John's Journal of Legal Commentary* 18, pp. 463-469 (2004)
- "The Production and Regulation of Health Insurance: Limiting Opportunism in Proprietary and Non-Proprietary Organizations," (with Tomas Philipson) in *Individual Decisions for Health*, Bjorn Lindgren (ed.), pp. 194-206, Routledge International Studies in Health Economics, Routledge: London (2003)
- "Pricing and Capital Allocation in Catastrophe Insurance," *Journal of Financial Economics* 65, pp. 283-305 (2002) [reprinted in *Insurance and Risk Management Volume I: Economics of Insurance Markets*, Gregory Niehaus (ed.), Northampton: Edward Elgar Publishing, (2008)]

#### Publications: Professional/Practitioner

- Book review of "Moral Hazard in Health Insurance," *Journal of Economic Literature* 53, pp. 682-3 (2015)
- "Microinsurance Lessons from History," (with Rick Koven), *Microinsurance Learning and Knowledge (MILK)* (2013)
- "Institutional Investors and Asset Allocations: Accounting and Regulation of Private Defined Benefit Pension Plans and Other Institutional Investors in the United States, Mexico, and Australia," (with John Broadbent, Michael Palumbo, and Julio Santaella), CGFS Publication No. 27, Working Group on Institutional Investors, Global Savings, and Asset Allocation (2006)
- "An Overview of Political Risk Insurance" (with Kausar Hamdani and Elise Liebers), CGFS Publication No. 22, Working Group on Foreign Direct Investment in the Financial Sector of Emerging Market Economies (2005)

## **Work in Progress**

- "Life Insurance and Annuity Pricing During the Financial Crisis, Revisited," (with Daniel Bauer, Lars Powell, and Boheng Su), working paper, 2022
- "Dynamic Capital Allocation in General Insurance," (with Daniel Bauer and Qiheng Guo), working paper, 2022
- "The Ignorance of Crowds: Understanding Reserving Errors in the Liability Crisis of 1997-2001," (with Eren Cifci, Qianlong Liu, Steve Mildenhall, Lars Powell, and Kenny Wunder), working paper, 2022

- "Market Discipline and Guaranty Funds in Life Insurance," (with Martin Grace, Shinichi Kamiya, and Robert W. Klein), working paper, 2019
- "The Effect of Government Guarantees on Market Discipline in the Property-Casualty Insurance Industry," (with Yiling Deng, Ty Leverty, and Kenny Wunder), working paper, 2019
- "An Integrated Approach to Measuring Asset and Liability Risks in Financial Institutions," (with Daniel Bauer), working paper, 2019
- "Optimal Insurance Contracts with Insurer Background Risk," (with Xiaohu Ping), working paper, 2015
- "The Effect of Banking Crises: Evidence from Non-Life Insurance Consumption," (with Shinichi Kamiya and Jackie Li), working paper, 2015
- "Bankruptcy in the Core and Periphery of Financial Groups: The Case of the Property-Casualty Insurance Industry" working paper, 2010
- "The Rise and Fall of the Fraternal Life Insurer: Law and Organizational Form in U.S. Life Insurance, 1870-1920," working paper, (revise and resubmit, Journal of Law & Economics), 2007
- "Organizational Form and the Underwriting Cycle: Theory with Evidence from the Pennsylvania Fire Insurance Market, 1873-1909," working paper, 2004
- "Consumption versus Production of Insurance," (with Tomas Philipson), *NBER Working Paper* #6225, 1997

#### **External Research Projects and Consulting**

- 2022 Expert Witness, Insurance Rate Filings, North Carolina
- 2021 Expert Witness, Golson v. Provident Life, Alabama
- 2021 Expert Witness, Workers' Compensation Rate Filings, Massachusetts
- 2021 Expert Witness, Insurance Rate Filings, North Carolina
- 2020 Expert Witness, Insurance Rate Filings, North Carolina
- 2019 NCCI Review of Cost of Capital Methodology
- 2019 Expert Witness, Workers' Compensation Rate Filings, Massachusetts
- 2019 Expert Witness, Insurance Rate Filings, North Carolina
- 2018 NCCI Review of TCJA
- 2017 Expert Witness, Workers' Compensation Rate Hearing, Florida
- 2016 Expert Witness, Assigned Risk Workers' Compensation Rate Hearing, Virginia
- 2015 Expert Witness, Workers' Compensation Rate Hearing, Florida
- 2015 NCCI Revision of Underwriting Profit and Contingency Internal Rate of Return Model
- 2015 An Extension of the Project on the Costs of Holding Capital, sponsored by the CAS
- 2013 Microinsurance Centre Lessons from History Project
- 2012 Allocation of the Costs of Holding Capital, sponsored by the CAS,
- 2011 CRO Risk Index Project, co-sponsored by SOA and Bloomberg, co-founder

2009 "The Financial Crisis and Lessons for Insurers," \$50,000 SOA grant, role: report co-author

## **Papers Presented at Professional Meetings**

- 2022 "Understanding Loss Reserving Errors in the Liability Catastrophe of 1997-2001," Conference in Honor of J.David Cummins and Mary Weiss, Temple University, Philadelphia
- 2020 "Life Insurance and Annuity Pricing During the Financial Crisis, Revisited" WRIEC, virtual meeting
- 2019 "An Integrated Approach to Measuring Asset and Liability Risks in Financial Institutions," EGRIE Annual Meeting, Rome, Italy
- 2019 "An Integrated Approach to Measuring Asset and Liability Risks in Financial Institutions," ARIA Annual Meeting, San Francisco, CA
- 2019 "An Integrated Approach to Measuring Asset and Liability Risks in Financial Institutions," RTS Annual Seminar, Tuscaloosa, AL
- 2017 "The Effect of Government Guarantees on Market Discipline in the Property-Casualty Insurance Industry," NBER Insurance Project Workshop, Boston, MA
- 2015 "The Marginal Cost of Risk in a Multi-Period Model," NBER Insurance Project Workshop, Stanford, CA
- 2015 "The Marginal Cost of Risk in a Multi-Period Model," CAS Annual Meeting, Philadelphia, PA
- 2015 "Dynamic Capital Allocation," IME Annual Conference, Liverpool UK
- 2015 "What Drives Tort Reform Legislation? Economics and Politics of the State Decisions to Restrict Liability Torts," ASSA Annual Meeting, Boston, MA
- 2014 "The Marginal Cost of Risk in a Multi-Period Model," CAS Centennial, New York, NY
- 2014 "Market Discipline and Guaranty Funds in Life Insurance," EGRIE Annual Seminar, St. Gallen, CH
- 2014 "Dynamic Capital Allocation with Irreversible Investments," EGRIE Annual Seminar, St. Gallen, CH
- 2014 "What Drives Tort Reform Legislation? Economics and Politics of the State Decisions to Restrict Liability Torts," ARIA Annual Meeting, Seattle, WA
- 2014 "The Marginal Cost of Risk in a Multi-Period Model," ARIA Annual Meeting, Seattle, WA
- 2014 "Market Discipline and Guaranty Funds in Life Insurance," ARIA Annual Meeting, Seattle, WA
- 2014 "The Marginal Cost of Risk in a Multi-Period Model," IME Conference, Shanghai, CN
- 2014 "The Effect of Banking Crises: Evidence from Non-Life Insurance Consumption," Risk Theory Seminar, Munich, Germany
- 2013 "The Effect of Banking Crises: Evidence from Non-Life Insurance Consumption," ASSA Annual Meeting, Philadelphia, PA
- 2013 "Optimal Insurance Contracts with Insurer Background Risk," EGRIE Annual Meeting, Paris, FR
- 2013 "The Effect of Banking Crises: Evidence from Non-Life Insurance Consumption," ARIA Annual Meeting, Washington D.C.
- 2013 "The Marginal Cost of Risk, Risk Measures, and Capital Allocation," IRFRC Catastrophe Risk Conference, Singapore
- 2013 "Optimal Insurance Contracts with Insurer Background Risk," ARIA Annual Meeting, Washington D.C.
- 2013 "The Marginal Cost of Risk, Risk Measures, and Capital Allocation," CEAR/ETH Indices of Risk and New Risk Measures Conference, Zurich, CH
- 2012 "The Marginal Cost of Risk, Risk Measures, and Capital Allocation," CAS Spring Meeting, Phoenix, AZ
- 2012 "The Marginal Cost of Risk, Risk Measures, and Capital Allocation," Symposium: Risk and Catastrophic Events, State College, PA
- 2012 "The Marginal Cost of Risk, Risk Measures, and Capital Allocation," ASSA Annual Meeting, Chicago, IL
- 2011 "The Marginal Cost of Risk, Risk Measures, and Capital Allocation," NBER Insurance Project Workshop, Cambridge, MA
- 2010 "Bankruptcy in the Core and Periphery of Financial Groups: The Case of the Property-Casualty Insurance Industry," ASSA Annual Meeting, Atlanta, GA
- 2009 "Bankruptcy in the Core and Periphery of Financial Groups: The Case of the Property-Casualty Insurance Industry," Risk Management and Corporate Governance Conference, Loyola University of Chicago
- 2009 "Bankruptcy in the Core and Periphery of Financial Groups: The Case of the Property-Casualty Insurance Industry," ARIA Annual Meeting, Providence, RI
- 2008 "An Economic Approach to Capital Allocation," Risk Theory Society, Annual Meeting, Fort Collins, CO

- 2007 "Federal Financial Exposure to Catastrophic Risk," ARIA Annual Meeting, Quebec City, CA
- 2007 "Catastrophe Bonds, Reinsurance, and the Optimal Collateralization of Risk Transfer," EFMA Annual Meeting, Vienna, AT
- 2007 "Catastrophe Bonds, Reinsurance, and the Optimal Collateralization of Risk Transfer," 5<sup>th</sup> Infiniti Conference on International Financial Integration, Dublin, IE
- 2007 "Federal Financial Exposure to Catastrophic Risk," NBER Conference on Measuring and Managing Federal Financial Risk, Evanston, IL
- 2006 Insuring Catastrophic Losses: The Status of TRIA and Proposed Natural Disaster Backstops, Wash., D.C.
- 2006 "Catastrophe Bonds, Reinsurance, and the Optimal Collateralization of Risk Transfer," Risk Theory Society, Annual Meeting, Richmond, VA
- 2006 "Public versus Private Underwriting of Catastrophe Risk: Lessons from the California Earthquake Authority," Berkeley Symposium on Real Estate, Catastrophic Risk, and Public Policy
- 2006 "Catastrophe Bonds, Reinsurance, and the Optimal Collateralization of Risk Transfer," NBER Insurance Project Workshop, Cambridge, MA
- 2005 "Regulation, Capital, and the Evolution of Organizational Form in U.S. Life Insurance," NBER Insurance Project Workshop, Cambridge, MA
- 2004 "The Rise and Fall of the Fraternal Life Insurer: Law and Organizational Form in U.S. Life Insurance," NBER Insurance Project Workshop, Cambridge, MA
- 2004 "Regulation, Capital, and the Evolution of Organizational Form in U.S. Life Insurance," American Finance Association, Annual Meeting, San Diego, CA
- 2003 "Insurance, Self-Protection, and the Economics of Terrorism," Risk Theory Society, Annual Meeting, Atlanta, GA
- 2003 "Terrorism Insurance Policy and the Public Good," St. John's Journal of Legal Commentary 10<sup>th</sup> Annual Legal Symposium: Terrorism and its Impact on Insurance: Legislative Responses and Coverage Issues, Queens, NY
- 2003 "Insurance, Self-Protection, and the Economics of Terrorism," NBER Insurance Project Workshop, Cambridge, MA
- 2002 "Pricing and Capital Allocation in Catastrophe Insurance," CAS Risk and Capital Management Seminar, Toronto, CA
- 2002 "Market Discipline and Government Guarantees in U.S. Life Insurance," Risk Theory Society, Annual Meeting, Urbana-Champaign, IL
- 2001 "Pricing and Capital Allocation in Catastrophe Insurance," Risk Theory Society, Annual Meeting, Montreal

#### Other Conferences Talks and Panel Participation

- 2018 Surplus Lines Automation Conference, Florida
- 2017 International Conference on Business Sciences, Cairo University, Egypt
- 2016 IIF Insurance Colloquium, Basel, Switzerland
- 2016 Surplus Lines Association of California, California (keynote)
- 2014 Surplus Lines Automation Conference, Florida
- 2011 PRMIA Annual Risk Leadership Conference, Atlanta, GA
- 2011 7<sup>th</sup> International Microinsurance Conference, Rio de Janeiro, Brazil
- 2010 Property Loss Research Bureau Eastern Adjusters Conference, Atlanta, GA (keynote)
- 2008 NCOIL Annual Meeting, Duck Key, FL
- 2007 Capital Markets Symposium on Securitizing Insurance Risk, New York, NY
- 2006 Insuring Catastrophic Losses: The Status of TRIA and Proposed Natural Disaster Backstops, Wash., D.C.
- 2006 Catastrophe Bonds and Insurance Linked Securities Summit, New York, NY
- 2005 12th Annual International Conference Promoting Business Ethics, New York, NY

## Service Activities in Academic and Professional Organizations

Senior Editor, *Journal of Risk and Insurance* (2019-) Associate Editor, *Insurance: Mathematics and Economics* (2022-) International Research Advisory Board, Risk and Insurance Research Center, NCCU, Taiwan American Risk & Insurance Association President (2012-13)

Risk Theory Society President (2011-2012)

American Risk & Insurance Association Board Member (2007-2014)

Editorial Board, Journal of Insurance Issues (2012-2014)

Huebner Colloquium Panelist (2016-2019)

#### **External Committees**

American Risk & Insurance Association Program Committee, various years; ARIA Nominations Committee, 2015, 2016, 2018; Kulp-Wright Book Award Committee, 2005

Discussant: ARIA Annual Meeting, Los Angeles, 2022; WRIEC 2020; EGRIE Annual Meeting, Rome, 2019; ARIA Annual Meeting, San Francisco, 2019; ARIA Annual Meeting, Chicago, 2018; ARIA Annual Meeting, Boston, 2016; SIFR Insurance Conference, Stockholm, 2015; EGRIE Annual Seminar, St. Gallen, 2014; ARIA Annual Meeting, Seattle, 2014; ARIA Annual Meeting, San Diego, 2011; CEAR Workshop on Insurance for the Poor, Atlanta, 2010; CEAR Workshop on Risk Perception and Subjective Beliefs, Atlanta, 2010; Midwest Finance Association Annual Meeting, Chicago, 2009; 5th Infiniti Conference, Dublin, 2007; EFMA Annual Meeting, Vienna, 2007; AEA Annual Meeting, San Diego, 2004

Session Chair: ARIA Annual Meeting, Chicago, 2018, ARC, Atlanta, 2017; IME, Atlanta, 2017; ARIA Annual Meeting, San Diego, 2011; Midwest Finance Association Annual Meeting, Chicago, 2009; ARIA Annual Meeting, Quebec City, 2007; EFMA Annual Meeting, Vienna, 2007;

Referee for Asia-Pacific Journal of Risk and Insurance, Astin Bulletin, Australian Social Monitor,
Contemporary Economic Policy, Current Issues in Economics and Finance, Defense and Peace
Economics, European Economic Review, Financial Review, Geneva Papers: Issues and Practice,
Geneva Risk and Insurance Review, Health Affairs, Insurance: Mathematics and Economics, Journal of
Banking and Finance, Journal of Business, Journal of Finance, Journal of Financial Intermediation,
Journal of Financial Services Research, Journal of Law and Economics, Journal of Mathematical
Economics, Journal of Money, Credit, and Banking, Journal of Political Economy, Journal of Risk and
Insurance, Management Science, Mathematical Social Sciences, North American Actuarial Journal,
Proceedings of the National Academy of Sciences, Review of Financial Studies, Risk Management and
Insurance Review, Scandinavian Actuarial Journal, and Science.

#### Working Group Participation

Committee on the Global Financial System, Working Group on Institutional Investors, Global Savings, and Asset Allocation (2006); Presidential Working Group on Financial Markets, Working Group on Terrorism Insurance (2006)

## **Continuing Education Activities**

2004-2007	Central Banking Seminar, Federal Reserve Bank of New York, Topics: Introduction to U.S.
	TO CARACLA TALANCE AND A ATT A ATT OF THE CONTROL O

Financial Markets; Introduction to Non-bank Financial Institutions

2009 Texas Farm Bureau Program, Georgia State University, Topic: Securitization, the Insurance

Industry, and the Panic of 2007

2009-2012 Horst K. Jannott Visiting Fellows Program, Georgia State University, Topics: Securitization, the

Insurance Industry, and the Panic of 2007; Introduction to Statistics

NCRB - Pro Forma Statutory	v Rate of Return								
	Mobile Homeowners MH(C) ex. Liability Insurance								
	-	Tax							
	Pre-Tax	Liability	Post-Tax						
1 Drawings		,	. 550 107						
1 Premiums	100.00%								
Loss & LAE	43.87%								
Commissions Other Acquisition & Conoral	16.60%								
Other Acquisition & General	14.61%								
Taxes, Licenses, & Fees Policyholder Dividends	3.20% 0.45%								
Policyholder Dividends Net Cost of Reinsurance	0.45% 13.78%								
	0.99%								
Compensation for Assessment Risk	U.3370								
2 Pro Forma Underwriting Profit	6.50%								
3 Installment Fee Income	0.21%								
4 Regular Tax		1.41%							
5 Additional Tax Due to IRS Treatment of Reserves		0.05%							
6 Return from Underwriting Post-Tax			5.25%						
7 Investment Gain on Insurance Transaction	1.84%								
Less Investment Income on Agent and Reinsuranco	0.60%								
Net Investment Gain on Insurance Transaction	1.24%	0.20%	1.04%						
8 Statutory Return as a Percent of Premium (post-tax)			6.29%						
9 Premium-to-Net Worth Ratio			1.14						
10 Statutory Return as a Percent of Net Worth (post-tax)	l		7.19%						
Lines (1) to (8) are expressed as a percentage of premium	<u> </u>								
Assumptions and Parameters									
Assumptions and Parameters			24 255						
(a) Underwriting Income Tax Rate			21.00%						
(b) Investment Income Tax Rate			16.44%						
(c) Pre-tax Investment Yield			4.01%						
(d) Premium-to-Surplus Ratio			1.3						
(e) Net Worth-to-Surplus Ratio			1.137						
(f) Installment Fee Income	d 11585		0.21%						
(g) Additional Tax Due to IRS Treatment of Loss Reserves a	ana UEPK		0.05%						
(h) Net Cost of Reinsurance			13.78%						
(i) Compensation for Assessment Risk			0.99%						

#### Notes to Exhibit RB-21 Page 1

- 1 The expense provisions are those used in Exhibit RB-1, adjusted for the indicated rate change.
- 2 Selected by North Carolina Rate Bureau
- 3 See Exhibit RB-21, Page 3
- 4 [ (2) + (3) ] x (a)
- 5 See Exhibit RB-21, Pages 4-6
- 6(2) + (3) (4) (5)
- 7 Investment income on agents balances is calculated as 0.165 x 1.021 x (c), where 0.165 is a factor for agents balances held for less than 90 days and 1.021 is a factor to correct for overdue balances. The figures are based on the Homeowners line and are sourced from ISO. We then deduct investment income on net reinsurance balances, which we estimate at 0.105 of the total cost of reinsurance times (c). The estimate for net reinsurance balances is based on ceded balances payable plus funds held plus other amounts due reinsurers minus reinsurance recoverables. These amounts are taken from the aggregated Schedule F in the latest available edition of A.M. Best's Aggregates & Averages.
- 8(6) + (7)
- 9 (d) / (e)
- 10 (8) x (9)

#### Assumptions

- (a) Current corporate tax rate, based on the Tax Cut and Jobs Act of 2017.
- (b) See Exhibit RB-21, Pages 11-13. Calculated as 1- average post-tax yield/average pre-tax yield.
- (c) See Exhibit RB-21, Page 10
- (d) See Exhibit RB-21, Page 14
- (e) See Exhibit RB-21, Page 15
- (f) See Exhibit RB-21, Page 3
- (g) See Exhibit RB-21, Pages 4-6
- (h) Net Cost of Reinsurance based on the analysis of Aon and incorporated in the filing, adjusted for the indicated rate change.
- (i) Compensation for Assessment Risk based on the analysis of Milliman incorporated in the filing, adjusted for the indicated rate change.

1.137

0.21%

0.05%

13.78%

0.99%

NCRB - Pro Forma Total Rate of	Return				
(Including Investment Income on Surplus)					
Mobile Homeowners MH(C) ex. Liabil	lity Insurance				
		Tax			
	Pre-Tax	Liability	Post-Tax		
1 Premiums	100.00%				
Loss & LAE	43.87%				
Commissions	16.60%				
Other Acquisition & General	14.61%				
Taxes, Licenses, & Fees	3.20%				
Policyholder Dividends	0.45%				
Net Cost of Reinsurance	13.78%				
Compensation for Assessment Risk	0.99%				
2 Pro Forma Underwriting Profit	6.50%				
3 Installment Fee Income	0.21%				
4 Regular Tax		1.41%			
5 Additional Tax Due to IRS Treatment of Reserves		0.05%			
6 Return from Underwriting Post-Tax			5.25%		
7 Investment Gain on Insurance Transaction	1.84%				
Less Investment Income on Agent and Reinsurance Balances	0.60%				
Net Investment Gain on Insurance Transaction	1.24%	0.20%	1.04%		
8 Investment Gain on Surplus	3.65%	0.60%	3.05%		
9 Total Return as a Percent of Premium (post-tax)			9.34%		
10 Premium-to-Net Worth Ratio			1.14		
11 Total Return as a Percent of Net Worth (post-tax)			10.68%		
Lines (1) to (8) are expressed as a percentage of premium.					
Assumptions and Parameters					
(a) Underwriting Income Tax Rate			21.00%		
(b) Investment Income Tax Rate			16.44%		
(c) Pre-tax Investment Yield			4.01%		
(d) Premium-to-Surplus Ratio			1.30		
(2)			2.50		

(e) Net Worth-to-Surplus Ratio

(g) Additional Tax Due to IRS Treatment of Loss Reserves and UEPR

(f) Installment Fee Income

(h) Net Cost of Reinsurance

(i) Compensation for Assessment Risk

#### Notes to Exhibit RB-21 Page 1A

- 1 The expense provisions are those used in Exhibit RB-1, adjusted for the indicated rate change.
- 2 Selected by North Carolina Rate Bureau
- 3 See Exhibit RB-21, Page 3
- 4 [ (2) + (3) ] x (a)
- 5 See Exhibit RB-21, Pages 4-6
- 6(2) + (3) (4) (5)
- 7 Investment income on agents balances is calculated as 0.165 x 1.021 x (c), where 0.165 is a factor for agents balances held for less than 90 days and 1.021 is a factor to correct for overdue balances. The figures are based on the Homeowners line and are sourced from ISO. We then deduct investment income on net reinsurance balances, which we estimate at 0.105 of the total cost of reinsurance times (c). The estimate for net reinsurance balances is based on ceded balances payable plus funds held plus other amounts due reinsurers minus reinsurance recoverables. These amounts are taken from the aggregated Schedule F in the latest available edition of A.M. Best's Aggregates & Averages.
- 8 (c) x [  $1/(d) + 0.2657 \times 0.5307$  ], where 0.2657 is the prepaid expense ratio minus the total cost of reinsurance from Page 7 and 0.5307 is the UEPR ratio from Page 7.
- 9(6) + (7) + (8)
- 10 (d) / (e)
- 11 (9) x (10)

#### Assumptions

- (a) Current corporate tax rate, based on the Tax Cut and Jobs Act of 2017.
- (b) See Exhibit RB-21, Pages 11-13. Calculated as 1- average post-tax yield/average pre-tax yield.
- (c) See Exhibit RB-21, Page 10
- (d) See Exhibit RB-21, Page 14
- (e) See Exhibit RB-21, Page 15
- (f) See Exhibit RB-21, Page 3
- (g) See Exhibit RB-21, Pages 4-6
- (h) Net Cost of Reinsurance based on the analysis of Aon and incorporated in the filing, adjusted for the indicated rate change.
- (i) Compensation for Assessment Risk based on the analysis of Milliman incorporated in the filing, adjusted for the indicated rate change.

## NORTH CAROLINA Mobile Homeowners MH(C) ex. Liability Insurance INSTALLMENT PAYMENT INCOME

	Installment	<b>Mobile Home</b>	
Year	Charges	<b>Written Premium</b>	Percentage
202	21 98,292	130,201,079	0.08%
202	194,677	122,868,273	0.16%
201	.9 317,709	118,284,427	0.27%
201	.8 327,136	117,915,910	0.28%
201	.7 333,749	115,100,136	0.29%
Selected	Value		0.21%

Source: NCRB

# North Carolina Mobile Homeowners MH(C) ex. Liability Insurance Calculation of Additional Tax Liability

1. Collected Earned Premium for Current Year	100.00%
2. Unearned (Net) Premium Reserve 12/31/Current	44.60%
3. Unearned (Net) Premium Reserve 12/31/Prior	43.38%
4. Increase: (2) - (3)	1.22%
5. 20% of Increase = Taxable Income	0.24%
6. Additional Tax Liability due to Unearned Premium Reserve	0.05%
7. Unpaid Loss Current Year	12.27%
8. Discounted Unpaid Loss Prior Year	11.65%
9. Unpaid Loss Prior Year	11.93%
10. Discounted Unpaid Loss Prior Year	11.30%
·	
11. Additional Income	-0.01%
12. Additional Tax Liability due to Loss Reserve Discounting	0.00%
,	
13. Total Additional Tax Liabilities (6) + (12)	0.05%
	0.0070

NORTH CAROLINA

Mobile Homeowners MH(C) ex. Liability Insurance
Calculation of Taxable Income

Calculation of Unpaid Loss for Current Accident Year (AY)			Calculation of Discounted Unpaid Loss for Current AY			Calculation of Discounted Unpaid Loss for Prior AY					
	Calculation of Oripaid Loss for Current Accident Year (AT)				Olipaid 2033 for Current AT			Onpula 2000 for Filer At			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
AY Avg	AY Pay	Percent	Total	Unpaid	AY at	Discount	Discounted	AY at	Unpaid	Discount	Discounted
Acc Date	Pattern	Unpaid	Losses	Losses	12/31 yr t	Factor	Unpaid Loss	12/31/yr t-1	Losses	Factor	Unpaid Loss
0.5	75.79%	24.21%	43.875	10.62	2021	0.954554	10.1406				
1.5	94.14%	5.86%	42.675	2.50		0.933939	2.3366	2020	10.333	0.950975	9.8262
2.5	98.58%	1.42%	41.507	0.59	2019	0.936815	0.5520	2019	2.433	0.933741	2.2722
3.5	99.66%	0.34%	40.372	0.14	2018	0.932041	0.1293	2018	0.573	0.939651	0.5385
4.5	99.92%	0.08%	39.268	0.03	2017	0.914064	0.0299	2017	0.135	0.932041	0.1258
5.5	99.98%	0.02%	38.194	0.01	2016	0.916039	0.0071	2016	0.032	0.914064	0.0291
6.5	100.00%	0.00%	37.149	0.00	2015	0.913154	0.0017	2015	0.007	0.916039	0.0069
7.5	100.00%	0.00%	36.133	0.00	2014	0.910177	0.0000	2014	0.002	0.913154	0.0016
								2013	0.000	0.910177	0.0000
Totals				13.90			13.20		13.52		12.80

#### Notes to Pages 4 and 5

Page 4	
2	Page 8, line (2) divided by Page 8, line (1) times one minus the Cost of Reinsurance from Page 7
3	(2) divided by 1 plus the 10 year average growth rate of MHC premiums in North Carolina
4	(2) - (3)
5	(4) x 20%
6	(5) x current corporate tax rate
7	Unpaid current-year net losses at year-end as a percent of current year premium.
	Sum of Page 5, Column (5) x (ratio of the net loss and LAE ratio from Page 7 to the direct loss and LAE ratio from Page 1)
8	Discounted unpaid current-year losses at year-end as a percent of current year premium.
	Sum of Page 5, Column (8) x (ratio of the net loss and LAE ratio from Page 7 to the direct loss and LAE ratio from Page 1)
9	Unpaid prior-year losses at year-end as a percent of current year premium.
	Sum of Page 5, Column (10) x (ratio of the net loss and LAE ratio from Page 7 to the direct loss and LAE ratio from Page 1)
10	Discounted unpaid prior-year losses at year-end as a percent of current year premium.
	Sum of Page 5, Column (12) x (ratio of the net loss and LAE ratio from Page 7 to the direct loss and LAE ratio from Page 1)
11	Change in loss reserve discount: [ (7) - (8) ] - [ (9) - (10) ]
12	(11) x current corporate tax rate
13	(6) + (12)
Page 5	
1	Midpoint of number of years since end of accident period
2	Homeowners accident year payout pattern developed from North Carolina policy year losses (Source: ISO)
3	1 - (2)
4	Latest period losses are based on projected loss ratio from Page 1. For previous years,
	losses are detrended at the 10 year average premium growth rate for MHC in North Carolina.
5	(3) x (4)
6	Accident Year at current year end
7	IRS discount factors for Multiple Peril Lines from Revenue Bulletin 2021-52
8	(5) x (7)
9	Accident Year at prior year end
10	Column (3), previous period x Column (4), current period
11	IRS discount factors for Multiple Peril Lines from Revenue Procedure 2020-48
12	(10) x (11)

# NCRB Investment Income Calculation Mobile Homeowners MH(C) ex. Liability Insurance

# 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 Unearned Premium Reserve	53.07%	530,662
3. Deductions for Prepaid Expenses		,
Commissions & Brokerage	16.60%	
Taxes, Licenses, & Fees (5/6)	2.67%	
Other Acquisition & General (1/2)	7.30%	
Cost of Reinsurance	18.91%	
Total	45.48%	
4. Deduction for Prepaid Expense: (2) x (3)		241,328
5. Net Unearned Premium Reserve Subject to Investment (2) - (4)		289,333
B. Loss and Loss Expense Reserves		
1. Direct Earned Premiums		1,000,000
2. Expected Net Incurred Loss & LAE-to- Direct Premium Ratio	38.74%	387,444
3. Expected Mean Loss and LAE Reserve-to-Incurred Ratio	43.67%	169,198
C. Net Policyholder Funds Subject to Investment (A5 + B3)		458,531
D. Average Rate of Return		4.01%
E. Investment Earnings from Net Reserves: ( C ) x ( D )		18,394
	->// • 4 >	4.044
F. Average Rate of Return as a Percent of Direct Earned Premiums: (	E)/(A1)	1.84%

### NORTH CAROLINA Mobile Homeowners MH(C) ex. Liability Insurance

### ESTIMATED INVESTMENT EARNINGS ON UNEARNED PREMIUM RESERVES AND ON LOSS RESERVES

#### **EXPLANATORY NOTES**

#### Line A-1

Calculations displayed are per million of direct earned premiums.

#### Line A-2

The mean unearned premium reserve (UEPR) is determined by multiplying the direct earned premiums in line (1) by the ratio of the mean unearned premium reserve to the direct earned premium for the current calendar year ended 12/31/21. The data are for North Carolina Homeowners (NC HO) insurance (from statutory Page 14 of the Annual Statement) for all companies which wrote Mobile Homeowners C in the most recent calendar year. Volume amounts are in thousands of dollars.

1 NC HO Direct Earned Premium for most recent calendar year	134,138
2 NC HO UEPR at end of most recent calendar year	73,778
3 NC HO UEPR at end of previous calendar year	68,586
4 Mean NC HO UEPR	71,182
5 Ratio [ (4) / (1) ]	53.07%

#### Line A-3

Deduction for prepaid expenses

Certain production expenses, such as commissions and reinsurance, are assumed to be incurred when the policy is written and before the premium is paid. In addition, half of Other Acquisition and General expenses and 5/6 of Taxes, Licenses and Fees are assumed to be prepaid.

### NORTH CAROLINA Mobile Homeowners MH(C) ex. Liability Insurance

### ESTIMATED INVESTMENT EARNINGS ON UNEARNED PREMIUM RESERVES AND ON LOSS RESERVES

#### **EXPLANATORY NOTES**

#### Line B-2

Ratio is calculated as the expected direct loss and LAE ratio from Page 1 minus the difference between the total cost of reinsurance from Line A-3 and the net cost of reinsurance from Page 1.

#### Line B-3

The mean loss reserve is calculated by multiplying the incurred losses in (2) by the ratio for mean loss reserves to incurred losses. The latter figures are based on total statutory Page 14 figures for North Carolina Homeowners direct losses incurred and direct losses unpaid for all companies writing Mobile Homeowners C in North Carolina in each year. The adjustment for loss expense reserves is based on nationwide industry aggregates for the HO line. Volume amounts are in thousands of dollars.

6 Direct Losses Incurred	2017	39,809
7 Direct Losses Incurred	2018	122,751
8 Direct Losses Incurred	2019	36,245
9 Direct Losses Incurred	2020	49,336
10 Direct Losses Incurred	2021	44,890
11 Direct Losses Unpaid	2016	22,711
12 Direct Losses Unpaid	2017	15,114
13 Direct Losses Unpaid	2018	26,592
14 Direct Losses Unpaid	2019	18,733
15 Direct Losses Unpaid	2020	18,553
16 Direct Losses Unpaid	2021	20,627
17 Mean Loss Reserve	2017	18,913
18 Mean Loss Reserve	2018	20,853
19 Mean Loss Reserve	2019	22,663
20 Mean Loss Reserve	2020	18,643
21 Mean Loss Reserve	2021	19,590
22 Ratio	2017	47.51%
23 Ratio	2018	16.99%
24 Ratio	2019	62.53%
25 Ratio	2020	37.79%
26 Ratio	2021	43.64%
27 Average Loss Reserve		41.69%
28 Ratio of LAE Reserves to	Loss Reserves	0.191
29 Ratio of Incurred LAE to I	ncurred Loss	0.137
30 Loss & LAE Reserve [ (27)	x (1+(28))/(1+(29)) ]	0.437

## NORTH CAROLINA Mobile Homeowners MH(C) ex. Liability Insurance

## ESTIMATED INVESTMENT EARNINGS ON UNEARNED PREMIUM RESERVES AND ON LOSS RESERVES

#### **EXPLANATORY NOTES**

#### Line E

The average rate of return is the average of the pretax current yield calculated on Page 11 and the pretax embedded yield. The embedded yield (see Page 12) is the sum of the ratio of investment income to invested assets for the most recent year plus the ten year average ratio of capital gains to invested assets (see Page 13). The current yield is the estimated currently available rate of return (including both income and capital gains) on the industry investment portfolio (see Page 11).

Embedded Yield	3.32%
Current Yield	4.70%
Average	4.01%

Portfolio Yield and Tax Rate - Current Yield					
Investable Asset	Percent of Assets	Estimated Prospective Pre-Tax Return	Tax Rate	Estimated Prospective Post-Tax Return	
Bonds					
US Gov't	8.47%	3.16%	21.00%	2.50%	
Municipal	21.43%	2.04%	5.25%	1.94%	
Industrial	33.42%	3.82%	21.00%	3.02%	
Preferred Stock	0.51%	5.61%	13.13%	4.87%	
Common Stock	20.82%	10.68%	19.60%	8.59%	
Mortgage Loans	1.30%	5.37%	21.00%	4.24%	
Real Estate	0.80%	6.71%	21.00%	5.30%	
Cash & Short-term Investments	5.48%	2.19%	21.00%	1.73%	
Other Long-Term Investments	7.78%	6.30%	18.78%	5.12%	
Rate of Return Before Expenses	100.00%	4.97%	18.72%	4.04%	
Investment Expenses		0.27%	21.00%	0.21%	
Portfolio Rate of Return		4.70%	18.59%	3.83%	

#### Sources

Preferred Stock Current yield on iShares Preferred Stock Index ETF, 8/12/2022

Real Estate REIT Sector WACC; source: Damodaran Online

Cash 3 month Treasury rate, averaged over 3 months (source: US Treasury)

Municipal Maturity weighted average of 3 month average MBIS Investment Grade yield curve; linearly interpolated

Industrial Three month average of HQM par yields (source: FRED); linearly interpolated
Treasury Three month average of Treasury yields; linearly interpolated (source: US Treasury)

Common Stock 0.0849 ERP (source: Damodaran Online) plus 3 month average T-Bill Rate

Other LTI Average of yields on bond portfolio, preferred stock, common stock, mortgages, and real estate.

Investment Expenses 
Investment Expenses from statutory Page 12 of the Annual Statement (Exhibit of Net

Investment Income) divided by Cash and Invested Assets from statutory Page 2 of the Annual Statement (Assets), as compiled in the 2022 edition of A.M. Best's Aggregates and Averages.

Portfolio Yield and Tax Rate Embedded Yield					
	Income	Tax Rate			
Bonds					
Taxable	27,541,921	21.00%			
Non-Taxable	6,758,270	5.25%			
Stocks					
Taxable	9,208,921	13.13%			
Non-Taxable	3,215,338	5.25%			
Mortgage Loans	1,149,755				
Real Estate	1,995,863				
Contract Loans	91				
Cash & Short Term Inv	138,807				
All Other	12,716,678	21.00%			
Total	62,725,644	17.34%			
Inv. Expenses	6,106,110	21.00%			
Net Inv. Income	56,619,534	16.95%			
Mean Invested Assets	2,156,355,790				
Inv. Inc. Yield Rate	2.63%	16.95%			
Capital Gains (10 yr. avg.) (% of Inv. Assets)	0.70%	0.00%			
Invest. Yield Rate (pre-tax)	3.32%	13.39%			
Invest. Yield Rate (post-tax)	2.88%				

Source: A.M. Best's Aggregates and Averages, 2022 Edition, Page 12 - Exhibit of Net Investment Income (Column 2 - Earned During Year). For capital gains, see Exhibit RB-21, Page 13.

# Realized Capital Gains or Losses As a Percentage of Mean Invested Assets (Amounts in Thousands of Dollars)

		Realized	
		<b>Capital Gains</b>	
Calendar Year	<b>Mean Invested Assets</b>	Amount	Percent
2012	1,400,656,619	9,035,405	0.65%
2013	1,473,600,834	12,163,890	0.83%
2014	1,543,882,375	12,093,078	0.78%
2015	1,567,611,077	9,887,732	0.63%
2016	1,596,937,470	8,086,268	0.51%
2017	1,676,831,258	15,725,303	0.94%
2018	1,733,729,297	10,825,733	0.62%
2019	1,822,857,949	11,238,484	0.62%
2020	1,975,605,647	10,933,304	0.55%
2021	2,156,355,790	18,153,320	0.84%
Total	16,948,068,313	118,142,517	0.70%

<sup>&</sup>quot;Mean Invested Assets" is the average of current and prior year values for Total Invested Assets (Page 2). Source for data is 2012-2022 editions of A.M. Best's Aggregates and Averages. Figures are net of capital gains taxes.

#### **North Carolina**

#### Mobile Homeowners MH(C) ex. Liability Insurance

#### **Premium-to-Surplus Ratios**

Year	Ratio
2021	1.34
2020	1.27
2019	1.36
2018	1.45
2017	1.38
2016	1.25
2015	1.23
2014	1.24
2013	1.20
2012	1.23
Average	1.30

Data from NAIC Statutory Filings and from A.M. Best's Aggregates and Averages, various years, for all groups writing Mobile Homeowners insurance in North Carolina, weighted by North Carolina Mobile Homeowners premiums.

# North Carolina Mobile Homeowners MH(C) ex. Liability Insurance Calculation of Ratio of GAAP Net Worth to Statutory Surplus

	2016	2017	2018	2019	2020
Policyholder Surplus	700,833,588,840	750,700,298,191	742,079,084,495	847,278,658,173	910,066,482,410
+ Deferred Acquisition Costs	33,046,102,666	34,674,341,556	43,991,738,565	46,002,606,289	48,118,482,109
+ Non-Admitted DTA Provision	11,544,280,333	5,482,491,430	6,314,927,861	6,045,409,090	6,001,020,602
+ Non-admitted Assets (non-tax part)	43,722,898,341	46,932,629,941	46,502,063,197	50,520,441,190	51,971,123,366
+ Provision for Reinsurance	2,185,395,913	2,595,884,443	2,737,598,756	2,944,031,835	3,290,710,172
+ Provision for FASB 115(after-tax)	10,015,172,605	14,432,773,013	912,505,274	32,483,869,271	57,249,505,836
- Surplus Notes	(12,027,889,160)	(11,859,500,848)	(11,660,367,237)	(11,606,263,627)	(13,225,869,920)
GAAP-adjusted Net Worth	789,319,549,538	842,958,917,726	830,877,550,911	973,668,752,221	1,063,471,454,574
Ratio of Net Worth to Surplus	1.13	1.12	1.12	1.15	1.17
Five Year Average	1.137				

Source: ISO

1.137

0.21%

0.06%

NCRB - Pro Forma Statutory Rate of Return					
Mobile Homeowners MH(C) Liability Insurance					
		Tax			
	Pre-Tax	Liability	Post-Tax		
1 Premiums	100.00%				
Loss & LAE	54.73%				
Commissions	16.60%				
OA&G	19.02%				
TLF	3.20%				
Policyholder Dividends	0.45%				
2 Pro Forma Underwriting Profit	6.00%				
3 Installment Fee Income	0.21%				
4 Regular Tax		1.30%			
5 Additional Tax Due to IRS Treatment of Reserves	5	0.06%			
6 Return from Underwriting Post-Tax			4.85%		
7 Investment Gain on Insurance Transaction	2.47%				
Less Investment Income on Agents Balances	0.68%				
Net Investment Gain on Insurance Transaction	1.80%	0.30%	1.50%		
8 Statutory Return as a Percent of Premium (post-	tax)		6.35%		
9 Premium-to-Net Worth Ratio			1.14		
10 Statutory Return as a Percent of Net Worth (pos	t-tax)		7.26%		
Lines (1) to (8) are expressed as a percentage of pre	mium.				
Assumptions and Parameters					
·			24.0007		
(a) Underwriting Income Tax Rate			21.00%		
(b) Investment Income Tax Rate			16.44%		
(c) Pre-tax Investment Yield			4.01%		
(d) Premium-to-Surplus Ratio			1.3		

(e) Net Worth-to-Surplus Ratio

(g) Additional Tax Due to IRS Treatment of Loss Reserves and UEPR

(f) Installment Fee Income

#### Notes to Exhibit RB-22 Page 1

- 1 The expense provisions are those used in Exhibit RB-1, adjusted for the indicated rate change.
- 2 Selected by North Carolina Rate Bureau
- 3 See Exhibit RB-22, Page 3
- 4 [ (2) + (3) ] x (a)
- 5 See Exhibit RB-22, Pages 4-6
- 6(2) + (3) (4) (5)
- 7 Investment income on agents balances is calculated as 0.165 x 1.021 x (c), where 0.165 is the factor for agents balances held for less than 90 days and 1.021 is a factor to correct for overdue balances. The figures are based on the Homeowners line and are sourced from ISO.
- 8(6) + (7)
- 9 (d) / (e)
- 10 (8) x (9)

#### Assumptions

- (a) Current corporate tax rate, based on the Tax Cut and Jobs Act of 2017.
- (b) See Exhibit RB-22, Pages 11-13. Calculated as 1- average post-tax yield/average pre-tax yield.
- (c) See Exhibit RB-22, Page 10
- (d) See Exhibit RB-22, Page 14
- (e) See Exhibit RB-22, Page 15
- (f) See Exhibit RB-22, Page 3
- (g) See Exhibit RB-22, Pages 4-6

NCRB - Pro Forma Total Ra	te of Return				
(Including Investment Incon		)			
Mobile Homeowners MH(C) Liability Insurance					
		Tax			
	Pre-Tax	Liability	Post-Tax		
1 Premiums	100.00%				
Loss & LAE	54.73%				
Commissions	16.60%				
OA&G	19.02%				
TLF Policyholder Dividende	3.20% 0.45%				
Policyholder Dividends	0.45%				
2 Pro Forma Underwriting Profit	6.00%				
3 Installment Fee Income	0.21%				
4 Regular Tax		1.30%			
5 Additional Tax Due to TRA		0.06%			
6 Total Return from Underwriting Post-Tax			4.85%		
7 Investment Gain on Insurance Transaction	2.47%				
Less Investment Income on Agents Balances	0.68%				
Net Investment Gain on Insurance Transaction	1.80%	0.30%	1.50%		
8 Investment Gain on Surplus	3.70%	0.61%	3.09%		
9 Total Return as a Percent of Premium (post-tax)			9.44%		
10 Premium-to-Net Worth Ratio			1.14		
11 Total Return as a Percent of Net Worth (post-tax)			10.79%		
Lines (1) to (8) are expressed as a percentage of pren	nium.				
Assumptions and Parameters					
(a) Underwriting Income Tax Rate			21.00%		
(b) Investment Income Tax Rate			16.44%		
(c) Pre-tax Investment Yield			4.01%		
(d) Premium-to-Surplus Ratio			1.30		
(e) Net Worth-to-Surplus Ratio			1.137		
(f) Installment Fee Income			0.21%		
(g) Additional Tax Due to IRS Treatment of Loss Reser	ves and UEPR		0.06%		

#### Notes to Exhibit RB-22 Page 1A

- 1 The expense provisions are those used in Exhibit RB-1, adjusted for the indicated rate change.
- 2 Selected by North Carolina Rate Bureau
- 3 See Exhibit RB-22, Page 3
- 4 [ (2) + (3) ] x (a)
- 5 See Exhibit RB-22, Pages 4-6
- 6(2) + (3) (4) (5)
- 7 Investment income on agents balances is calculated as 0.165 x 1.021 x (c) , where 0.165 is the factor for agents balances held for less than 90 days and 1.021 is a factor to correct for overdue balances. The figures are based on the Homeowners line and are sourced from ISO.
- 8 (c) x [  $1/(d) + 0.2878 \times 0.5307$ , where 0.2878 is the prepaid expense ratio from Page 7 and 0.5307 is the UEPR ratio from Page 7.
- 9(6) + (7) + (8)
- 10 (d) / (e)
- 11 (9) x (10)

#### Assumptions

- (a) Current corporate tax rate, based on the Tax Cut and Jobs Act of 2017.
- (b) See , Pages 11-13. Calculated as 1- average post-tax yield/average pre-tax yield.
- (c) See Exhibit RB-22, Page 10
- (d) See Exhibit RB-22, Page 14
- (e) See Exhibit RB-22, Page 15
- (f) See Exhibit RB-22, Page 3
- (g) See Exhibit RB-22, Pages 4-6

# NORTH CAROLINA Mobile Homeowners MH(C) Liability Insurance INSTALLMENT PAYMENT INCOME

	Installment	<b>Mobile Home</b>	
Year	Charges	Written Premium	Percentage
202	98,292	130,201,079	0.08%
202	194,677	122,868,273	0.16%
201	.9 317,709	118,284,427	0.27%
201	.8 327,136	117,915,910	0.28%
201	.7 333,749	115,100,136	0.29%
Selected	Value		0.21%

Source: NCRB

# North Carolina Mobile Homeowners MH(C) Liability Insurance Calculation of Additional Tax Liability

1. Collected Earned Premium for Current Year	100.00%
2. Unearned Premium Reserve 12/31/Current	55.00%
3. Unearned Premium Reserve 12/31/Prior	53.50%
4. Increase: (2) - (3)	1.50%
5. 20% of Increase = Taxable Income	0.30%
6. Additional Tax Liability due to Unearned Premium Reserve	0.06%
7. Unpaid Loss Current Year	17.33%
8. Discounted Unpaid Loss Prior Year	16.46%
9. Unpaid Loss Prior Year	16.86%
10. Discounted Unpaid Loss Prior Year	15.97%
11. Additional Income	-0.02%
12. Additional Tax Liability due to Loss Reserve Discounting	0.00%
13. Total Additional Tax Liabilities (6) + (12)	0.06%

NORTH CAROLINA

Mobile Homeowners MH(C) Liability Insurance
Calculation of Taxable Income

Calculation	of Unpaid Lo	ss for Currer	nt Accident	Year (AY)		lation of Di d Loss for C				f Discounte for Prior A	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
AY Avg	AY Pay	Percent	Total	Unpaid	AY at	Discount	Discounted	AY at	Unpaid	Discount	Discounted
Acc Date	Pattern	Unpaid	Losses	Losses	12/31 yr t	Factor	Unpaid Loss	12/31/yr t-1	Losses	Factor	Unpaid Loss
0.5	75.79%	24.21%	54.730	13.25	2021	0.954554	12.6496				
1.5	94.14%	5.86%	53.233	3.12	2020	0.933939	2.9147	2020	12.889	0.950975	12.2575
2.5	98.58%	1.42%	51.777	0.73	2019	0.936815	0.6886	2019	3.036	0.933741	2.8344
3.5	99.66%	0.34%	50.361	0.17	2018	0.932041	0.1613	2018	0.715	0.939651	0.6717
4.5	99.92%	0.08%	48.984	0.04	2017	0.914064	0.0373	2017	0.168	0.932041	0.1569
5.5	99.98%	0.02%	47.644	0.01	2016	0.916039	0.0088	2016	0.040	0.914064	0.0362
6.5	100.00%	0.00%	46.341	0.00	2015	0.913154	0.0021	2015	0.009	0.916039	0.0086
7.5	100.00%	0.00%	45.073	0.00	2014	0.910177	0.0000	2014	0.002	0.913154	0.0020
								2013	0.000	0.910177	0.0000
				17.5							
Totals				17.33			16.46		16.86		15.97

#### Notes to Pages 4 and 5

Page 4	
2	Page 8, line (2) divided by Page 8, line (1)
3	(2) divided by 1 plus the 10 year average growth rate of MHC premiums in North Carolina
4	(2) - (3)
5	(4) x 20%
6	(5) x current corporate tax rate
7	Unpaid current-year losses at year-end as a percent of current year premium. Sum of Page 5, Column (5)
8	Discounted unpaid current-year losses at year-end as a percent of current year premium. Sum of Page 5, Column (8)
9	Unpaid prior-year losses at year-end as a percent of current year premium. Sum of Page 5, Column (10)
10	Discounted unpaid prior-year losses at year-end as a percent of current year premium.  Sum of Page 5, Column (12)
11	Change in loss reserve discount: [ (7) - (8) ] - [ (9) - (10) ]
12	(11) x current corporate tax rate
13	(6) + (12)
Page 5	
1	Midpoint of number of years since end of accident period
2	Homeowners accident year payout pattern developed from North Carolina policy year losses (Source: ISO)
3	1 - (2)
4	Latest period losses are based on projected loss ratio from Page 1. For previous years, losses are detrended at the 10 year average premium growth rate for MHC in North Carolina.
5	(3) x (4)
6	Accident Year at current year end
7	IRS discount factors for Multiple Peril Lines from Revenue Bulletin 2021-52
8	(5) x (7)
9	Accident Year at prior year end
10	Column (3), previous period x Column (4), current period
11	IRS discount factors for Multiple Peril Lines from Revenue Procedure 2020-48
12	(10) x (11)

# NCRB Investment Income Calculation Mobile Homeowners MH(C) Liability Insurance

## Projected Investment Earnings on Loss, Loss Adjustment Expense and Unearned Premium Reserves

Adjustificite Expense and Official feet Territoria Reserv		
A. UNEARNED PREMIUM RESERVES		
1. Direct Earned Premiums		1,000,000
2. Mean Unearned Premium Reserve	53.07%	530,662
3. Deductions for Prepaid Expenses		,
Commissions & Brokerage	16.60%	
Taxes, Licenses, & Fees (5/6)	2.67%	
Other Acquisition & General (1/2)	9.51%	
Total	28.78%	
4. Deduction for Prepaid Expense: (2) x (3)		152,706
5. Net Unearned Premium Reserve Subject to Investment (2) - (4)		377,956
B. Loss and Loss Expense Reserves		
1. Direct Earned Premiums		1,000,000
2. Expected Incurred Loss & LAE-to-Premium Ratio	54.73%	547,304
3. Expected Mean Loss and LAE Reserve-to-Incurred Ratio	43.67%	239,009
C. Net Policyholder Funds Subject to Investment (A5 + B3)		616,965
D. Average Rate of Return		4.01%
E. Investment Earnings from Net Reserves: ( C ) x ( D )		24,749
F. Average Rate of Return as a Percent of Direct Earned Premiums: (	E)/(A1)	2.47%

### NORTH CAROLINA Mobile Homeowners MH(C) Liability Insurance

### ESTIMATED INVESTMENT EARNINGS ON UNEARNED PREMIUM RESERVES AND ON LOSS RESERVES

#### **EXPLANATORY NOTES**

#### Line A-1

Calculations displayed are per million of direct earned premiums.

#### Line A-2

The mean unearned premium reserve (UEPR) is determined by multiplying the direct earned premiums in line (1) by the ratio of the mean unearned premium reserve to the direct earned premium for the current calendar year ended 12/31/21. The data are for North Carolina Homeowners (NC HO) insurance (from statutory Page 14 of the Annual Statement) for all companies which wrote Mobile Homeowners C in the most recent calendar year. Volume amounts are in thousands of dollars.

1 Direct Earned NC HO Premium for most recent calendar year	134,138
2 NC HO UEPR at end of most recent calendar year	73,778
3 NC HO UEPR at end of previous calendar year	68,586
4 Mean NC HO UEPR	71,182
5 Ratio [ (4) / (1) ]	53.07%

#### Line A-3

#### Deduction for prepaid expenses

Certain production expenses, such as commissions and reinsurance, are assumed to be incurred when the policy is written and before the premium is paid. In addition, half of Other Acquisition and General expenses and 5/6 of Taxes, Licenses and Fees are assumed to be prepaid.

### NORTH CAROLINA Mobile Homeowners MH(C) Liability Insurance

### ESTIMATED INVESTMENT EARNINGS ON UNEARNED PREMIUM RESERVES AND ON LOSS RESERVES

#### **EXPLANATORY NOTES**

#### Line B-2

The expected loss and loss adjustment expense ratio is consistent with the expense provisions used in the filing.

#### Line B-3

The mean loss reserve is calculated by multiplying the incurred losses in (2) by the ratio for mean loss reserves to incurred losses. The latter figures are based on total statutory Page 14 figures for North Carolina Homeowners direct losses incurred and direct losses unpaid for all companies writing Mobile Homeowners C in North Carolina in each year. The adjustment for loss expense reserves is based on nationwide industry aggregates for the HO line. Volume amounts are in thousands of dollars.

6 Direct Losses Incurred	2017	39,809
7 Direct Losses Incurred	2018	122,751
8 Direct Losses Incurred	2019	36,245
9 Direct Losses Incurred	2020	49,336
10 Direct Losses Incurred	2021	44,890
11 Direct Losses Unpaid	2016	22,711
12 Direct Losses Unpaid	2017	15,114
13 Direct Losses Unpaid	2018	26,592
14 Direct Losses Unpaid	2019	18,733
15 Direct Losses Unpaid	2020	18,553
16 Direct Losses Unpaid	2021	20,627
17 Mean Loss Reserve	2017	18,913
18 Mean Loss Reserve	2018	20,853
19 Mean Loss Reserve	2019	22,663
20 Mean Loss Reserve	2020	18,643
21 Mean Loss Reserve	2021	19,590
22 Ratio	2017	47.51%
23 Ratio	2018	16.99%
24 Ratio	2019	62.53%
25 Ratio	2020	37.79%
26 Ratio	2021	43.64%
27 Average Loss Reserve		41.69%
28 Ratio of LAE Reserves to	Loss Reserves	0.191
29 Ratio of Incurred LAE to	Incurred Loss	0.137
30 Loss & LAE Reserve [ (27	7) x (1+(28))/(1+(29)) ]	0.437

## NORTH CAROLINA Mobile Homeowners MH(C) Liability Insurance

## ESTIMATED INVESTMENT EARNINGS ON UNEARNED PREMIUM RESERVES AND ON LOSS RESERVES

#### **EXPLANATORY NOTES**

#### <u>Line E</u>

The average rate of return is the average of the pretax current yield calculated on Page 11 and the pretax embedded yield. The embedded yield (see Page 12) is the sum of the ratio of investment income to invested assets for the most recent year plus the ten year average ratio of capital gains to invested assets (see Page 13). The current yield is the estimated currently available rate of return (including both income and capital gains) on the industry investment portfolio (see Page 11).

Embedded Yield	3.32%
Current Yield	4.70%
Average	4.01%

Portfolio Yield and Tax Rate - Current Yield				
Investable Asset	Percent of Assets	Estimated Prospective Pre-Tax Return	Tax Rate	Estimated Prospective Post-Tax Return
Bonds				
US Gov't	8.47%	3.16%	21.00%	2.50%
Municipal	21.43%	2.04%	5.25%	1.94%
Industrial	33.42%	3.82%	21.00%	3.02%
Preferred Stock	0.51%	5.61%	13.13%	4.87%
Common Stock	20.82%	10.68%	19.60%	8.59%
Mortgage Loans	1.30%	5.37%	21.00%	4.24%
Real Estate	0.80%	6.71%	21.00%	5.30%
Cash & Short-term Investments	5.48%	2.19%	21.00%	1.73%
Other Long-Term Investments	7.78%	6.30%	18.78%	5.12%
Rate of Return Before Expenses	100.00%	4.97%	18.72%	4.04%
Investment Expenses		0.27%	21.00%	0.21%
Portfolio Rate of Return		4.70%	18.59%	3.83%

#### Sources

Preferred Stock Current yield on iShares Preferred Stock Index ETF, 8/12/2022

Real Estate REIT Sector WACC; source: Damodaran Online

Cash 3 month Treasury rate, averaged over 3 months (source: US Treasury)

Municipal Maturity weighted average of 3 month average MBIS Investment Grade yield curve; linearly interpolated

Industrial Three month average of HQM par yields (source: FRED); linearly interpolated
Treasury Three month average of Treasury yields; linearly interpolated (source: US Treasury)

Common Stock 0.0849 ERP (source: Damodaran Online) plus 3 month average T-Bill Rate

Other LTI Average of yields on bond portfolio, preferred stock, common stock, mortgages, and real estate.

Investment Expenses 
Investment Expenses from statutory Page 12 of the Annual Statement (Exhibit of Net

Investment Income) divided by Cash and Invested Assets from statutory Page 2 of the Annual Statement (Assets), as compiled in the 2022 edition of A.M. Best's Aggregates and Averages.

Portfolio Yield and Tax Rate Embedded Yield					
	Income	Tax Rate			
Bonds					
Taxable	27,541,921	21.00%			
Non-Taxable	6,758,270	5.25%			
Stocks	0.200.024	12 120/			
Taxable Non-Taxable	9,208,921				
ivon-raxable	3,215,338	5.25%			
Mortgage Loans	1,149,755	21.00%			
Real Estate	1,995,863				
Contract Loans	91	21.00%			
Cash & Short Term Inv	138,807	21.00%			
All Other	12,716,678	21.00%			
Total	62,725,644	17.34%			
Inv. Expenses	6,106,110	21.00%			
Net Inv. Income	56,619,534	16.95%			
Mean Invested Assets	2,156,355,790				
Inv. Inc. Yield Rate	2.63%	16.95%			
Capital Gains (10 yr. avg.) (% of Inv. Assets)	0.70%	0.00%			
Invest. Yield Rate (pre-tax)	3.32%	13.39%			
Invest. Yield Rate (post-tax)	2.88%	,			

Source: A.M. Best's Aggregates and Averages, 2022 Edition, Page 12 - Exhibit of Net Investment Income (Column 2 - Earned During Year). For capital gains, see Exhibit RB-22, Page 13.

# Realized Capital Gains or Losses As a Percentage of Mean Invested Assets (Amounts in Thousands of Dollars)

		Realized	
		<b>Capital Gains</b>	
Calendar Year	<b>Mean Invested Assets</b>	Amount	Percent
2012	1,400,656,619	9,035,405	0.65%
2013	1,473,600,834	12,163,890	0.83%
2014	1,543,882,375	12,093,078	0.78%
2015	1,567,611,077	9,887,732	0.63%
2016	1,596,937,470	8,086,268	0.51%
2017	1,676,831,258	15,725,303	0.94%
2018	1,733,729,297	10,825,733	0.62%
2019	1,822,857,949	11,238,484	0.62%
2020	1,975,605,647	10,933,304	0.55%
2021	2,156,355,790	18,153,320	0.84%
Total	16,948,068,313	118,142,517	0.70%

<sup>&</sup>quot;Mean Invested Assets" is the average of current and prior year values for Total Invested Assets (Page 2). Source for data is 2012-2022 editions of A.M. Best's Aggregates and Averages. Figures are net of capital gains taxes.

#### **North Carolina**

#### Mobile Homeowners MH(C) Liability Insurance

#### **Premium-to-Surplus Ratios**

Year	Ratio
2021	1.34
2020	1.27
2019	1.36
2018	1.45
2017	1.38
2016	1.25
2015	1.23
2014	1.24
2013	1.20
2012	1.23
Average	1.30

Data from NAIC Statutory Filings and from A.M. Best's Aggregates and Averages, various years, for all groups writing Mobile Homeowners insurance in North Carolina, weighted by North Carolina Mobile Homeowners premiums.

# North Carolina Mobile Homeowners MH(C) Liability Insurance Calculation of Ratio of GAAP Net Worth to Statutory Surplus

	2016	2017	2018	2019	2020
Policyholder Surplus	700,833,588,840	750,700,298,191	742,079,084,495	847,278,658,173	910,066,482,410
+ Deferred Acquisition Costs	33,046,102,666	34,674,341,556	43,991,738,565	46,002,606,289	48,118,482,109
+ Non-Admitted DTA Provision	11,544,280,333	5,482,491,430	6,314,927,861	6,045,409,090	6,001,020,602
+ Non-admitted Assets (non-tax part)	43,722,898,341	46,932,629,941	46,502,063,197	50,520,441,190	51,971,123,366
+ Provision for Reinsurance	2,185,395,913	2,595,884,443	2,737,598,756	2,944,031,835	3,290,710,172
+ Provision for FASB 115(after-tax)	10,015,172,605	14,432,773,013	912,505,274	32,483,869,271	57,249,505,836
- Surplus Notes	(12,027,889,160)	(11,859,500,848)	(11,660,367,237)	(11,606,263,627)	(13,225,869,920)
GAAP-adjusted Net Worth	789,319,549,538	842,958,917,726	830,877,550,911	973,668,752,221	1,063,471,454,574
Ratio of Net Worth to Surplus	1.13	1.12	1.12	1.15	1.17
Five Year Average	1.137				

Source: ISO

#### Sample of Findings on the Private Company Discount

Study	Years	Discount	Туре
Emory (1994)	1992-1993	45%	IPO
Willamette Management Associates (various)	1975-1997	29% to 60%	IPO
Garland and Reilly (2004)	1998-2002	35%	IPO
Larcker et al. (2018)	2017	39% to 47%	IPO
Koeplin et al. (2000)	1984-1998	20% to 30%	Acquisitions
Block (2007)	1999-2006	20% to 25%	Acquisitions
Officer (2007)	1979-2003	15% to 30%	Acquisitions
Paglia and Harjoto (2010)	1993-2008	65% to 70%	Acquisitions
Jaffe et al. (2018)	1985-2014	0%	Acquisitions
Lohrey (2020)	2005-2015	48% to 62%	Acquisitions
   Silber (1991)	1981-1988	34%	Restricted Stock
Johnson (1999)	1991-1995	20%	Restricted Stock
Bajaj et al. (2001)	1990-1995	7%	Private placements
Comment (2012)	2004-2010	5% to 6%	Private placements
Finnerty (2013)	1991-1997	21%	Private placements
Finnerty (2013)	1997-2007	15%	Private placements
Chen et al. (2015)	1999-2012	10%	Private placements

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\* The Willamette research studies were unpublished but reported in <u>Business Valuation Discounts and Premiums</u>, Chapter 5, by Shannon Pratt (New York: John Wiley & Sons, Inc., p. 85).