

LOSS COSTS – INFORMATION

DECEMBER 11, 2023

COMMERCIAL PROPERTY

LI-CF-2023-150

VERMONT COMMERCIAL FIRE AND ALLIED LINES ADVISORY PROSPECTIVE LOSS COST REVISION TO BE IMPLEMENTED; LOSS COST REPLACEMENT PAGE PROVIDED

KEY MESSAGE

We are providing replacement loss cost Section E, Page E-3, for filing [CF-2023-RLA1](#) in Vermont.

BACKGROUND

In circular [LI-CF-2023-149](#), we announced that Commercial Property loss cost filing CF-2023-RLA1 was to be implemented. After announcing implementation, it has come to our attention that the Rule 72.E.2.(c).2 Causes of Loss – Special Form loss cost provided for Service – High was not as intended. Consequently, Section E, Page E-3 of loss cost filing CF-2023-RLA1, has been revised to display the intended loss cost.

ISO ACTION

We are replacing Section E, Page E-3, to reflect the revised Service – High loss cost within Rule 72.E.2.(c).2. Apart from the updated above, the information in circular [LI-CF-2023-149](#) remains unchanged.

For more information on the status of filings in a particular state, including filed and approved documents, associated circulars and links to Print Ready Manuals and Commercial Lines Manual, please feel free to access our [Filings](#) feature within the ISOnet Circulars product.

REFERENCE(S)

[LI-CF-2023-149](#) (11/30/2023) Vermont Commercial Fire And Allied Lines Advisory Prospective Loss Cost Revision To Be Implemented

[ATTACHMENT\(S\)](#)

- CF-2023-RLA1
- PCS Catastrophe List
- Supplement containing Basic Group I experience on a Rating Group basis

FILES AVAILABLE FOR DOWNLOAD

To download all files associated with this circular, including attachments in the full circular PDF and/or any additional files not included in the PDF, search for the circular number on [ISOnet Circulars](#). Then click the Word/Excel link under the Full Circular column on the Search Results screen.

Please note that in some instances, not all files listed in the Attachment(s) block (if applicable) are included in the PDF.

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ACKNOWLEDGMENT OF ACTUARIAL QUALIFICATIONS

The American Academy of Actuaries' "Qualifications Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" requires that an actuary issuing a Statement of Actuarial Opinion should include an acknowledgment with the opinion that he/she has met the qualification standards of the AAA. ISO considers the loss cost level indications shown in this document a Statement of Actuarial Opinion; therefore, we are including the following acknowledgment:

I, Rimma Maasbach, am an Actuarial Consultant in Actuarial Operations for ISO, and I, Brian Klaif, am an Associate Actuarial Consultant for Commercial Property for ISO. We are jointly responsible for the content of this Statement of Actuarial Opinion. We are both members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

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VERMONT

COMMERCIAL FIRE AND ALLIED LINES INSURANCE PROSPECTIVE LOSS COST LEVEL REVISION EXECUTIVE SUMMARY

PURPOSE

This document:

- revises advisory prospective loss costs. These loss costs represent a +1.1% statewide change from the current ISO loss costs.
- provides the analyses used to derive the prospective loss costs based on experience through calendar/accident year ending 3/31/2022, evaluated as of 6/30/2022.
- incorporates hurricane modeled loss costs based on Touchstone Version 9.0 of AIR Worldwide Corporation's (AIR) tropical cyclone model.
- introduces Basic Group I loss costs for the cannabis classes (0535, 0574, 0575, 0585, and 2205). See filing CF-2021-RCCLC.

CONSIDERATION OF COVID-19

ISO has considered whether any adjustments need to be made to prospective loss costs, which are based partially on historical experience (pre-COVID-19), to reflect the conditions in which these loss costs will be effective (post-COVID-19). While there will almost certainly be long-term behavioral, social and economic changes as a result of COVID-19, we expect, that those changes will have negligible and/or offsetting effects on prospective loss costs. Considering the nature of the perils coverage by Basic Group I (fire) and the weather driven perils covered by Basic Group II and Special Causes of Loss, ISO is not making any explicit adjustments to our Commercial Property prospective loss costs due to COVID-19.

DEFINITION OF THE ISO PROSPECTIVE LOSS COST

Advisory prospective loss costs in this document are the expected value of that portion of a rate that does not include provisions for expenses (other than loss adjustment expenses) or profit, and are based on historical aggregate losses and loss adjustment expenses adjusted and projected through trending to a future point in time.

CHANGES TO METHODOLOGY

Calculation of Aggregate Loss Costs at Current Level (ALCCL)

With the implementation of a new ratemaking system, we are now able to reflect risk count in the calculation of PPR (extension of exposure approach) used to calculate Aggregate Loss Costs at Current Level (ALCCL). When there are multiple risks having the same features and are reported as such, they are now counted separately, which more accurately reflects current statistical reporting instructions.

Premiums are both on-leveled and, where possible, PPR'd for the calculation of ALCCL. It should be noted that PPR cannot be calculated for some risks, e.g., Basic Group I specifically-rated risks for which there are no manual (class-rated) loss costs to be used for PPR'ing.

In both the old system and the new, ISO's ratemaking procedures include coding which compares the ALCCL results of using the PPR approach versus the on-level approach, then selects the appropriate result. In the old system, if multiple base records were being inadvertently calculated as if they were one base record, then often the PPR approach would result in too little ALCCL, but the on-level results would have accurately reflected the higher ALCCL of the multiple exposures. In the new system, if there are extra records being reported as if they are base records, which could result in the PPR method calculating them to have too much ALCCL, then the on-level approach would accurately reflect the lower ALCCL from fewer exposures. Because not all reporting errors can be caught, this system acts to ensure that a valid ALCCL amount is selected in both the old methodology and the new.

In addition, the PPR or on-level selection criteria has also been updated with our new programs. Because we now have the ability to make the system more granular, the decision of whether to use the PPR'd or on-leveled ALCCL is being made on a record basis rather than based on an aggregation over similar fields as was done in the old system, which we believe is more accurate.

The combination of reflecting risk count for PPR and selecting on-leveled vs. PPR'd ALCCL on a unit record basis results in more accurate ALCCL for ratemaking. Note that these changes only apply for those records that can be PPR'd and have no impact on those records that are on-leveled only.

LOSS COST LEVEL CHANGES

The statewide monoline prospective loss cost level changes are:

<u>Coverage</u>	<u>Indicated</u>
Basic Group I	+2.9%
Basic Group II	+2.7%
Special Causes of Loss	-3.6%
Total	+1.1%

Indicated loss cost level changes are changes from the current loss cost level.

PRIOR ISO
REVISIONS

The latest revisions in this state are:

<u>Reference Document or Filing</u>	CF-2021-RLA1	CF-2019-RLA1
<u>Rates/ Loss Costs</u>	Loss Costs	Loss Costs
<u>Dates Implemented</u>	06/01/22	11/01/19
<u>Changes</u>		
Basic Group I	-3.1%	-8.4%
Basic Group II	-3.0%	-0.2%
Special Causes of Loss	-8.5%	-3.8%
Total	-4.5%	-6.2%

HISTORICAL
SOURCE DATA

The data used in this revision is:

- . Voluntary experience for ISO reporting companies.
 - . Five calendar/accident years ending 3/31/2022 for Basic Group I and Special Causes of Loss.
 - . Ten calendar/accident years ending 3/31/2022 for Basic Group II.
-

DISTRIBUTION
OF STATEWIDE
MONOLINE
LOSS COST
CHANGES

ISO has distributed the statewide monoline prospective loss cost changes as follows:

- by territory (where applicable) for Basic Group I.
- by territory, coverage and symbol (where applicable) for Basic Group II.
- by category (building coverage and occupancy type) for Special Causes of Loss.

This has been done based on the experience of each territory (where applicable) for Basic Group I or category for Special Causes of Loss. Therefore, the resulting changes will vary by territory (where applicable) for Basic Group I and by category for Special Causes of Loss.

TREND AND
OTHER
ADJUSTMENTS

Loss Trend

For trend purposes, the period of use for this revision is assumed to begin on 12/01/2024. To adjust the loss experience to the levels expected to prevail while the revised loss costs are in effect, trend factors have been applied to the historical incurred losses. These trend factors are based on:

- external cost indices published by the U.S. Government and information provided by Xactware Solutions, Inc.
- changes in multistate average claim costs through fourth quarter 2021.

The "historic" trend factors based on the external indices, i.e. the factors based on historic changes in the indices, vary by year. The latest annual rates of change based on these indices are:

<u>Coverage</u>	<u>Annual Rate of Change</u>
Buildings	7.5%
Contents	7.6%
Time Element	7.8%

Incurred losses are also multiplied by loss trend adjustment factors (LTA's) to reflect trends in claim frequency and claim costs that are different from those exhibited by the external indices. The annual loss trend adjustments are:

<u>Line of Business</u>	<u>Buildings</u>	<u>Contents</u>	<u>Time Element</u>
Basic Group I	-0.3%	0.3%	1.8%
Basic Group II	0.5%	3.1%	2.4%
Special Causes of Loss	0.2%	-0.2%	1.8%

TREND AND
OTHER
ADJUSTMENTS
(cont'd)

This produces a total annual loss trend of:

<u>Line of Business</u>	<u>Buildings</u>	<u>Contents</u>	<u>Time Element</u>
Basic Group I	7.2%	7.9%	9.8%
Basic Group II	8.0%	10.9%	10.4%
Special Causes of Loss	7.7%	7.4%	9.7%

Premium Trend

Over time, insureds tend to purchase increased amounts of insurance in order to compensate for inflation, which results in increased premium revenue.

In order to reflect this increase in revenue, ISO uses a premium trend procedure. The premium trend factors are based on observed changes in the annual amount of insurance written for BG I renewal policies for a group of selected companies. For property damage coverages, these amount of insurance, or exposure, trend factors are adjusted for the decrease in limit of insurance factors associated with the increase in amount of insurance to calculate premium trend factors. The selected annual trends in the amount of insurance are:

<u>Line of Business</u>	<u>Buildings</u>	<u>Contents</u>	<u>Time Element</u>
Basic Group I	3.9%	2.3%	1.6%
Basic Group II	3.5%	2.1%	1.6%
Special Causes of Loss	3.7%	1.8%	1.6%

Other Adjustments

Standard actuarial procedures have been used in calculating the loss costs including loss development and the reflection of all loss adjustment expense. In addition, smoothing procedures have been applied to stabilize the effects of large or excess losses.

TEN LARGEST
COMPANY
GROUPS IN
ISO DATA BASE

COMMERCIAL MULTIPERIL - NON-LIABILITY (ASLOB 51)

1. Vermont Mutual Insurance Company
2. Patrons Cooperative Fire Insurance
3. Liberty Mutual Insurance Company
4. Cincinnati Insurance Company
5. Travelers Indemnity Company
6. Tokio Marine Companies
7. Frankenmuth Mutual Insurance Company
8. Concord General Mutual Insurance Company
9. NGM Insurance Company
10. Zurich American Insurance Company

Insurers are listed in descending order based on the percent of statewide written premium volume from Annual Statement Page 15 for year ending 12/31/2021 for

Annual Statement Line of Business (ASLOB) 51, Commercial Multiperil - Non-liability.

Although ASLOB 51 includes coverages in addition to commercial fire and allied lines, e.g., crime, inland marine, fidelity, the largest percentage of premium volume is due to fire and allied lines (Basic Group I, Basic Group II, and Special Causes of Loss coverages). ASLOB 51 does not include data reported under monoline fire and allied lines (ASLOBs 10 and 21), which includes both commercial and personal property experience.

SIZE OF ISO
DATA BASE

The market share of all insurers reporting to ISO in this state and included in the ratemaking experience underlying this review as measured by Annual Statement Page 15 written premium for year ending 12/31/2021 is:

Commercial Multi-peril - Non-liability (ASLOB 51) - 56.7%

COMPANY
DECISION

We encourage each insurer to decide independently whether the judgments made and the procedures or data used by ISO in developing the loss costs contained herein are appropriate for its use. We have included within this document the information upon which ISO relied in order to enable companies to make such independent judgments.

The data underlying the enclosed material comes from companies reporting to Insurance Services Office, Inc. Therefore, the ISO experience permits the establishment of a much broader statistical ratemaking base than could be employed by using any individual company's data. A broader data base enhances the validity of ratemaking analysis derived therefrom. At the same time, however, an individual company may benefit from comparison of its own experience to the aggregate ISO experience, and may reach valid conclusions with respect to the manner in which its own costs can be expected to differ from ISO's projections based on the aggregate data.

Some calculations included in this document involve areas of ISO staff judgment. Each company should carefully review and evaluate its own experience in order to determine whether the ISO selected loss costs are appropriate for its use.

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COMMERCIAL PROPERTY

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OVERVIEW OF ISO ACTUARIAL PROCEDURES - COMMERCIAL PROPERTY

INTRODUCTION

Commercial Property prospective loss costs are determined by evaluating the adequacy of the current ISO loss costs to pay for our best estimate of losses and all loss adjustment expenses that will be incurred in the prospective (or future) period. This evaluation is done separately for Basic Group I, Basic Group II, and Special Causes of Loss.

STEP 1: DETERMINATION OF INDICATED STATEWIDE LOSS COST LEVEL CHANGE

The first step in this process is the determination of the indicated statewide loss cost level change. This indicated statewide loss cost level change is the average percentage change which must be made to the current ISO loss costs in order to achieve adequacy for the prospective conditions. The percentage changes are presented on the exhibits labeled "Statewide Coverage Loss Cost Level Evaluation".

STEP 2: DISTRIBUTION OF CHANGES

Based on the experience, ISO then distributes the indicated statewide loss cost level change by territory (where applicable) and type of policy for Basic Group I; by type of policy for Basic Group II; and by type of policy and category for Special Causes of Loss.

STEP 3: CALCULATION OF REVISED LOSS COSTS

The last step is the calculation of the prospective ISO loss costs. This is achieved by applying the indicated monoline changes to the current ISO loss costs. For Basic Group I, for those states without BG I rating territories, the statewide loss cost changes are applied to the current manual loss costs. For those states with rating territories, the Balance of State loss cost changes are applied to the current manual loss costs. The revised territory multipliers are calculated by multiplying the current territory multipliers by the indicated territory changes. For specifically-rated properties, the appropriate changes are applied to the current experience level adjustment factors and territory multipliers. For Basic Group II, revised loss costs are calculated by applying the indicated statewide monoline change to the current ISO loss costs, and where applicable, adding the hurricane modeled loss costs. For Special Causes of Loss, revised loss costs are calculated by applying the indicated monoline changes by category to the current ISO loss costs.

COMMERCIAL PROPERTY INSURANCE
CALCULATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGES IN EXHIBITS B1-B3

OBJECTIVE	<p>The objective of this procedure is to determine the indicated statewide advisory loss cost level change. This procedure answers the question: What average percentage change must be made to the current ISO loss costs in order for them to be adequate to cover indemnity losses and all loss adjustment expenses incurred in the prospective period in which the revised loss costs are assumed to be in effect?</p>
DESCRIPTION	<p>This procedure compares the trended and developed incurred losses and loss adjustment expenses with the trended aggregate loss costs at current ISO level. The aggregate loss costs at current level are the amounts that would have been collected for losses and all loss adjustment expenses if the current ISO loss costs had been in effect during the experience period.</p> <p>Experience ratios (losses and all loss adjustment expenses divided by aggregate loss costs, both trended to the prospective experience period) are calculated by year, and a weighted average of the yearly experience ratios is calculated. For Basic Group I (BG I) and Special Causes of Loss (SCL), the five year weights vary by year, giving greater weight to the more recent experience. For Basic Group II (BG II), because of the more volatile nature of the data, the ten individual years are given equal weight.</p> <p>The average experience ratio is then credibility-weighted with the expected experience ratio in order to minimize the impact of random variation in the observed losses. The resulting credibility-weighted experience ratio is the indicated statewide advisory loss cost level change in decimal form.</p>
EXPERIENCE BASE	<p>The experience used in this review is the latest available data reported under the ISO Commercial Statistical Plan for BG I, BG II and SCL. The data are aggregated on an accident year basis.</p>

EXPLANATORY NOTES TO EXHIBITS B1-B3

STATEWIDE BASIC GROUP I, BASIC GROUP II AND SPECIAL CAUSES OF LOSS COVERAGE LOSS COST LEVEL EVALUATION

COLUMN (1)

EXPERIENCE PERIOD

Experience for the five most recent accident years is used for BG I and SCL.
Experience for the ten most recent accident years is used for BG II.

COLUMN (2)

AGGREGATE LOSS COSTS

Since the objective of the ratemaking procedure is to test the adequacy of the current ISO loss costs, premium data for each year in the experience period are adjusted to the loss cost level which would have been earned had the current loss costs been in effect. This is accomplished by using either an extension-of-exposures (PPR or premium at present rates/loss costs) approach or an on-level approach. Where appropriate, certain reported data elements have been adjusted prior to being used in the calculations.

Extension of Exposures Approach

Where feasible, aggregate loss costs at current level (ALCCL) are developed using an extension-of-exposures approach. That is, the exposure (amount of insurance per \$100) for each policy is multiplied by the current manual loss cost for that state, territory, subline, coverage, construction, occupancy and by any other applicable rating factors, such as limit of insurance factors and deductible relativities.

On-level Approach

The on-level approach is applied on an individual policy basis. The first step in the process is to multiply the reported premiums by the product of all loss cost level changes that have become effective subsequent to the inception date of the policy. The premiums are divided by the reported Rating Modification Factors and Loss Cost Multipliers to bring them to current ISO monoline manual loss cost level.

For premium records with inception dates prior to the effective date of the implementation of Limit of Insurance (LOI) curves, premiums are multiplied by off-balance factors and limit of insurance factors to bring them to a post-LOI loss cost level.

The on-level approach is used to adjust those premium records which cannot be adjusted using the extension-of-exposures techniques, for example, premium records for Basic Group I specifically-rated properties, for which manual loss costs do not exist. In addition, records failing an exposure edit which checks for a reasonable relationship between reported premium and exposure amount have also been on-leveled.

STATEWIDE BASIC GROUP I, BASIC GROUP II AND
SPECIAL CAUSES OF LOSS COVERAGE LOSS COST LEVEL EVALUATION (cont'd)

COLUMN (2)
(cont'd)

Current IPMF and Prospective Amount of Insurance Levels

Premiums are also adjusted to prospective amount of insurance levels by exposure trend factors to reflect the impact of inflation on the average amount of insurance written (Exhibit C13). After multiline premiums are brought to current ISO monoline manual level, they are further adjusted to implicit package modification factor (IPMF) level by the application of Commercial Package Policy (CPP) IPMF's which vary by the eight CPP types of policy. (Both the adjustments to prospective amount of insurance level and to current IPMF level are done on an aggregate basis.) For a more complete description of the IPMF's and the other premium adjustments, refer to Exhibits C7 through C9 in the supporting material.

COLUMN (3) - BG II

NON-HURRICANE AGGREGATE LOSS COSTS - BASIC GROUP II ONLY

The non-hurricane aggregate loss costs reflect that portion of the BG II loss cost volume due to perils other than hurricane. These loss costs are calculated by multiplying the total aggregate loss costs for each rating territory, coverage, and symbol by the ratio of the current non-hurricane to current total loss costs found on Exhibit C25.

COLUMN (3) -
BG I, SCL
COLUMN (4) - BG II

ADJUSTED INCURRED LOSSES

In order to assure the adequacy of the proposed loss cost level, incurred losses are adjusted to reflect the effect of inflation and other trends on loss costs. The adjustment of past losses to prospective levels is accomplished on an individual loss basis by application of current cost factors, loss projection factors and loss trend adjustments (Exhibits C10 through C12). In addition to adjusting losses to prospective cost level, the effect of inflation on the deductible portion of the loss incurred is reflected. For Basic Group II, losses due to hurricanes reflected in the modeled hurricane loss costs have been removed from the experience and replaced with average non-hurricane losses for each rating territory and loss month.

For each subline, incurred losses are further adjusted by an excess loss procedure which smoothes fluctuations due to large loss occurrences. The procedure removes any losses determined to be excess from the total incurred losses, resulting in normal incurred losses. These normal incurred losses (total - excess) are then multiplied by excess loss factors to calculate adjusted incurred losses (Exhibits C18 through C21). The resulting adjusted incurred losses are then developed to their ultimate settlement value and loaded by a factor to include all loss adjustment expenses. Loss development factors can be found on Exhibit C17, and loss adjustment expense factors on Exhibit D6. Where appropriate, certain reported data elements have been adjusted prior to being used in the calculations.

STATEWIDE BASIC GROUP I, BASIC GROUP II AND
SPECIAL CAUSES OF LOSS COVERAGE LOSS COST LEVEL EVALUATION (cont'd)

COLUMN (4) - BG I, SCL EXPERIENCE RATIO
COLUMN (5) - BG II

The experience ratio is the ratio of adjusted incurred losses to aggregate loss costs for each year. For BG II, the experience ratio is a measure of non-hurricane experience only. It is the ratio of the adjusted non-hurricane incurred losses to the non-hurricane aggregate loss costs.

COLUMN (5) - BG I, SCL WEIGHTS

For Basic Group I and Special Causes of Loss, the yearly experience ratios are weighted using weights of 10%, 15%, 20%, 25%, and 30% with the greatest weight assigned to the most recent year. These weights recognize the need to balance stability and responsiveness. The ten Basic Group II experience ratios are equally weighted, each given 10% weight.

LINE (6) WEIGHTED EXPERIENCE RATIO

For Basic Group I and Special Causes of Loss, the weights are applied to the experience ratios to yield the weighted experience ratio. For Basic Group II, the experience ratios are equally weighted. These weighted experience ratios represent a projection of the experience which would result if future policies were written without a loss cost level revision.

LINE (7) CREDIBILITY

The standards for 100% credibility are discussed in detail in Exhibits C22, C23, and C24 for Basic Group I, Basic Group II, and Special Causes of Loss, respectively.

LINE (8) EXPECTED EXPERIENCE RATIO

The expected experience ratio is ISO's best prediction of the experience ratio if the actual incurred experience were not available. For this review, we have assumed that the current loss costs were adequate when implemented and will be inadequate for the prospective period only to the extent of the net trend. The expected experience ratio is represented by the net (loss / amount of insurance) trend factor.

STATEWIDE BASIC GROUP I, BASIC GROUP II AND
SPECIAL CAUSES OF LOSS COVERAGE LOSS COST LEVEL EVALUATION (cont'd)

LINE (9) CREDIBILITY WEIGHTED EXPERIENCE RATIO

The credibility weighted experience ratio is a weighted average of the weighted experience ratio (line (6)) and the expected experience ratio (line (8)) using the credibility factor and its complement as respective weights. For more detailed information regarding the development of the credibility factors, refer to Exhibits C22, C23, and C24.

LINE (10) INDICATED COVERAGE LOSS COST CHANGE

The credibility weighted experience ratio yields the overall coverage loss cost level change for Basic Group I (see Exhibit B1), Basic Group II (see Exhibit B2), and Special Causes of Loss (see Exhibit B3).

COMPOSITION OF THE RATEMAKING DATA BASE

DATA INCLUDED

BASIC GROUP I

- . CSP Subline 010 (Commercial Fire)
- . CSP Subline 015 (Basic Group I, i.e., Fire, Lightning, Explosion, Vandalism, Sprinkler Leakage)
- . CSP Subline 016 (BG I excluding Vandalism)
- . CSP Subline 017 (BG I excluding Sprinkler Leakage)
- . CSP Subline 018 (BG I excluding Vandalism and Sprinkler Leakage)

BASIC GROUP II

- . CSP Subline 020 (Extended Coverage)
- . CSP Subline 025 (Basic Group II, i.e., Windstorm or Hail, Smoke, Aircraft or Vehicles, Riot or Civil Commotion, Sinkhole Collapse and Volcanic Action)
- . CSP Subline 027 (Basic Group II Causes of Loss, i.e., Windstorm or Hail, Smoke, Aircraft or Vehicles, Riot or Civil Commotion, Sinkhole Collapse and Volcanic Action)
- . CSP Subline 029 (Basic Group II Causes of Loss excluding Windstorm or Hail)

SPECIAL CAUSES OF LOSS

- . CSP Subline 028 (All Other Perils Special Coverage Forms & Endorsements)
- . CSP Subline 035 (Causes of Loss Special Form Including Theft)
- . CSP Subline 045 (Causes of Loss Special Form Excluding Theft)

NOTES ON DATA INCLUDED

All CSP data are reviewed for CSP Types of Policy 10 (monoline), 3X, 70, and 7X (multiline).

For BG I, BG II and SCL, the reviewed experience is for property damage and time element coverages (coverage codes 1-7, as well as coverage code 9 reported under pre-simplification sublines 010, 020, and 028).

COMPOSITION OF THE RATEMAKING DATA BASE (cont'd)

<u>DATA EXCLUDED</u>	<u>TYPE OF DATA</u>	<u>BG I</u>	<u>BG II</u>	<u>SCL</u>
	• Non-voluntary experience (e.g. FAIR Plans)	X	X	NA
	• Dwelling experience	X	X	X
	• Farm experience	X	X	NA
	• Countrywide rated risks	X	X	X
	• Highly protected risks	X	X	X
	• Experience for policies with large deductibles	X	X	X

X indicates that experience is excluded.

For BG II, losses due to hurricanes with wind speeds of 40 miles per hour or greater have been excluded and replaced with average non-hurricane losses for each BG II rating territory and loss month.

Separately identifiable terrorism premium and loss records have been excluded from the ratemaking experience.

OVERVIEW OF ISO ACTUARIAL PROCEDURES - COMMERCIAL PROPERTY

STEP 2 - DISTRIBUTION OF LOSS COST LEVEL CHANGES

OBJECTIVE	<p>The objective of this procedure is to distribute the indicated statewide loss cost level change for Basic Group I, Basic Group II, and Special Causes of Loss among the various rating variables used in each subline. These procedures are used to answer the question: What percentage change for each rating variable must be made to the current ISO loss costs in order to achieve adequacy for the prospective conditions?</p> <hr/>
BASIC GROUP I	<p>For Basic Group I, a consolidated simultaneous iterative procedure is used to calculate the type of policy and territory relativities. More detail on this procedure is given in Exhibit B4. The type of policy relativities serve to price Commercial Package policies relative to monoline policies, via the Package Modification Factors (PMF), while the territory relativities serve to price the various territories relative to one another.</p> <p>The overall loss cost level change is distributed across type of policy and territory. The indicated monoline change is the product of the monoline type of policy relativity, the territory relativity and the statewide loss cost level change.</p> <hr/>
BASIC GROUP II	<p>The purpose of the Basic Group II relativity analysis is to determine monoline loss cost level needs, to obtain marginal relativities displayed on Exhibit B8 and to price CPP policies relative to monoline policies via the PMFs. Unlike the BG I and SCL relativity analyses, the BG II relativity analysis does not employ a simultaneous review procedure because the overall loss cost change is distributed across type of policy only.</p> <p>The statewide monoline non-hurricane loss cost change is the product of the monoline normalized formula relativity, shown on Exhibit B8 and the indicated statewide loss cost level change. This change is applied to the non-hurricane portion of the BG II loss costs to produce indicated non-hurricane loss costs. The indicated loss costs by territory, coverage, and symbol are equal to the sum of the indicated non-hurricane loss costs plus the hurricane modeled loss costs.</p> <hr/>

OVERVIEW OF ISO ACTUARIAL PROCEDURES - COMMERCIAL PROPERTY

STEP 2 - DISTRIBUTION OF LOSS COST LEVEL CHANGES (cont'd)

BASIC GROUP II (cont'd)

The overall monoline loss cost level change is the weighted average of the loss cost changes by territory, coverage and symbol. In calculating this weighted average, the latest year aggregate monoline and multiline combined loss costs at current level are used as weights.

SPECIAL CAUSES OF LOSS

For Special Causes of Loss, a simultaneous iterative procedure is used as for BG I to arrive at a set of type of policy and category relativities (as displayed on Exhibit B5) that best represent the experience within each state. The type of policy relativities serve to price CPP policies relative to monoline policies via the PMFs, while the category relativities serve to price the various categories relative to one another.

The indicated monoline loss cost level changes are calculated for each category by taking the product of the monoline type of policy relativity, the category relativity and the statewide loss cost change. See Exhibit B5 for the monoline loss cost indications.

The overall monoline loss cost level change is a weighted average of the 14 monoline category changes. In calculating this weighted average, the latest year monoline and multiline combined loss costs at current level are used as weights.

EXPLANATORY NOTES TO EXHIBITS B4 AND B5

BASIC GROUP I AND SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS

INTRODUCTION

The explanations which follow clarify Exhibits B4 and B5, the Basic Group I relativity analysis and the Special Causes of Loss relativity analysis, respectively. The purpose of these analyses is to:

- (1) determine monoline territorial loss cost level needs for Basic Group I;
- (2) determine monoline category loss cost level needs for Special Causes of Loss;
- (3) determine indicated changes to the eight CPP package modification factors (PMFs) based on Basic Group I/Special Causes of Loss experience.

COLUMN (1)

LEAST SQUARES FORMULA RELATIVITIES

The least squares formula relativities are the marginal relativities which result from the application of the simultaneous review procedure to the raw experience (where marginal refers to the relativities for a given rating variable, e.g. type of policy, across all subsets of any other rating variables, i.e. territory for Basic Group I, and category for Special Causes of Loss).

The purpose of such a simultaneous review procedure is to arrive at a set of type of policy relativities (which will serve to price CPP policies relative to monoline policies via the PMFs); a set of territory relativities for Basic Group I; and a set of category relativities for Special Causes of Loss that best represent the experience. This procedure is in contrast to a review of each rating variable's experience separately. Such one-way types of review do not take into account differing percentages of monoline and multiline experience in each rating variable, nor differing percentages of a particular rating variable's experience in the monoline and multiline types of policy. The simultaneous relativity procedure accounts for these different distributions in generating relativities for the various rating variables.

EXPLANATORY NOTES TO EXHIBITS B4 AND B5 (cont'd)

COLUMN (1)
(Cont'd)

The procedure follows an iterative technique to determine a set of marginal relativities by rating variable that is a best fit to the individual cell relativities, with each cell being defined as the cross-section of specific values of each rating variable. The process uses the relativity of the five year experience ratios by rating cell to the overall statewide experience ratio and the latest year aggregate loss costs for each rating cell. (This experience is shown in Exhibits B6 for Basic Group I and Exhibits B7 for Special Causes of Loss.) Specifically, the iteration procedure uses the following formulas:

BASIC GROUP I:

$$TOP_i = \frac{\sum_{k=1}^t W_{ik}^2 R_{ik} TER_k}{\sum_{k=1}^t W_{ik}^2 TER_k^2}, \text{ where } 1 \leq i \leq m;$$

$$TER_k = \frac{\sum_{i=1}^m W_{ik}^2 R_{ik} TOP_i}{\sum_{i=1}^m W_{ik}^2 TOP_i^2}, \text{ where } 1 \leq k \leq t;$$

SPECIAL CAUSES OF LOSS:

$$TOP_i = \frac{\sum_{j=1}^n W_{ij}^2 R_{ij} CAT_j}{\sum_{j=1}^n W_{ij}^2 CAT_j^2} \quad \text{where } 1 \leq i \leq m;$$

$$CAT_j = \frac{\sum_{i=1}^m W_{ij}^2 R_{ij} TOP_i}{\sum_{i=1}^m W_{ij}^2 TOP_i^2}, \quad \text{where } 1 \leq j \leq n;$$

EXPLANATORY NOTES TO EXHIBITS B4 AND B5 (cont'd)

COLUMN (1)
(cont'd)

- TOP_i is the relativity for the i th type of policy;
- CAT_j is the relativity for the j th category;
- TER_k is the relativity for the k th territory;
- W_{ik} is the loss cost volume at current level for the i th type of policy and k th territory;
- R_{ij} is the experience ratio relativity for the i th type of policy and j th category (Special Causes of Loss);
- R_{ik} is the experience ratio relativity for the i th type of policy and k th territory (Basic Group I);
- m is the number of types of policy in the analysis;
- n is the number of categories in the analysis;
- t is the number of territories in the analysis.

The procedure determines m type of policy relativities using the above formulas. Then, using those results, a set of t territory relativities (BG1) or a set of n category relativities (SCL) are determined. These steps form an iterative process which continues until there is no appreciable difference in results from one iteration to the next.

COLUMN (2)

CREDIBILITY

The credibility of the experience for each rating variable is determined from the formula:

$$Z = \frac{P}{P + K} ,$$

where P represents the five-year aggregate adjusted loss costs for a given rating variable, and K is a constant value. For Basic Group I, K equals an aggregate loss cost volume of \$55,000,000 for territory and \$100,000,000 for type of policy. For Special Causes of Loss, K equals an aggregate loss cost volume of \$15,000,000 for category and \$40,000,000 for type of policy.

EXPLANATORY NOTES TO EXHIBITS B4 AND B5 (cont'd)

COLUMN (3)

CREDIBILITY-WEIGHTED RELATIVITIES

Credibility-weighted relativities are calculated based on the formula

$$W = R^Z,$$

where Z is the credibility, R is the least squares formula relativity and W is the credibility weighted relativity for a given rating variable.

This formula implicitly assigns the complement of credibility to a relativity of unity.

COLUMN (4)

BALANCED RELATIVITIES

The credibility-weighted relativities are balanced to assure that the average relativity across all rating variables remains at unity.

COLUMN (5)

INDICATED MONOLINE LOSS COST LEVEL CHANGE

For Basic Group I, the indicated monoline loss cost changes are calculated for each territory by taking the product of the monoline type of policy (TOP 10) relativity, the territory relativity and the statewide loss cost level change. (An example of such a calculation appears on Exhibit B4.)

EXPLANATORY NOTES TO EXHIBITS B4 AND B5 (cont'd)

COLUMN (5) (cont'd)

The indicated overall statewide monoline loss cost level change shown at the bottom of the first page of Exhibit B4 is the aggregate loss cost-weighted average of the individual territory changes.

For Special Causes of Loss, the indicated monoline loss cost changes are calculated for each category by taking the product of the monoline type of policy (TOP 10) relativity, the category relativity, and the statewide loss cost level change. (An example of such a calculation is included in Exhibits B5.) The indicated overall statewide loss cost level change shown at the bottom of Exhibits B5 is the aggregate loss cost-weighted average of the individual category changes.

In all cases, the loss costs used in these calculations are the latest year's monoline and multiline combined adjusted loss costs.

MULTILINE CONSIDERATIONS

The type of policy (TOP) relativities are used to generate multiline indications which apply to the current implicit package modification factors (IPMF's). The indicated IPMF's are calculated as follows:

$$\frac{\text{TOP y indicated IPMF}}{\text{IPMF}} = \frac{(\text{TOP y current IPMF})(\text{TOP y relativity})}{\text{monoline relativity}}$$

For each CPP type of policy, the indicated IPMF is subject to a minimum value of 0.50 and a maximum value of 1.50. If an indicated IPMF falls outside one of those limits, it is capped at that amount, the loss costs for that type of policy are adjusted to the capped IPMF level, and the entire relativity review as described above is re-performed to take this into account. If an IPMF has been capped, it is so noted at the bottom of Exhibits B4 and Exhibits B5.

It should be noted that although this procedure generates multiline indications, this filing only addresses monoline loss cost levels. That is, upon implementation of this filing only the monoline loss costs will be revised. The multiline indications developed here will be combined with those of the other component coverages, e.g. GL Premises and Operations in the CPP review for the purpose of revising the package modification factors.

EXPLANATORY NOTES TO EXHIBITS B6

BASIC GROUP I RELATIVITY ANALYSIS SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

INTRODUCTION	<p>The experience used in the relativity analysis and displayed on Exhibit B6 is the latest five accident years of data reported under the Commercial Statistical Plan. As in the overall review, loss costs have been adjusted to current ISO loss cost and prospective amount of insurance levels (with multiline aggregate loss costs adjusted additionally by the current implicit package modification factors). Incurred losses are adjusted to prospective cost levels, and are further adjusted by the Basic Group I large loss procedure and the Special Causes of Loss excess procedure. Losses have also been developed to their ultimate settlement value by application of loss development factors.</p>
COLUMN (1)	<p><u>2022 AGGREGATE LOSS COSTS</u></p> <p>The latest accident year aggregate loss costs (adjusted as described above) are used as weights both in the calculation of any totals shown in this table and in the iterative formulas used in the simultaneous review procedure.</p>
COLUMN (2)	<p><u>2018 - 2022 AGGREGATE LOSS COSTS</u></p> <p>The combined five-year adjusted aggregate loss costs (adjusted as described above) are used to calculate the experience ratios in column (3).</p>
COLUMN (3)	<p><u>FIVE-YEAR EXPERIENCE RATIOS</u></p> <p>These are the ratios of the combined five-year adjusted incurred losses (adjusted as described above) to the combined five-year adjusted aggregate loss costs as shown in column (2). Any totals which are shown are weighted averages using the adjusted aggregate loss costs in column (1).</p>
COLUMN (4)	<p><u>RELATIVITIES</u></p> <p>The relativities are the ratios of the five-year experience ratios shown in column (3) to the average five-year experience ratio for all TOP's and territories (where applicable) combined. These relativities represent how much better or worse than average the experience for a given cell is. They are used along with the aggregate loss costs in column (1) as input for the simultaneous review procedure.</p>

EXPLANATORY NOTES TO EXHIBITS B7

SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

INTRODUCTION	<p>The experience used in the relativity analysis and displayed on Exhibit B7 is the latest five accident years of data reported under the Commercial Statistical Plan. As in the overall review, loss costs have been adjusted to current ISO loss cost and prospective amount of insurance levels (with multiline aggregate loss costs adjusted additionally by the current implicit package modification factors). Incurred losses are adjusted to prospective cost levels, and are further adjusted by the Basic Group I large loss procedure and the Special Causes of Loss excess procedure. Losses have also been developed to their ultimate settlement value by application of loss development factors.</p>
COLUMN (1)	<p><u>2022 AGGREGATE LOSS COSTS</u></p> <p>The latest accident year aggregate loss costs (adjusted as described above) are used as weights both in the calculation of any totals shown in this table and in the iterative formulas used in the simultaneous review procedure.</p>
COLUMN (2)	<p><u>2018 - 2022 AGGREGATE LOSS COSTS</u></p> <p>The combined five-year adjusted aggregate loss costs (adjusted as described above) are used to calculate the experience ratios in column (3).</p>
COLUMN (3)	<p><u>FIVE-YEAR EXPERIENCE RATIOS</u></p> <p>These are the ratios of the combined five-year adjusted incurred losses (adjusted as described above) to the combined five-year adjusted aggregate loss costs as shown in column (2). Any totals which are shown are weighted averages using the adjusted aggregate loss costs in column (1).</p>
COLUMN (4)	<p><u>CREDIBILITY (Z) WEIGHTED EXPERIENCE RATIO</u></p> <p>A credibility procedure is applied to the initial experience ratios in column (3) on a cell-by-cell basis prior to the simultaneous review procedure. The credibility values are calculated using an empirical Bayesian credibility procedure. In the following discussion, cell refers to an individual combination of TOP and category.</p>

EXPLANATORY NOTES TO EXHIBITS B7 (cont'd)

COLUMN (4)
(cont'd)

The important concept underlying empirical Bayesian credibility is that credibility should depend both on the overall variation of the group of which the cell is a member and the variation of the yearly experience ratios for the cell. Therefore, if a cell's data is very stable then a relatively high credibility value is assigned, and vice versa.

The empirical Bayesian credibility formula for individual cell credibility is $Z = ((C-3)/C) (P/(P+K)) + (3/C)$. P equals the cell's five-year adjusted aggregate loss costs and C equals the number of unique combinations of rating variables (TOP and Category) within a class group. The K value is estimated from the underlying data using the empirical Bayes method and varies by TOP group. The three TOP groups used in this analysis are: Monoline (TOP 10), Premises (TOP's 31-35), and Operations (TOP's 36-38). The 3/C term corrects for the statistical bias associated with the credibility process. The minimum credibility that is possible is 3/C.

COLUMN (5)

Z-WEIGHTED RELATIVITIES

The relativities are the ratios of the five-year credibility-weighted experience ratios shown in column (4) to the average five-year credibility-weighted experience ratio for all TOP's and categories combined. These relativities represent how much better or worse than average the experience for a given cell is. They are used along with the aggregate loss costs in column (1) as input for the simultaneous review procedure.

EXPLANATORY NOTES TO EXHIBIT B8

BASIC GROUP II RELATIVITY ANALYSIS

INTRODUCTION

The explanations which follow clarify Exhibit B8, the Basic Group II (BG II) relativity analysis. The purpose of this analysis is to:

- (1) determine the monoline loss cost level need;
- (2) determine indicated changes to the eight CPP package modification factors (PMFs) based on Basic Group II experience.

The BG II relativity analysis is based on non-hurricane loss experience only, as it is assumed that type of policy relativities are the same for both non-hurricane and hurricane perils. The resulting relativities apply to the total (hurricane plus non-hurricane) BG II loss costs.

COLUMN (1)

2022 AGGREGATE LOSS COSTS

The latest accident year adjusted aggregate loss costs (adjusted in the same manner as in the overall review, i.e. to current manual loss cost and prospective amount of insurance levels, with multiline aggregate loss costs further adjusted to current IPMF level) are used as weights in the calculation of any totals shown in this table.

COLUMN (2)

2013 - 2022 EXPERIENCE RATIO

These experience ratios are the ratios of the combined ten-year CSP adjusted incurred non-hurricane losses (adjusted to current deductible and prospective cost levels including loss development, and smoothed by the BG II excess loss procedure) to the combined ten year CSP adjusted aggregate loss costs. Any totals which are shown are weighted averages using the aggregate loss costs in column (1). When a dash is displayed in the column, it indicates that the indicated IPMF which resulted from this procedure was capped. The procedure which follows when capping occurs is described below.

COLUMN (3)

FORMULA RELATIVITY

The formula relativities are the ratios of the ten year non-hurricane experience ratios for the type of policy (either monoline vs. multiline or individual multiline programs) to the average ten year experience ratio for monoline and multiline combined. These relativities represent how much better or worse than average the experience for a given type of policy is. Again, any totals which are shown are weighted averages and the display of a dash indicates that the resulting IPMF was capped. Unlike the BG I and SCL relativity analyses, the BG II analysis does not employ a simultaneous review procedure since a one way review is involved. That is, the overall loss cost change is only distributed across type of policy; no other rating variables are considered.

EXPLANATORY NOTES TO EXHIBIT B8 (cont'd)

COLUMN (4)

CREDIBILITY

The credibility of the experience for each type of policy is determined from the formula:

$$Z = \frac{P}{P + K}$$

where P is the ten year aggregate adjusted loss costs for a given type of policy, and K is a constant loss cost volume of \$45,000,000.

COLUMN (5)

Z - WEIGHTED RELATIVITY

The weighted relativity is a weighted average of the individual TOP formula relativity and the overall (coverage) formula relativity using credibility and its complement as the respective weights. Therefore, to the extent that the indication for a type of policy is not fully credible, the complement of credibility is assigned to the statewide coverage level change.

COLUMN (6)

BALANCED FORMULA RELATIVITY

The individual multiline weighted relativities are balanced to the multiline weighted relativity level by applying a factor equal to the overall multiline relativity (i.e. the weighted relativity for all multiline combined which is shown on the top of the exhibit directly under the corresponding monoline relativity) divided by the average multiline relativity (i.e. the weighted average of the individual multiline weighted relativities which is shown on the bottom of the exhibit). When the indicated IPMF for a type of policy is capped, the balanced relativity is set equal to the product of the capped IPMF in column (9) and the monoline balanced formula relativity in column (6), divided by the current IPMF in column (8).

COLUMN (7)

NORMALIZED FORMULA RELATIVITY

The normalized relativity is equal to the balanced formula relativity divided by the average monoline/multiline combined relativity. This balances the average monoline/multiline relativity to unity.

COLUMN (8)

CURRENT IMPLICIT PMF

This is the current IPMF for each multiline type of policy.

EXPLANATORY NOTES TO EXHIBIT B8 (cont'd)

COLUMN (9)

INDICATED IMPLICIT PMF

The indicated IPMF is calculated from the normalized relativities as follows:

$$\text{TOP y indicated IPMF} = \frac{(\text{TOP y current IPMF}) \times (\text{TOP y relativity})}{(\text{monoline relativity})}$$

For each CPP type of policy the indicated IPMF is subject to a minimum value of 0.50 and a maximum value of 1.50. If an indicated IPMF falls outside one of those limits, it is capped at that amount, the aggregate loss costs for that type of policy are adjusted to the capped IPMF level, and the entire relativity review as described above is redone to take this into account. If an IPMF has been capped it is so noted in footnote A.

COLUMN (10)

INDICATED LOSS COST CHANGES

The indicated monoline change is the statewide BG II total (hurricane and non-hurricane combined) monoline loss cost change found on Exhibit C25. The multiline change for each TOP is the product of the statewide monoline loss cost change times the ratio of the TOP y relativity divided by the monoline relativity found in column (7).

The overall multiline loss cost level change is a weighted average of the individual multiline TOP changes based on the aggregate loss cost volume shown in column (1). The coverage change is a weighted average of the monoline and average multiline TOP changes based on the aggregate loss cost volume shown in column (1).

MULTILINE
CONSIDERATIONS

It should be noted that although this procedure generates multiline indications, this filing only addresses monoline loss cost levels. That is, upon implementation of this filing only the monoline loss costs will be revised. The multiline indications developed here will be combined with those of the other component coverages, e.g. GL Premises and Operations in the CPP review for the purpose of revising the package modification factors.

OVERVIEW

AGGREGATE LOSS COSTS AT CURRENT LEVEL

Exhibits C1, C2 and C3 provide the overall loss cost/rate level histories for Basic Group I, Basic Group II, and Special Causes of Loss respectively. These tables, along with Exhibits C4, C5 and C6, provide information on the on-level factors needed to bring collected aggregate loss costs to current loss cost level.

Exhibit C4 provides rate level/loss cost level histories by rating id (class vs. specific), rating group, and territory (where applicable) for Basic Group I, Exhibit C5 provides rate level/loss cost level histories by territory, coverage, and symbol (where applicable) for Basic Group II, and Exhibit C6 provides rate level/loss cost level histories by category for Special Causes of Loss. These tables can be used to develop on-level factors appropriate to bring collected aggregate loss costs up to current loss cost level. Factors based on these tables are more appropriate for company use than the overall factors shown on Exhibits C1, C2 and C3 if the company's mix of business differs substantially from the industrywide average. For example, if a company's business is very heavily concentrated in a single class or territory, it is more appropriate to use the rate level/loss cost history for that class rather than the overall average to develop on-level factors.

Exhibits C7, C8 and C9 provide the current implicit package modification factors (IPMFs) and IPMF caps for Basic Group I, Basic Group II and Special Causes of Loss.

ADJUSTMENTS TO LOSSES

The loss projection factors, current cost factors, and loss trend adjustments shown on Exhibit C10, C11 and C12 reflect the combined impact of all economic influences on Commercial Property underwriting results and are used to project past underwriting results to future loss levels. They are intended to reflect the impact of inflation on loss payments, the impact of higher costs due to repairs done on an “emergency” basis, the impact of coinsurance and relative insurance to value on loss payments, and any other economic influences which can affect underwriting losses but for which specific provisions are not made. Losses have also been developed to their ultimate settlement value using factors shown on Exhibit C17.

CREDIBILITY

Credibility, Z , is a weight given to the most recent body of data. The complement of credibility, $1-Z$, is the weight assigned to net trend. The final estimate is a weighted average obtained by using the formula $C = Z \times R + (1-Z) \times N$, where

Z = credibility

C = final estimate

R = estimate based on the most recent data

N = net trend

OVERVIEW (cont'd)

CREDIBILITY (cont'd)

Credibility may range from 0 to 1, where $Z=1$ is full credibility and $Z=0$ is no credibility. The actual numerical value of Z is calculated by considering how the state's volume of experience compares with the full credibility standard. Credibility is capped at 25% if the credibility calculated is less than 25%. See Exhibit C22, C23 and C24 for a complete explanation of the credibility standards for Basic Group I, Basic Group II, and Special Causes of Loss.

LOSS COST/RATE LEVEL HISTORY

Loss cost/rate level histories are provided for Basic Group I, Basic Group II and Special Causes of Loss. The loss cost/rate level changes are then further split out by rating territory, rating group or category since a company's business may be more heavily concentrated in a single class. These histories can be used to develop on-level factors appropriate to bring collected aggregate loss costs up to current loss cost levels.

EXPLANATORY NOTES TO EXHIBITS C1, C2 AND C3

LOSS COST/RATE LEVEL HISTORIES

COLUMN (1) EFFECTIVE DATE

The effective dates of the latest loss cost/rate level changes are shown.

COLUMN (2) LOSS COST/RATE LEVEL CHANGE

The overall loss cost/rate level change is shown in percent form.

COLUMN (3) LOSS COST/RATE LEVEL INDEX

The product of all loss cost/rate level changes up to and including the loss cost/rate change for that effective date is used to calculate on level factors.

COLUMN (4) WRITTEN ADJUSTMENT (ON LEVEL) FACTORS

These factors are used to bring individual policies with inception dates prior to the effective date up to current loss cost level. The actual loss cost/rate changes vary by rating id, rating group, and territory (where applicable) for Basic Group I, by territory, coverage, and symbol (where applicable) for Basic Group II, and by category for Special Causes of Loss. Consequently, these on-level factors represent average factors and are not the factors actually used to adjust the aggregate loss costs on an individual policy basis. For complete loss cost/rate level histories in detail, refer to Exhibits C4, C5 and C6.

COLUMN (5) WEIGHT

The weight indicates the portion of the effective year for which the on level factors apply. These can be used to calculate average yearly factors.

EXPLANATORY NOTES TO EXHIBIT C4

HISTORY OF BASIC GROUP I LOSS COST/RATE CHANGES
BY TERRITORY, RATING ID AND RATING GROUP

TERRITORY

The loss cost/rate level changes shown apply to the rating territory shown here.

EFFECTIVE DATE

The effective dates of the latest loss cost/rate level changes are shown.

LOSS COST/RATE LEVEL CHANGES

Loss cost/rate level changes are shown in percent form for each rating group.

EXPLANATORY NOTES TO EXHIBIT C5

HISTORY OF BASIC GROUP II LOSS COST CHANGES BY TERRITORY

COLUMN (1) TERRITORY

The loss cost level changes shown apply to the rating territory shown here.

COLUMN (2) EFFECTIVE DATE

The effective dates of the latest loss cost level changes are shown.

COLUMN (3) SYMBOL

The construction group symbol is shown here. Refer to the explanatory notes to Exhibit C25 for the symbol definitions.

COLUMN (4) BUILDING

Building loss cost changes are shown in percent form.

COLUMN (5) CONTENTS

Contents loss cost changes are shown in percent form.

EXPLANATORY NOTES TO EXHIBIT C6

HISTORY OF SPECIAL CAUSES OF LOSS
LOSS COST/RATE LEVEL CHANGES BY CATEGORY

COLUMN (1)

EFFECTIVE DATE

The effective dates of the latest loss cost/rate level changes are shown.

COLUMN (2)

LOSS COST/RATE LEVEL CHANGES BY CATEGORY

Loss cost/rate changes are shown in percent form for each category. Refer to Exhibit D2 for definitions of the current 14 categories.

The prior category definitions (before implementation of the revised rating for Special Causes of Loss) are:

- 01 - Buildings
- 02 - Apartments Contents
- 03 - Office Contents
- 04 - Mercantile, Motel/Hotel and Institutional Contents
- 05 - Service, Industrial/Processing, and Contractors Contents

COMMERCIAL PACKAGE POLICY IMPLICIT PACKAGE MODIFICATION FACTORS (IPMF's)
AND IPMF CAPS

IMPLICIT PACKAGE
MODIFICATION
FACTORS

Since multiline experience is included in the loss cost level evaluations, an additional adjustment is made to multiline aggregate loss costs after they have been brought to current ISO loss cost level. This adjustment is the application of implicit CPP package modification factors which vary for each of the eight CPP types of policy.

The loss costs used to price a Commercial Package Policy (CPP) are the monoline loss costs multiplied by the PMF to reflect the package policy discount for the particular type of CPP policy relative to the individual monoline policies. However, these PMF's measure the amount of multiline discount for all property coverages combined. A more accurate measure of the amount of multiline discount for each subline (e.g., Basic Group I, Basic Group II, or Special Causes of Loss) is the implicit package modification factor that was used to calculate the overall PMF for all property coverages combined.

For example, the published PMF for Apartments (all property coverages combined) may be .85, but the implicit PMF for Apartments, Commercial Basic Group I coverage only, may be .80. The average of the implicit PMF's for the various coverages is equal to the published PMF for each type of policy.

The current IPMF's by coverage for each CPP type of policy are applied to multiline aggregate loss costs at current level for Basic Group I, Basic Group II and Special Causes of Loss.

IPMF CAPS

For Basic Group I, Basic Group II, and Special Causes of Loss, the IPMF's lower caps are set at 0.50 and the upper caps are set at 1.50 for all TOP's.

EXPLANATORY NOTES TO EXHIBITS C7, C8 AND C9

IMPLICIT PACKAGE MODIFICATION
FACTORS (IPMF's) AND IPMF CAPS

EXHIBITS C7, C8
AND C9

These tables provide the current IPMF's and IPMF caps for Basic Group I, Basic Group II, and Special Causes of Loss. The IPMF's shown here are those which resulted from the most recent CPP revision. The IPMF lower caps are set at .50 and the upper caps are set at 1.50 for all TOP's.

TREND PROCEDURE

INTRODUCTION

The prospective loss cost levels established in this document reflect the anticipated claim cost and claim frequency levels and changes in revenue due to increased amounts of insurance purchased for the period when the new loss costs are assumed to be in effect.

LOSS TREND

EXTERNAL LOSS DATA

For Commercial Property, the loss trend factors are referred to as current cost factors (CCF's) and loss projection factors (LPF's). These CCF's and LPF's are based on the following accepted economic indices:

1. Xactware Commercial Index (XCI) for buildings loss projection factors and current cost factors
2. Producer Price Index (PPI) published by the US Department of Labor (Finished Goods Less Energy, Not Seasonally Adjusted) for contents factors
3. Index for Manufacturers' Sales Exposure (IMSEP) developed by ISO using indices published by the Department of Commerce and Chain-Type Price Index for Retail Sales (RSALES) produced by the Bureau of the Census, Bureau of Economic Analysis for time element factors

The CCF's adjust losses for actual inflationary changes which have taken place between the accident date and the midpoint of the latest period of external trend information, i.e. 2/15/2023 for property damage and time element. The LPF's adjust losses for projected inflationary changes from the midpoint of the latest period of external trend information to the anticipated average date of accident for policies written under the proposed loss costs (assumed to be 12 months after the assumed revision date based on all one-year policies).

The CCF's and LPF's are calculated separately for buildings, contents, and time element coverages. For coverage 3 (buildings and contents on a combined basis), combined trend factors are calculated using the following weights for buildings and contents: 70%/30% for Basic Group I, 75%/25% for Basic Group II, and 50%/50% for Special Causes of Loss. For time element (coverages 4-9) the combined trend factors are calculated using 70%/30% weights for RSALES/IMSEP. The factors are applied by coverage to the losses reported under CSP and CMSP on an individual occurrence basis.

TREND PROCEDURE (cont'd)

LOSS TREND (cont'd)

LOSS TREND ADJUSTMENT - SEVERITY

An evaluation of the latest Commercial Property insurance data shows that the cost levels inherent in the property damage coverages are increasing at a different rate than those measured by the external indices. Therefore, to insure adequate prospective loss cost levels during the period for which loss costs are to be determined, loss trend adjustments (LTA's) have been applied. These factors were developed by comparing the annual rate of change in average claim costs to the annual rate of change in the external indices. (Refer to Exhibit C12 for the calculations.)

LOSS TREND ADJUSTMENT - FREQUENCY

In order to reflect total trend more precisely, a frequency component is included in the loss trend adjustment factors (LTA's) separately for buildings and contents for Basic Group I and contents only for Special Causes of Loss. No frequency component is used for Basic Group II and Special Causes of Loss buildings due to the extremely volatile nature of the coverages.

AMOUNT-OF- INSURANCE TREND

Cost changes over time to both real and personal property result in insureds purchasing increased amounts of insurance. To reflect the impact of this phenomenon, amount of insurance trend factors are applied to collected loss costs to bring them to prospective amount of insurance levels. These factors are developed by measuring amount of insurance trends on a sample of renewal policies.

The application and development of these factors parallels loss trend factors in that separate factors are developed for buildings, contents, and time element, and the adjustment to prospective amount of insurance levels is done in two steps. The current written factors adjust loss costs to the amount of insurance level for the midpoint of the latest period of renewal information, i.e. July 1, 2022. Total amount of insurance trend factors are then calculated by projecting these current factors to the average date of writing (i.e. to the amount of insurance level six months beyond the assumed effective date).

EXPLANATORY NOTES TO EXHIBIT C10

PART A: XACTWARE, PRODUCER PRICE, IMSEP, RSALES INDICES AND COMBINED TIME ELEMENT

QUARTER	The quarter for which the indices shown apply.
XACTWARE COMMERCIAL INDEX (XCI)	The Xactware Commercial Index measures the costs of building material and repairs for commercial properties. The index, which is available since 1st Quarter 2005, is based on regular surveys of over 42,000 material and equipment suppliers and over 9,500 contractors, in addition to claims settlement data. The index values are created by estimating the cost to rebuild a sample set of different structures ranging in size, style, and quality in each economic market. The Xactware index is used in this filing to adjust for current cost from 1/1/05 to the midpoint of the latest index point and for determining the loss projection factor.
PRODUCER PRICE INDEX (PPI)	The Producer Price Index is a time series which measures the price level for a predetermined group of goods produced relative to the price level for an earlier point in time (2009). The PPI Finished Goods Less Energy is published by the U.S. Department of Labor.
PRICE DEFLATOR INDEX FOR MANUFACTURERS' SALES EXPOSURE (IMSEP)	<p>The price deflator index for manufacturers' sales exposure is a quarter's model of Manufacturers' Sales Exposure Proxy (MSEP) for the period in question relative to MSEP measured in chained 2012 dollars. The price deflator is defined as the GNP (Gross National Product) price deflator with government expenditures, investment in intellectual property products, inventory changes, and all services except food services removed.</p> $\text{MSEP} = (\text{CD} + \text{CN} + \text{FS}) + (\text{EXD\&N} - \text{IMD\&N}) + (\text{IFIX} - \text{IPP}), \text{ where}$ <p>CD and CN represent consumption of durables and nondurables, respectively; EXD&N and IMD&N represent exports and imports of merchandise, respectively; FS represents food services and IFIX represents gross private domestic fixed investment (including residential fixed investment as well as nonresidential fixed investment in structures, equipment, and intellectual property products); and IPP represents nonresidential fixed investment in intellectual property products.</p>
CHAIN-TYPE PRICE INDEX FOR RETAIL SALES (RSALES)	The Chain-Type Price Index for Retail Sales measures changes in losses due solely to inflation.

EXPLANATORY NOTES TO EXHIBIT C10 (cont'd)

PARTS B, C and D: COMPUTATION OF THE LOSS PROJECTION FACTOR

LOSS PROJECTION FACTOR

The loss projection factor is calculated by fitting a least squares exponential curve to the appropriate number of points (where the appropriate number of points is determined based on judgment and an examination of the goodness of fit as determined by the R-squared values subject to a maximum of 12 quarterly points for property damage and time element).

The table displays the indices for those points used in fitting the curve. The relevant equations are shown and the annual rate of change in the indices based on the exponential fit is developed. This annual rate of change is projected over the period which extends from the latest period of cost information to the average accident date of the projection period.

PART E: CALCULATION OF CURRENT COST FACTORS (CCF'S)

CALENDAR YEAR AVERAGES

The calendar year averages are the averages of the Xactware, PPI and Time Element indices for the given year. These average indices measure the average cost level of each year relative to the base.

CURRENT COST FACTORS

The current cost factors are the ratios of the indices for the latest period of cost information divided by the average indices for each calendar year. These factors measure the changes in cost levels which have occurred from the midpoint of the given year to the latest point of cost information. In this regard, they represent average factors which would result if each year's losses were distributed evenly throughout the year.

For buildings, the index for the latest point is based on the latest available Xactware point.

Since losses are trended on a record by record basis, these calendar year factors are not actually used in ISO's trend calculations. Instead, factors are calculated from the bi-monthly or quarterly indices and applied to the unit losses based on the date of occurrence.

EXPLANATORY NOTES TO EXHIBIT C11

SUMMARY OF LOSS TREND ADJUSTMENTS (LTA'S)

COVERAGE

The LTA's vary by coverage (buildings, contents, and time element) and line of business (BG I, BG II, and SCL).

FIVE-YEAR INCURRED LOSSES

The five-year multistate incurred losses are used as weights to determine the annual LTA for all lines of business and coverages combined.

ANNUAL LTA's

The LTA's are the factors which are applied to losses to supplement the external indices in order to correctly reflect cost level and claim frequency changes. These are shown here as annual factors. However, they are applied over the entire length of the trend period, i.e. from the date of loss occurrence to the anticipated average accident date under the revised loss costs. The severity portion of the LTA is applied on an individual record basis in the same manner as the CCF's and LPF's. The frequency portion of the LTA is applied to the aggregate losses.

OVERVIEW

DEVELOPMENT OF LOSS TREND ADJUSTMENTS

INTRODUCTION

In order to supplement the external indices reflected in CCF's and LPF's, loss trend adjustments (LTA's) have been developed based on internal loss data. This is necessary because the external indices alone have been insufficient in reflecting cost level and claim frequency changes in Commercial Property Insurance. The following tables show the calculations used to develop these LTA's. Please note the development of the LTA's for the 2023 COMFAL reviews is based on internal commercial property experience through 12/31/2021 and external cost indices through 12/31/2021. Therefore, the CCF's and LPF's shown on Exhibit C12 will not necessarily match those shown on Exhibit C10. ISO has determined that the selected LTAs are appropriate to be used with the latest external indices shown on Exhibit C10.

EXPLANATORY NOTES TO EXHIBIT C12

DEVELOPMENT OF LOSS TREND ADJUSTMENTS (LTA'S)

I. EXTERNAL RATE OF CHANGE

COLUMN (1), (2)
AND (3)

CURRENT COST FACTORS

The CCF's underlying the LTA analysis are based on external cost indices through 12/31/2021 for buildings, contents and time element.

COLUMNS (4)
AND (5)

WEIGHTS

The standard review weights are shown for each line of business.

LINES (6)

AVERAGE CURRENT COST FACTORS

The average CCF's for the experience period are calculated based on the weights shown in columns (4) and (5).

LINE (7)

LOSS PROJECTION FACTORS

The LPF's underlying the LTA analysis are shown here.

LINE (8)

TOTAL TREND

The total trend is the product of the average CCF and the LPF.

LINE (9)

EXTERNAL ANNUAL RATE OF CHANGE

The total trend is converted to an annual basis by raising it to the reciprocal of the number of years between the weighted midpoint of the experience period and the anticipated average accident date. For BG I and SCL the weighted midpoint of the experience period is 01/01/2020, for BG II it is 01/01/2017. Accordingly, there are 54 and 90 months, respectively, to the anticipated average accident date of 07/01/2024.

II. INTERNAL ANNUAL RATES OF CHANGES

LINE (10)

SELECTED COMFAL

The displayed annual rates of change in the average claim costs for BG I, BG II, and SCL were selected based on several least squares exponential fits of the annual claim costs for each subline. This was done to the most recent ten years of Commercial Property data using all companies in the ratemaking data base.

EXPLANATORY NOTES TO EXHIBIT C12 (cont'd)

III. LTA CALCULATION

COLUMN (11)

ANNUAL EXTERNAL

The annual external rates of change from column (9) are shown here.

COLUMN (12)

ANNUAL INTERNAL

The adjusted annual internal rates of change in average loss from line (10) are shown here.

COLUMN (13)

INDICATED SEVERITY LTA

The indicated severity LTA's are calculated by dividing the annual internal rates of change by the annual external rates of change.

COLUMN (14)

FORMULA SEVERITY LTA

The severity LTA's in column (13) are then selected to temper the full effect of internal trend data. Without such tempering, full weight would in effect be given to the internal data without any consideration of the external cost indices.

COLUMN (15)

FREQUENCY EFFECT

The displayed annual rates of change in claim frequency for BG I and SCL were selected based on several least squares exponential fits of the claim frequency by subline. No frequency trend was selected for BG II and SCL buildings due to the extremely volatile nature of the coverage.

COLUMN (16)

FINAL LTA

The final LTA is the combination of the severity and frequency trend adjustments, calculated as column (14) times column (15), in factor form.

EXPLANATORY NOTES TO EXHIBIT C13
EXPOSURE AND PREMIUM TREND FACTORS

Exhibit C13 contains Exposure trend factors, Premium trend factors for Basic Group I, Basic Group II and Special Causes of Loss respectively, building and contents. As annual written exposures increase (decrease), the resulting limit of insurance factors used for rating decrease (increase) and the combined effect should be reflected when trending premiums to future level. There are separate premium trend factor tables for Basic Group I, Basic Group II and Special Causes of Loss since there are separate limit of insurance curves for BG I, BG II and SCL.

For Time Element, exposure trend factors are also used to trend premiums, i.e., there are not separate Time Element premium trend factors because Time Element does not use limit of insurance factors for rating.

COLUMNS (1)
AND (5) ANNUAL WRITTEN INCREASE

The annual written increases for buildings, contents, and time element are calculated from the actual changes in amount of insurance from one year to the next for a sample of renewal policies (based on BG I experience). The change in amount of insurance for each policy in the sample was weighted with its prior year's premiums to obtain a weighted average change for each year. The Annual Written Increase in Premiums (Exhibit C13) are calculated as the Annual Written Increase in Exposure tempered by the change in Limit of Insurance factor.

COLUMNS (2)
AND (6) 07/01/2022 WRITTEN FACTORS

The written factors for a given year are the product of the written annual changes for all years subsequent to that year. Although the 2022 written changes are based on two quarters of data, the consistency of this experience allows for the assumption that written changes for the first half of 2022 are applicable for the entire year.

COLUMNS (3)
AND (7) 09/01/2024 PROJECTED FACTORS

The 09/01/2024 factors are calculated by applying a factor to adjust the 07/01/2022 written factors to the amount of insurance level at the average date of writing, 09/01/2024. This is done using the selected annual changes in exposure or premium.

COLUMNS (4)
AND (8) 09/01/2024 EARNED EXPOSURES/PREMIUM FACTORS

The projected earned factors at the 09/01/2024 level (where 09/01/2024 is the average date of writing in the effective period) are calculated by earning the written factors assuming all one-year policies. The earning factors are shown in footnote (c).

EXPLANATORY NOTES TO EXHIBITS C14, C15 AND C16

BG I, BG II, AND SCL ADDITIONAL INFORMATION ON TREND ADJUSTMENTS

COLUMN (1) UNADJUSTED INCURRED LOSSES

The unadjusted incurred losses are the reported losses prior to any adjustment.

COLUMN (2) TRENDED INCURRED LOSSES

The trended incurred losses are the aggregate of the individual losses trended on a unit record basis.

COLUMN (3) AVERAGE TREND FACTOR

The average trend factors are the trended incurred losses in column (2) divided by the unadjusted incurred losses in column (1). Although average factors could be calculated from the information contained in Exhibits C10 through C12, they would differ from the factors shown in this table for the following reasons:

- (1) In calculating such averages, the usual assumption is that the losses are spread evenly throughout the year, yielding the midpoint of each year as the average date of loss. A predominance of losses at a certain time of the year could shift the average accident date away from the midpoint.
- (2) The average trend factors will be slightly higher due to the impact of trend on the deductible.

COLUMN (4) PERCENTAGE SPLIT BETWEEN BUILDINGS, CONTENTS, AND TIME ELEMENT

The current cost factors and loss projection factors are different for buildings, contents, and time element. Therefore, in addition to the reasons cited above, the average trend factors will differ from state to state depending on the buildings/contents/time element split. Companies with splits substantially different from the industrywide averages shown here may find it appropriate to develop trend factors which reflect their own coverage mix.

LOSS DEVELOPMENT

INTRODUCTION

For Commercial Property, losses are evaluated as of June 30, 2022, three months after the end of the latest experience year used in the review. In order to account for development of losses beyond fifteen months and to reflect overall loss development patterns, loss development was incorporated into the adjustment process of incurred losses to their ultimate settlement value.

LOSS DEVELOPMENT PROCEDURES

The application of loss development factors recognizes the fact that not all of the Commercial Property losses for a particular accident year have been finally determined at the time the experience is compiled.

The incurred losses underlying the statewide loss cost level indications were evaluated as of June 30, 2022.

Accident year ended March 31, 2022 includes all losses paid on accidents from April 1, 2021 to March 31, 2022 and all losses outstanding on those accidents as of June 30, 2022, fifteen months after the inception of the accident year. Similarly, accident years ended 2021, 2020, 2019 and 2018 include all losses paid and outstanding as of 27, 39, 51 and 63 months, respectively, after the inception of the accident year.

Thus, the immature experience reported as of 15, 27, 39 or 51 months must be adjusted to an ultimate settlement basis. This adjustment is accomplished through the use of loss development factors based on the historic multistate Basic Group I, Basic Group II, and Special Causes of Loss incurred losses as shown in Exhibit C17.

EXPLANATORY NOTES TO EXHIBIT C17

LOSS DEVELOPMENT

INTRODUCTION

Exhibit C17 shows multistate incurred loss development exhibits for Basic Group I, Basic Group II and Special Causes of Loss. The exhibits on Exhibit C17 are arranged identically for each subline and can be summarized as listing the following information: incurred losses by accident year and age, age-to-age factors by accident year, and age-to-ultimate factors.

INCURRED LOSSES

The multistate incurred losses are shown by accident year and age at the top of Exhibit C17. The multistate incurred losses are evaluated as of 15, 27, 39, 51 and 63 months. For Basic Group II, losses due to hurricanes reflected in the modeled hurricane loss costs have been removed from the experience for each rating territory and loss month.

AGE-TO-AGE DEVELOPMENT FACTORS

Age-to-age development factors or link ratios are calculated for each accident year. These age-to-age factors are calculated by dividing the incurred losses evaluated at each age by the incurred losses evaluated at the immediately preceding age. For example, 27:15 month age-to-age factors are calculated by taking the losses evaluated as of 27 months and dividing them by the losses evaluated as of 15 months, for each accident year. Age-to-age development factors are also calculated for 39:27 months, 51:39 months and 63:51 months. Latest five-year averages are then determined for each age-to-age interval.

AGE-TO-ULTIMATE DEVELOPMENT FACTORS

Age-to-ultimate factors are then calculated for the latest four years by multiplying the five-year average age-to-age development factors. These age-to-ultimate factors are then used in the adjustment of incurred losses to develop losses to their ultimate settlement value.

EXCESS LOSS PROCEDURES

INTRODUCTION

If not addressed, the presence or absence of large losses during the review period can produce significant fluctuations in loss cost levels. In order to develop a more stable body of experience, large losses have been smoothed. This procedure removes any excess losses from the experience and applies excess loss factors to the resultant state normal losses to generate the adjusted incurred losses. The adjusted losses developed in this manner replace the incurred losses in the loss cost level evaluation.

BASIC GROUP I

First, the excess portion of each large loss is removed from the trended loss experience.

Individual claim amounts that result from the same occurrence are grouped together, and if the total loss for one occurrence exceeds the normal loss cutoff (at 2005 cost levels), the total loss is identified as a large loss. Each large loss is then split into its normal and excess portions based on the normal loss cutoff.

The Basic Group I normal loss cutoff begins at \$250,000 and varies with the size of loss up to a maximum normal amount (approached asymptotically) of \$1,250,000. (The formula and a graph are shown on Exhibit C18.) The portion of each large loss exceeding the cutoff is considered excess and the portion of any loss up to the cutoff is considered normal.

As noted above, the excess loss procedure is performed on trended loss experience (i.e. loss experience adjusted to prospective cost levels by the current cost factors, loss projection factors, and loss trend adjustment factors (for claim cost only) shown in Exhibits C10 through C11). The loss trend adjustment for frequency trend is not reflected at this step in the process. The normal breakpoint of \$250,000 for BG I and the parameters in the normal loss formula are at 2005 cost levels and therefore have been similarly adjusted to prospective cost levels.

Both the normal and total incurred losses are aggregated over all states and years in the experience period by construction, protection, and amount of insurance intervals. Excess loss factors by construction, protection and amount of insurance are then calculated as the ratios of the ten-year multistate incurred losses to the ten-year multistate normal losses.

These factors are then smoothed by fitting curves (by amount of insurance intervals) to the indicated factors. The resulting factors are then balanced so that the original ten-year multistate incurred loss level is maintained.

The excess factors are then applied to the state normal losses, which are maintained in the same detail (construction, protection and amount of insurance) as well as by year, territory, rating group and TOP. The state normal losses used in this calculation have also been trended for frequency.

The excess loss factors vary by construction, protection and the amount of insurance because these are the most significant severity-related rating variables.

EXCESS LOSS PROCEDURES (cont'd)

BASIC GROUP II

Since wind caused by non-hurricane events can cause large and unexpected losses, a long-term excess procedure is used for Basic Group II. The purpose of this procedure is to avoid the shifts in loss costs which would result from reflecting large, unexpected losses only in the year in which they occur.

The Basic Group II excess procedure identifies periods of overall adverse experience, rather than individual large losses, since catastrophic non-hurricane wind losses affect both the frequency and the severity of losses. Also, due to the extreme volatility of these losses, a long-term review period (1950 - present) is used. Losses reflected in the hurricane model are not included in this procedure. For those years reported under the Commercial Statistical Plan (CSP), 1982 and later, hurricane losses have been replaced with average non-hurricane losses. For years prior to CSP reporting, any year in which a hurricane occurred has been excluded.

A loss ratio cutoff is used to determine normal and excess losses in the excess procedure. The application of this cutoff is described in the explanatory notes to Exhibit C20. The excess losses are used to determine the excess multiplier. The excess multiplier is derived in such a manner as to provide an estimate of the expected excess non-hurricane loss dollars per normal non-hurricane loss dollar.

The excess multiplier is applied to the normal non-hurricane losses for each accident year in the ten-year experience period used in the review. In this way, a review database is created reflecting both the current normal non-hurricane loss experience and the average excess non-hurricane loss experience based on the long-term review. This allows a concurrent evaluation of both the normal and the excess components of the BG II non-hurricane loss cost level.

SPECIAL CAUSES OF LOSS

Similar to Basic Group II, the Special Causes of Loss (SCL) smoothing procedure uses a loss ratio approach to reflect both the frequency and severity of unusual loss events which may produce significant fluctuations in loss cost levels. The excess procedure uses longer term statewide SCL experience (1985 - present) to account for the volatile nature of weather related losses (water damage from bursting pipes, or the weight of ice, sleet, or snow) which are the predominant cause of large SCL losses in a given experience period. A monthly normal loss ratio cutoff of 2.0 is used to define normal and excess losses. The resulting ratio of excess to normal losses over the long-term experience period is then applied to the normal losses used in the loss cost level review. The calculations underlying the smoothing procedure are described in the Explanatory Notes to Exhibit C21.

EXPLANATORY NOTES TO EXHIBIT C18

COUNTRYWIDE BASIC GROUP I EXCESS LOSS FACTORS

EXCESS LOSS
FACTORS

The multistate excess loss factors are the ratios of the ten-year multistate adjusted incurred losses to the ten-year multistate adjusted normal losses (both adjusted for severity trend). They are determined separately by construction, protection and amount of insurance range. Due to credibility considerations, both constructions and protections have been consolidated as shown. The amount of insurance ranges are also shown.

EXPLANATORY NOTES TO EXHIBIT C19

BASIC GROUP I ADDITIONAL EXCESS LOSS INFORMATION

COLUMN (1) TRENDED INCURRED LOSSES

The trended incurred losses are the aggregate of all individually-trended loss records prior to any adjustment for large losses. They are shown here fully trended for severity.

COLUMN (2) TRENDED NORMAL LOSSES

The normal losses are the aggregate of the normal portions of each loss occurrence. These are also fully trended.

COLUMN (3) STATE NORMAL PERCENTAGE

The state normal percentages are the statewide normal losses divided by the statewide trended incurred losses. These percentages can be used in conjunction with the multistate percentages and actual dollar amounts of normal losses to assess the state loss experience. For example, consistently lower state normal percentages relative to multistate normal percentages could indicate that the state has a greater propensity for large losses.

COLUMN (4) MULTISTATE NORMAL PERCENTAGES

The multistate normal percentages are the multistate normal losses divided by the multistate trended incurred losses. As noted above these can be used as a yardstick against which the statewide experience can be measured.

COLUMN (5) ADJUSTED INCURRED LOSSES

The adjusted incurred losses are the totals across all constructions, protections and exposures of the fully trended normal losses multiplied by the excess loss factors.

COLUMN (6) STATE AVERAGE EXCESS FACTOR

The state average excess factors are the adjusted incurred losses in column (5) divided by the normal losses in column (2). These factors represent the annual averages of the factors calculated separately by construction, protection and amount of insurance. The average excess factor reflects the normal loss mix by construction, protection and exposure. Heavy concentration in those subsets of the data with high excess factors will result in large average factors.

EXPLANATORY NOTES TO EXHIBIT C20

BASIC GROUP II EXCESS MULTIPLIER

COLUMN (1) EARNED PREMIUMS

The unadjusted earned premiums are shown for each year.

COLUMN (2) INCURRED NON-HURRICANE LOSSES

The unadjusted non-hurricane incurred losses are shown for each year. Note that any year prior to 1982 (pre-CSP) in which a hurricane occurred has been excluded from the excess review period. The incurred losses have been adjusted to reflect loss development.

COLUMN (3) NORMAL INCURRED NON-HURRICANE LOSSES

The normal incurred losses for each year are those non-hurricane losses which do not exceed 0.500 times the earned premium for that year.

COLUMN (4) NORMAL LOSS RATIO

For each year in the excess review period, the normal loss ratio is the ratio of the normal incurred losses to the earned premium for the same year.

COLUMN (5) STATE EXCESS LOSS RATIO

The state excess loss ratio for each year is the ratio of the excess losses to the earned premium for the year. The excess losses are calculated as the incurred losses minus the normal incurred losses for each year.

LINE (6) STATE EXCESS COMPONENT

The state excess component is determined by dividing the sum of the state excess loss ratios by the sum of all normal loss ratios (where each sum is taken across all non-hurricane accident years in the excess review period).

LINE (7) STATE EXCESS MULTIPLIER

The state excess multiplier is derived by adding unity to the state excess component.

EXPLANATORY NOTES TO EXHIBIT C21

SPECIAL CAUSES OF LOSS ADDITIONAL EXCESS LOSS FACTOR

COLUMN (1) EARNED PREMIUMS

These are the unadjusted earned premiums for each year.

COLUMN (2) INCURRED LOSSES

These are the unadjusted incurred losses for each year.

COLUMN (3) NORMAL INCURRED LOSSES

The normal incurred losses are shown for each year. The normal incurred losses are defined to be that portion of each month's losses which does not exceed 2.0 times the monthly earned premiums.

COLUMN (4) NORMAL LOSS RATIO

The normal loss ratio for each year is the ratio of the normal incurred losses for each year divided by the earned premiums for the year.

Column (4) = Column (3) ÷ Column (1)

COLUMN (5) EXCESS LOSS RATIO

The excess loss ratio for each year is the ratio of the excess losses to the earned premium for the year. The excess losses are calculated as the incurred losses minus the normal incurred losses for each year.

LINE (6) EXCESS COMPONENT

The excess component is determined by dividing the sum of the excess loss ratios by the sum of the normal loss ratios, where the sums are taken across all years in the excess review period.

LINE (7) EXCESS MULTIPLIER

The excess multiplier is derived by adding unity to the excess component.

OVERVIEW

APPLICATION OF CREDIBILITY

INTRODUCTION

Credibility, Z , is a weight given to the most recent body of data. The complement of credibility, $1-Z$, is the weight assigned to net trend. The final estimate is a weighted average obtained by using the formula $C = Z \times R + (1-Z) \times N$, where:

Z = credibility

C = final estimate

R = estimate based on the most recent data

N = net trend

Credibility may range from 0 to 1, where $Z=1$ is full credibility and $Z=0$ is no credibility. The actual numerical value of Z is calculated by considering how the state's volume of experience compares with an established full credibility standard. Credibility is capped at 25% if the credibility calculated is below 25%. See Exhibits C22, C23, and C24 for a complete explanation of the credibility standards for Basic Group I, Basic Group II, and Special Causes of Loss.

EXPLANATORY NOTES TO EXHIBITS C22, C23 AND C24

BASIC GROUP I, BASIC GROUP II, AND SPECIAL CAUSES OF LOSS
STATEWIDE CREDIBILITY CALCULATION

LINE (1a)
(BGI only)

Full Credibility Claims Standard of Frequency

Based on a Poisson distribution, the minimum sample size of claims is determined such that the probability that the actual number of claims will be within 5% of the expected number of claims is greater than 95%.

LINE (1b)
(BGI only)

Severity Modification Factor

This factor, defined as $(1 + S^2 / M^2)$, is used to modify the claims standard to reflect variance due to severity, where S is the standard deviation and M is the mean of the loss severity distribution (on a normal loss basis).

LINE (1c) - BGI
LINE (1) - BGII, SCL

Full Credibility Claims Standard

For Basic Group I, this standard is the product of the frequency standard in line (1a) and the severity modification factor in line (1b). For Basic Group II and Special Causes of Loss, standards for full credibility of 30,000 claims for BGII and 25,000 claims for SCL were selected to balance stability and responsiveness.

LINE (2)

Multistate Experience Period Ratio of Earned Risks to Claims

This ratio was determined based on Commercial Statistical Plan data for the latest experience period (Five years for Basic Group I and Special Causes of Loss; Ten years for Basic Group II).

LINE (3)

Full Credibility Earned Risks Standard

To translate the claims standard to an equivalent standard based on earned risks, the claims standard (line (1c) for BGI, (1) for BGII and SCL) is multiplied by the multistate experience period ratio of earned risks to claims (line (2)).

LINE (4)

Experience Period Statewide Earned Risks

This is the number of earned risks in the state for the experience period.

EXPLANATORY NOTES TO EXHIBITS C22, C23 AND C24 (cont'd)

LINE (5) Experience Period Aggregate Loss Costs

These are the state's experience period adjusted aggregate loss costs.

LINE (6) Statewide Experience Period Ratio of Aggregate Loss Costs to Earned Risks

This ratio is determined by dividing the state's experience period adjusted aggregate loss costs by its experience period earned risks.

LINE (7) Full Credibility Aggregate Loss Costs Standard

To translate the risk standard into an aggregate loss cost standard on a state by state basis, the ratio (line (6)) is multiplied by the full credibility earned risks standard (line (3)).

LINE (8) Credibility

The state's credibility is calculated by using the square root credibility formula:

$$Z = \sqrt{\frac{P}{C}}$$

where Z = credibility,
P = statewide five-year adjusted aggregate loss costs (line (5)), and
C = full credibility aggregate loss costs standard (line (7)).

When the indicated credibility is below 25%, a minimum cap of 25% is assigned to the state credibility in order to reasonably reflect the state's experience in the coverage change calculation.

BASIC GROUP II

HURRICANE PROCEDURES

INTRODUCTION

The Basic Group II ratemaking procedures in hurricane-prone states incorporate the use of a computerized hurricane model which can estimate hurricane losses more accurately and with greater geographic specificity than traditional experience-based techniques. The model uses a meteorological database of both landfalling and nonlandfalling tropical cyclones since 1900, a sophisticated wind field model, and engineering and insurance-based damage relationships to develop reliable estimates of expected hurricane losses. The model evaluates the probability of a hurricane at a specific location, the duration of the wind speeds at that location and the relative damageability by type of structure for the current distribution of exposures.

OVERVIEW OF THE USE OF HURRICANE MODELS IN RATEMAKING

The model provides hurricane loss costs (expected hurricane losses per \$100 of replacement cost value) by ZIP code, construction class, and coverage (building vs. contents). These loss costs are weighted together using the latest year Basic Group II premium distribution to calculate expected hurricane loss costs by BG II rating territory, symbol (construction grouping) and coverage (building vs. contents). The hurricane loss costs are then adjusted to an 80% coinsurance, base deductible, and base limit of insurance level, and a factor is applied to reflect all loss adjustment expenses.

The non-hurricane portion of the prospective loss costs is calculated by applying the statewide non-hurricane monoline change, based on the latest ten years of non-hurricane experience, to the non-hurricane portion of the current BG II loss costs.

The revised BG II loss costs are then equal to the sum of the modeled hurricane loss costs and the non-hurricane portion of the prospective loss costs.

BASIC GROUP II

DESCRIPTION OF THE HURRICANE MODEL

HURRICANE DEFINED

A hurricane is a tropical cyclone technically defined as a non-frontal, low pressure synoptic-scale system in which the maximum sustained surface wind speed is at least 74 miles per hour.

HURRICANE MODEL

The model consists of several components or modules - an event generation module, local intensity module, and damage module.

The event generation module is used to create the stochastic storm catalog. Over 100 years of historical data on the frequency of hurricanes and their meteorological characteristics were used to fit statistical distributions for each parameter used. These parameters include storm track, landfall location and track angle at landfall, and the intensity variables of central pressure, radius of maximum winds, and forward speed. By stochastically drawing from these statistical distributions, the fundamental characteristics of each simulated storm are generated. The result is a large, representative catalog of potential events.

Once the model generates the characteristics of a simulated event, it propagates the event along its track. Peak gust wind speeds and wind duration are estimated for each geographical location affected by the storm, and the local intensity is estimated as a function of the magnitude of the event, distance from the source of the event, and a variety of local conditions.

Damageability functions are then used to determine the relationship between the local intensity and the resulting damage to buildings and contents. Expected hurricane losses are calculated by applying the appropriate damage functions to the replacement value of the insured properties.

Following is a discussion of those elements reflected in the AIR tropical cyclone model for the Gulf and Atlantic Coasts of the continental United States.

EVENT GENERATION MODULE

The following storm characteristics are modeled as part of the event generation module:

Frequency of Occurrence - The model estimates frequency of occurrence based on tropical cyclones occurring since 1900.

Landfall Location - The model estimates the probability of a hurricane occurring at points along the smoothed coastline from Texas to Maine.

Central Pressure - Central pressure is the primary determinant of hurricane wind speed and therefore of intensity. All else being equal, as central pressure decreases, wind speeds increase or, more precisely, wind speed is an increasing function of the difference between the central and peripheral pressure.

Radius of Maximum Winds (Rmax) - The radius of maximum winds is the distance from the storm's center, or eye, to where the strongest winds are found. On average, the radius of maximum winds tends to be larger at higher latitudes. Similarly, the radius will be smaller, on average, for more intense storms. These relationships are explicitly accounted for in the model. While a smaller radius of maximum winds corresponds to greater storm intensity, it does not necessarily follow that losses will be greater. This is because a smaller radius usually results in a smaller affected area.

Forward Speed - Forward, or translational, speed is the rate at which a hurricane moves from point to point along its track. In general, the higher the latitude, the faster the hurricane's translational speed. Faster moving storms result in higher losses further inland. On the other hand, the faster a storm travels, the shorter the duration that a building is subjected to high wind speeds. In some areas, particularly along the coast, this can lead to lower losses than would otherwise be the case.

Track Angle at Landfall - Separate distributions for track angle at landfall are estimated for segments of coastline that are variable in length, depending upon the coastal orientation of that segment.

Storm Track - Once landfall location and the track angle at landfall are identified, the simulated storm track is generated using conditional probability matrices which resemble the curving and recurving tracks actually observed from the stochastic storm database.

Multiple-Landfalling Storms - In order to model multiple landfalling events as single storms, simulated storm tracks are joined statistically based on consistency of certain storm parameters.

LOCAL
INTENSITY
MODULE

Once the model probabilistically generates the hurricane's meteorological characteristics, it simulates the storm's movement along its track. Calculations of local intensity begin with the maximum over-water windspeed, and then adjustments are made for the asymmetric nature of the hurricane windfield, storm filling over land, surface friction, and relative wind speed profiles.

Asymmetry Effect - In the Northern Hemisphere, hurricane winds rotate in a counter-clockwise direction. The combined effects of hurricane winds and forward motion produce higher wind speeds on the right side of the storm, as viewed facing the storm's forward direction. The model accounts for the dynamic interaction of the forward (translational) and rotational speeds, as well as the inflow angle.

Filling Effect - As the storm moves inland its intensity begins to dissipate. Central pressure rises and the eye of the hurricane begins to "fill" as it moves away from its energy source, i.e., warm ocean water. The model filling equations are a function of the geographic location (particularly distance from coastline) and the time elapsed since landfall. Rates of filling vary by region, consistent with historical observations.

Surface Friction Effect - Differences in surface terrain (or land use/land cover) also affect windspeeds. Wind velocity profiles typically show higher wind speeds at higher elevations. Winds travel more slowly at ground-level because of the horizontal drag force of the earth's surface, or surface friction. The addition of obstacles such as buildings will further degrade wind speed. In general, the rougher the terrain, due to both natural and man-made obstacles, the more quickly wind speeds dissipate.

Relative Wind Speeds - The wind speed at any particular location is dependent on the radial distance between the eye of the storm and the location of interest.

DAMAGE
ESTIMATION
MODULE

The tropical cyclone model develops a complete time profile of wind speeds for each location affected by the storm, thus capturing the effect of wind duration on structures as well as the effect of peak wind speed. Damage estimation for hurricanes begins at sustained wind speeds of 40 mph and is calculated cumulatively until sustained winds are once again below 40 mph.

Separate damageability estimates exist by construction type (e.g., frame, joisted masonry, masonry non-combustible) and coverage (buildings vs. contents). Estimated hurricane damage is measured as the ratio of repair cost (i.e., expected hurricane losses) to the replacement cost of the property, capped at 80% of the replacement cost. 80% replacement cost is the exposure base, or limit of insurance, used in ISO's commercial property program.

BASIC GROUP II

RATEMAKING PROCEDURES AND LOSS COST CALCULATIONS

The following is an overview of the Basic Group II ratemaking procedures incorporating computer modeled hurricane loss costs in the hurricane-prone states.

REMOVAL OF HURRICANE LOSSES

Losses due to hurricanes reflected in the modeled hurricane loss costs are excluded from the Basic Group II loss database. Storm track data from several meteorological sources are analyzed to determine the date, location, and wind speed of each hurricane during the BG II experience period, and those losses incurred during the month of a hurricane reflected in the model are replaced with the average monthly non-hurricane losses for each rating territory. The resulting non-hurricane losses are used in the calculation of the statewide non-hurricane coverage change, the excess procedure (for CSP years, 1982 and later), and the type of policy relativities.

EXCESS PROCEDURE

The excess procedure smoothes catastrophic BG II losses due to perils other than hurricane. The procedure is based on long-term (1950 to present) statewide BG II non-hurricane experience. For those years prior to 1982 (pre-CSP), any year in which a hurricane occurred has been excluded from the excess procedure. For 1982 and later, losses incurred during the month of a hurricane have been replaced by average non-hurricane losses as described above. The normal loss ratio cutoff for each year included in the excess procedure is 0.500. From this follows the following definitions:

The Normal incurred losses for each year are those losses which do not exceed 0.500 times the earned premium for the year. The Excess incurred losses for each year are equal to the Incurred losses minus the Normal losses for the year.

$$\text{Normal Loss Ratio (NLR)} = \frac{\text{Normal Losses}}{\text{Earned Premium}}, \text{ for each year}$$

$$\text{Excess Loss Ratio (ELR)} = \frac{\text{Excess Losses}}{\text{Earned Premium}}, \text{ for each year}$$

$$\text{Excess Component} = \frac{\text{Sum of ELR's}}{\text{Sum of NLR's}}, \text{ over the long-term non-hurricane experience period}$$

The Excess Multiplier is equal to the excess component plus 1.000, and is applied to the normal non-hurricane losses used in the statewide experience review.

STATEWIDE EXPERIENCE LEVEL REVIEW	<p>The statewide experience review (Exhibit B2) is based on the latest ten years of non-hurricane loss experience. The losses are normal non-hurricane losses (i.e., hurricane losses reflected by the model have been replaced by average non-hurricane losses and the resulting losses have been capped at 0.500 times the earned premium for each year), multiplied by the excess multiplier, loss adjustment expense factor, trend factors, and loss development factors. The non-hurricane aggregate loss costs are at current manual level and have been trended to the average date of writing in the assumed effective period.</p>
NON-HURRICANE LOSS COST PROVISION	<p>The non-hurricane portion of the revised BG II loss costs for each territory (where applicable), coverage, and symbol is calculated as:</p> $\text{Current Non-Hurricane Loss Cost} \times \text{Statewide Monoline Non-Hurr. Change}$ <p>where the statewide monoline non-hurricane change is the product of the statewide non-hurricane coverage change (Exhibit B2) and the indicated monoline relativity found on Exhibit B8, Column (7).</p>
MODELED HURRICANE LOSS COSTS	<p>The model produces hurricane loss costs (expected hurricane losses per \$100 of replacement cost) including demand surge and truncated at 80% of value in ZIP code, coverage, and construction detail. These loss costs are weighted together to derive expected hurricane loss costs for each rating territory, coverage, and symbol, using the latest BG II premium distribution. The hurricane loss costs are then adjusted to an 80% coinsurance, base deductible, and base limit of insurance level, and a factor is applied to reflect all loss adjustment expenses.</p>
REVISED BASIC GROUP II LOSS COSTS	<p>The revised BG II loss costs are the sum of the non-hurricane portion of the revised loss costs plus the modeled hurricane loss costs.</p> <p>The statewide BG II monoline change shown on Exhibit A1 is calculated as a weighted average of the individual loss cost changes for each territory (where applicable), coverage, and symbol. This monoline change (based on hurricane plus non-hurricane experience combined) is then used to determine the indicated loss cost adjustments by type of policy as described on Exhibit B8.</p> <hr/>

EXPLANATORY NOTES TO EXHIBIT C25

CALCULATION OF REVISED BASIC GROUP II LOSS COSTS

SYMBOL DEFINITIONS

The Basic Group II (BG II) symbol definitions are:

<u>Symbol</u>	<u>Definition</u>
AA	Superior Wind Resistive
A	Wind Resistive
AB	Semi-Wind Resistive
B	Ordinary

COLUMN (1) Latest Year Aggregate Loss Costs

The latest accident year statewide aggregate loss costs for each symbol.

COLUMN (2) Current Loss Costs

The current manual loss costs are shown here.

COLUMN (3) Current Non-Hurricane Loss Costs

These are the current manual loss costs minus their hurricane component.

COLUMN (4) Statewide Monoline Non-Hurricane Loss Cost Change

The statewide monoline non-hurricane loss cost change is the product of the indicated statewide coverage change shown on Exhibit B2, line (10), times the monoline normalized formula relativity shown on Exhibit B8, column (7).

COLUMN (5) Indicated Non-Hurricane Loss Costs

The indicated non-hurricane loss costs are calculated as the current non-hurricane loss costs times the statewide non-hurricane monoline change, and reflect that portion of the indicated BG II loss costs due to non-hurricane perils.

EXPLANATORY NOTES TO EXHIBIT C25

CALCULATION OF REVISED BASIC GROUP II LOSS COSTS (Cont'd)

COLUMN (6) Hurricane Modeled Loss Costs

These are the expected hurricane loss costs based on the computer simulation model. The model produces hurricane loss costs (expected hurricane loss per \$100 of replacement cost) by ZIP code, coverage (building vs. contents) and construction. These loss costs are weighted together using the latest year written premium to calculate expected hurricane loss costs by territory, coverage and symbol. The loss costs are then adjusted to reflect the 80% coinsurance clause, \$500 base deductible level, base limit of insurance (\$250,000 for buildings and \$50,000 for contents), and all loss adjustment expenses.

COLUMN (7) Indicated Total Loss Costs

The indicated total loss costs are equal to the sum of the revised non-hurricane loss costs plus the hurricane modeled loss costs.

COLUMN (8) Percent Change

The percentage change is the ratio of the indicated loss cost to current loss cost, minus one. The overall statewide change is a weighted average of the percent changes for each symbol based on the aggregate loss costs shown in column (1).

OVERVIEW

LOSS ADJUSTMENT EXPENSE FACTORS

OBJECTIVE	The reported indemnity losses must be loaded for any loss adjustment expenses (LAE) that are not reported in statistical detail to ISO.
PROPERTY COVERAGES	For the property coverages, only the incurred indemnity losses are reported to ISO under the Commercial Statistical Plan. All loss adjustment expenses must be loaded in. A factor representing the ratio of incurred losses plus all LAE to incurred losses was selected based on multistate financial data (see Exhibit D6 for the underlying data).
EXPERIENCE INCLUDED	Fire and Allied Lines incurred loss and loss adjustment expense experience for 2017-2021 is displayed on Exhibit D6. The experience is based on Insurance Expense Exhibit information compiled by A.M. Best. For Allied Lines, the loss adjustment expense ratios [Exhibit D6, line (3)(b)] for a few years are distorted by unusual catastrophe-related losses and loss adjustment expenses. The selected Allied Lines loss adjustment expense factor used for this review was selected after consideration of this distortion and based on a review of average loss adjustment expense ratios over a longer time period.
SELECTED FACTORS	The following factors have been used in this review to load incurred losses for all loss adjustment expenses:

Basic Group I	1.090
Basic Group II	1.110
Special Causes of Loss	1.110

VERMONT

SUMMARY OF MONOLINE PROSPECTIVE LOSS COST CHANGES (A)

<u>Coverage</u>	<u>Indications</u>	<u>Selections</u>	Aggregate Loss Costs At Current <u>Level</u>
Basic Group I	+2.9%	+2.9%	7,571,408
Basic Group II	+2.7%	+2.7%	1,612,742
Special Causes of Loss	-3.6%	-3.6%	3,561,988
All Coverages Combined	+1.1%	+1.1%	12,746,138

(A) For trend purposes, the period of use for this revision is assumed to begin on 03/01/2024.

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Basic Group II Prospective Loss Cost Changes
By Territory, Coverage, and Symbol

		<u>Territory</u>
<u>Coverage</u>	<u>Symbol</u>	<u>Entire State</u>
Buildings	AA	0.0%
	A	0.0%
	AB	0.0%
	B	2.8%
Contents	AA	0.0%
	A	0.0%
	AB	3.0%
	B	5.0%
	Total	2.7%

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SPECIAL CAUSES OF LOSS PROSPECTIVE LOSS COST CHANGES BY CATEGORY

<u>Category</u>	<u>Description</u>	<u>Entire State</u>
01	Buildings	-4.9%
02	Res. Apts. And Condos	+0.5%
03	Offices	+0.5%
04	Mercantile - High	+1.0%
05	Mercantile - Medium	+0.7%
06	Mercantile - Low	+0.4%
07	Motels And Hotels	+0.4%
08	Institutional - High	+0.4%
09	Institutional - Low	+0.6%
10	Indust-Proc - High	+1.7%
11	Indust-Proc - Low	+4.0%
12	Service - High	+2.0%
13	Service - Low	+0.4%
14	Contractors	-0.8%
	Statewide Total	-3.6%

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POTENTIAL IMPACT OF BG I, BG II, AND SCL MONOLINE REVISIONS
ON COMMERCIAL PACKAGE POLICY

	(1)	(2)	(3)	(4)
		Basic	Basic	Special
	Type of Policy	Group I	Group II	Causes
				of Loss
31	Motel/Hotel	2.9%	2.8%	-4.3%
32	Apartment	2.9%	2.7%	-4.1%
33	Office	2.9%	3.0%	-4.0%
34	Mercantile	2.9%	2.8%	-4.0%
35	Institutional	2.9%	2.9%	-2.5%
36	Services	2.9%	2.9%	-3.6%
37	Indust/Processing	2.9%	2.9%	-2.9%
38	Contractors	2.9%	3.2%	-3.6%

Basic Group I, Basic Group II, and Special Causes of Loss monoline changes by type of policy (TOP) are displayed. They are calculated by taking a weighted average of the loss cost changes by territory (where applicable) for BGI, or by category for SCL, using the latest year multiline aggregate loss costs as weights. Basic Group II monoline changes are calculated by taking a weighted average of the loss cost changes by coverage and symbol, using the latest year aggregate loss costs as weights.

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STATEWIDE BASIC GROUP I
COVERAGE LOSS COST LEVEL EVALUATION

(1)	(2)	(3)	(4)	(5)
	Aggregate*	Adjusted**	Experience	
<u>Year</u>	<u>Loss Costs</u>	<u>Incurred Losses</u>	<u>Ratio</u> <u>(3)/(2)</u>	<u>Weights</u>
2018	8,166,992	3,797,849	0.465	0.10
2019	8,317,707	9,407,343	1.131	0.15
2020	8,607,086	14,539,878	1.689	0.20
2021	8,154,146	7,152,475	0.877	0.25
2022	7,571,408	12,860,361	1.699	0.30
(6) Weighted Experience Ratio				= 1.283
(7) Credibility				= 0.250
(8) Expected Experience Ratio				= 1.043
(9) Credibility Weighted Experience Ratio				= 1.103
(0.250 X 1.283) + (0.750 X 1.043)				
(10) Indicated Coverage Loss Cost Change				= 1.103
				OR 10.3%

* Aggregate Loss Costs are adjusted to current ISO Loss Cost Level and 09/01/2024 Amount of Insurance levels.

** Incurred Losses are adjusted to 03/01/2025 cost levels including Loss Development and all Loss Adjustment Expenses.

VERMONT

STATEWIDE BASIC GROUP II
COVERAGE LOSS COST LEVEL EVALUATION

(1)	(2)	(3)	(4)	(5)
	Aggregate*	Non-Hurricane	Non-Hurricane	Experience
		Aggregate*	Adjusted**	Ratio
<u>Year</u>	<u>Loss Costs</u>	<u>Loss Costs</u>	<u>Incurred Losses</u>	<u>(3)/(2)</u>
2013	1,293,619	1,088,871	1,891,467	1.737
2014	1,326,166	1,117,376	988,041	0.884
2015	1,430,282	1,206,794	2,581,648	2.139
2016	1,483,980	1,252,850	532,823	0.425
2017	1,547,074	1,306,561	903,933	0.692
2018	1,609,528	1,359,406	3,050,380	2.244
2019	1,615,749	1,364,607	1,768,652	1.296
2020	1,653,726	1,396,956	543,831	0.389
2021	1,603,540	1,356,613	431,947	0.318
2022	1,612,742	1,375,889	374,877	0.272
(6) Weighted Experience Ratio				= 1.040
(7) Credibility				= 0.250
(8) Expected Experience Ratio				= 1.058
(9) Credibility Weighted Experience Ratio				
(0.250 X 1.040) + (0.750 X 1.058)				= 1.054
(10) Indicated Coverage Loss Cost Change				= 1.054
				OR 5.4%

* Aggregate Loss Costs are adjusted to current ISO Loss Cost Level and 09/01/2024 Amount of Insurance levels.

** Incurred Losses are adjusted to 03/01/2025 cost levels including Loss Development and all Loss Adjustment Expenses.

VERMONT

STATEWIDE SPECIAL CAUSES OF LOSS
COVERAGE LOSS COST LEVEL EVALUATION

(1)	(2)	(3)	(4)	(5)
	Aggregate*	Adjusted**	Experience	
<u>Year</u>	<u>Loss Costs</u>	<u>Incurred Losses</u>	<u>Ratio</u> <u>(3)/(2)</u>	<u>Weights</u>
2018	3,777,724	3,093,049	0.819	0.10
2019	3,844,053	3,049,019	0.793	0.15
2020	3,908,294	2,049,143	0.524	0.20
2021	3,737,535	3,095,729	0.828	0.25
2022	3,561,988	2,780,905	0.781	0.30
(6) Weighted Experience Ratio				= 0.747
(7) Credibility				= 0.250
(8) Expected Experience Ratio				= 1.050
(9) Credibility Weighted Experience Ratio				= 0.974
(0.250 X 0.747) + (0.750 X 1.050)				
(10) Indicated Coverage Loss Cost Change				= 0.974
				OR -2.6%

* Aggregate Loss Costs are adjusted to current ISO Loss Cost Level and 09/01/2024 Amount of Insurance levels.

** Incurred Losses are adjusted to 03/01/2025 cost levels including Loss Development and all Loss Adjustment Expenses.

VERMONT
BASIC GROUP I RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	Statewide Coverage Loss Cost Change Of	1.103
<u>TOP</u>	<u>\$ Lst Sq Formula Relativity</u>	<u>Credibility Z</u>	<u>Credibility Weighted Relativity</u>	<u>Balanced Relativity</u>	<u>Or</u>	10.3%
10	0.206	0.047	0.928	0.933		
31	0.277	0.023	0.971	0.976		
32	1.384	0.054	1.018	1.024		
33	0.091	0.022	0.949	0.954		
34	1.815	0.057	1.035	1.041		
35	1.504	0.061	1.025	1.031		
36	1.300	0.053	1.014	1.020		
37	0.605	0.051	0.975	0.981		
38	0.167	0.021	0.963	0.968		

Statewide Monoline Loss Cost Level Change: 2.9%

VERMONT
BASIC GROUP I RELATIVITY ANALYSIS

Calculation of Loss Cost Change for Entire State:

Statewide Coverage Loss Cost Change = 1.103

 Territorial Relativity = 1.000

 Monoline (TOP 10) Relativity = 0.933

Indicated Monoline Loss Cost Level Change

 = 1.103 X 1.000 X 0.933 = 1.029

 or 2.9%

VERMONT
SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	Statewide Coverage Loss Cost Change Of	0.974 -2.6%
TOP	<u>\$ Lst Sq Formula Relativity</u>	<u>Credibility Z</u>	<u>Credibility Weighted Relativity</u>	<u>Balanced Relativity</u>	<u>or</u>	
10	0.882	0.045	0.994	0.989		
31	1.075	0.029	1.002	1.006		
32	0.882	0.085	0.989	1.005		
33	1.034	0.037	1.001	1.005		
34	1.136	0.080	1.010	1.014		
35	1.243	0.057	1.012	1.016		
36	0.816	0.053	0.989	0.993		
37	0.435	0.038	0.969	0.973		
38	2.252	0.018	1.015	1.019		

	(1)	(2)	(3)	(4)	(5)
Category	<u>\$ Lst Sq Formula Relativity</u>	<u>Credibility Z</u>	<u>Credibility Weighted Relativity</u>	<u>Balanced Relativity</u>	<u>Indicated Monoline Loss Cost Level Change</u>
01	0.890	0.487	0.945	0.987	-4.9%
02	0.970	0.039	0.999	1.043	0.5%
03	0.954	0.025	0.999	1.043	0.5%
04	1.202	0.021	1.004	1.048	1.0%
05	1.032	0.016	1.001	1.045	0.7%
06	0.849	0.012	0.998	1.042	0.4%
07	0.905	0.016	0.998	1.042	0.4%
08	0.965	0.048	0.998	1.042	0.4%
09	0.987	0.037	1.000	1.044	0.6%
10	2.585	0.011	1.011	1.056	1.7%
11	4.810	0.021	1.034	1.080	4.0%
12	1.893	0.022	1.014	1.059	2.0%
13	0.841	0.013	0.998	1.042	0.4%
14	0.428	0.017	0.986	1.030	-0.8%

Statewide Monoline Loss Cost Level Change: -3.6%

VERMONT
SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS

Sample Loss Cost Level Change calculation:

Statewide Coverage Loss Cost Change	=	0.974
Monoline (TOP 10) Relativity	=	0.989
Category 1 Relativity	=	0.987
Indicated Monoline Loss Cost Level Change for Category 1	=	0.951
	OR	-4.9%

VERMONT
BASIC GROUP I RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

<u>Type Of Policy</u>	(1) Accident Year Ending 03/31/2022 Aggregate Loss <u>Costs</u>	(2) 5 - Year Aggregate <u>Loss Costs</u>	(3) 5 - Year Experience <u>Ratio</u>	(4) 5 - Year Exp. Ratio <u>Relativity</u>
Entire State (Vermont)				
10 Monoline	942,236	4,886,528	0.238	0.206
31 Multiline Motel/Hotel	412,859	2,352,811	0.320	0.277
32 Multiline Apartment	971,590	5,721,441	1.597	1.384
33 Multiline Office	430,121	2,256,514	0.105	0.091
34 Multiline Mercantile	1,095,462	6,058,666	2.096	1.816
35 Multiline Institutional	1,225,884	6,477,793	1.737	1.505
36 Multiline Services	1,017,584	5,587,296	1.500	1.300
37 Multiline Indust/Process	1,091,690	5,338,309	0.698	0.605
38 Multiline Contractors	383,982	2,137,983	0.193	0.167
Total All Tops*	7,571,408	40,817,341	1.154	1.000

VERMONT
SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

<u>Type Of Policy</u>	<u>Category</u>	(1) Accident Year Ending 03/31/2022 Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
Entire State						
10 Monoline	01 Buildings	268,841	1,415,832	0.594	0.594	0.837
	02 Res. Apts. And Cond	6,205	39,677	0.658	0.644	0.907
	03 Offices	10,936	55,884	0.133	0.431	0.607
	04 Mercantile - High	11,439	62,145	0.185	0.444	0.625
	05 Mercantile - Medium	2,318	15,888	0.203	0.493	0.694
	06 Mercantile - Low	3,332	18,427	0.000	0.436	0.614
	07 Motels And Hotels	610	37,629	0.000	0.408	0.575
	08 Institutional - Hig	4,597	23,299	3.986	1.546	2.177
	09 Institutional - Low	8,601	55,977	0.000	0.383	0.539
	10 Indust-Proc - High	1,189	7,369	9.622	2.730	3.845
	11 Indust-Proc - Low	12,362	72,745	0.000	0.364	0.513
	12 Service - High	7,247	35,233	0.741	0.641	0.903
	13 Service - Low	7,088	41,544	0.427	0.541	0.762
	14 Contractors	3,353	10,862	0.000	0.449	0.632
	Total	348,118	1,892,511	0.592	0.587	0.827
31 Multiline Motel/Hotel	01 Buildings	201,165	993,029	0.481	0.720	1.014
	07 Motels And Hotels	26,839	201,775	0.362	0.732	1.031
	Total	228,004	1,194,804	0.467	0.721	1.016

VERMONT
SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

<u>Type Of Policy</u>	<u>Category</u>	(1) Accident Year Ending 03/31/2022 Aggregate Loss <u>Costs</u>	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience <u>Ratio</u>	(4) Credibility Weighted Experience <u>Ratio</u>	(5) Credibility Weighted Relativity
32 Multiline Apartment	01 Buildings	575,248	3,162,143	0.594	0.595	0.838
	02 Res. Apts. And Cond	105,931	569,368	0.658	0.609	0.858
	Total	681,179	3,731,511	0.604	0.597	0.841
33 Multiline Office	01 Buildings	263,495	1,214,523	0.407	0.692	0.975
	03 Offices	53,933	319,355	0.503	0.749	1.055
	08 Institutional - Hig	151	2,944	0.000	0.699	0.985
	12 Service - High	0	13	0.000	0.699	0.985
	14 Contractors	229	436	0.000	0.699	0.985
	Total	317,808	1,537,271	0.423	0.702	0.989

VERMONT
SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

<u>Type Of Policy</u>	<u>Category</u>	(1) Accident Year Ending 03/31/2022 Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
34 Multiline Mercantile	01 Buildings	572,666	2,822,018	0.706	0.761	1.072
	03 Offices	246	3,555	0.000	0.699	0.985
	04 Mercantile - High	45,274	265,514	2.312	1.045	1.472
	05 Mercantile - Medium	31,647	223,350	1.335	0.883	1.244
	06 Mercantile - Low	30,919	155,248	0.277	0.722	1.017
	08 Institutional - Hig	16	70	0.000	0.699	0.985
	11 Indust-Proc - Low	41	544	0.000	0.699	0.985
	12 Service - High	141	2,156	1.243	0.855	1.204
	13 Service - Low	694	2,237	1.757	0.919	1.294
	14 Contractors	2,115	7,710	0.000	0.699	0.985
	Total	683,759	3,482,402	0.821	0.784	1.104
35 Multiline Institutional	01 Buildings	246,012	1,264,952	0.920	0.833	1.173
	03 Offices	29	168	0.000	0.699	0.985
	08 Institutional - Hig	99,280	722,985	1.260	0.901	1.269
	09 Institutional - Low	94,656	440,093	1.478	0.925	1.303
	12 Service - High	89	624	41.167	5.849	8.238
	13 Service - Low	134	140	0.000	0.699	0.985
	14 Contractors	292	922	0.000	0.699	0.985
	Total	440,492	2,429,884	1.124	0.869	1.224

VERMONT
SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

<u>Type Of Policy</u>	<u>Category</u>	(1) Accident Year Ending 03/31/2022 Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
36 Multiline Services	01 Buildings	326,352	1,712,197	0.528	0.546	0.769
	03 Offices	108	713	0.000	0.717	1.010
	04 Mercantile - High	488	963	0.000	0.716	1.008
	05 Mercantile - Medium	63	81	0.000	0.721	1.015
	06 Mercantile - Low	376	1,176	364.327	45.566	64.177
	08 Institutional - Hig	2,181	8,470	0.000	0.678	0.955
	09 Institutional - Low	6,364	75,763	0.000	0.460	0.648
	11 Indust-Proc - Low	0	28	0.000	0.721	1.015
	12 Service - High	52,007	299,305	1.310	1.175	1.655
	13 Service - Low	21,141	154,134	0.311	0.518	0.730
	14 Contractors	105	950	0.000	0.716	1.008
	Total	409,185	2,253,780	0.938	0.666	0.937
37 Indust/Proc	01 Buildings	246,102	1,177,693	0.155	0.214	0.301
	03 Offices	90	195	0.000	0.720	1.014
	04 Mercantile - High	243	694	0.000	0.717	1.010
	10 Indust-Proc - High	32,580	157,218	0.863	0.844	1.189
	11 Indust-Proc - Low	49,529	254,797	2.422	1.933	2.723
	12 Service - High	261	556	0.000	0.718	1.011
	14 Contractors	181	229	0.000	0.720	1.014
	Total	328,986	1,591,382	0.566	0.536	0.755

VERMONT
SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

<u>Type Of Policy</u>	<u>Category</u>	(1) Accident Year Ending 03/31/2022 Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
38 Multiline Contractors	01 Buildings	84,868	474,947	1.676	1.509	2.125
	03 Offices	507	1,462	0.000	0.713	1.004
	04 Mercantile - High	169	260	199.142	24.040	33.859
	08 Institutional - Hig	51	51	0.000	0.721	1.015
	11 Indust-Proc - Low	180	553	0.000	0.718	1.011
	12 Service - High	7	21	0.000	0.721	1.015
	13 Service - Low	0	2	0.000	0.721	1.015
	14 Contractors	38,675	238,753	0.681	0.724	1.020
	Total	124,457	716,049	1.625	1.291	1.818
Total All TOPs	01 Buildings	2,784,749	14,237,334	0.606	0.657	0.925
	02 Res. Apts. And Cond	112,136	609,045	0.658	0.611	0.861
	03 Offices	65,849	381,332	0.434	0.696	0.980
	04 Mercantile - High	57,613	329,576	2.438	0.989	1.393
	05 Mercantile - Medium	34,028	239,319	1.255	0.856	1.206
	06 Mercantile - Low	34,627	174,851	4.203	1.181	1.664
	07 Motels And Hotels	27,449	239,404	0.354	0.725	1.021
	08 Institutional - Hig	106,276	757,819	1.349	0.924	1.301
	09 Institutional - Low	109,621	571,833	1.276	0.855	1.205
	10 Indust-Proc - High	33,769	164,587	1.171	0.910	1.283
	11 Indust-Proc - Low	62,112	328,667	1.931	1.616	2.277
	12 Service - High	59,752	337,908	1.294	1.114	1.570
	13 Service - Low	29,057	198,057	0.372	0.534	0.752
	14 Contractors	44,950	259,862	0.586	0.702	0.989
	Total	3,561,988	18,829,594	0.754	0.709	0.999

VERMONT

BASIC GROUP II RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Accident Year Ending 03/31/2022	Accident Years 2013-2022	Formula		Credibility	Balanced	Normalized	Current	Indicated	Indicated
	Loss Costs	Experience Ratio	Relativity	Credibility	Weighted	Formula	Formula	Implicit	Implicit	Total
	At Current	At Current	(2)/ 0.827	(C)	Relativity (D)	Relativity E	Relativity F	PMF	PMF G	Loss
	<u>Implicit PMF</u>	<u>PMF</u>								<u>Cost</u>
										<u>Adjustment</u>
Monoline	339,320	0.504	0.609	0.053	0.979	0.979	0.9658			2.7%
Multiline	1,273,422	0.913	1.104	0.219	1.023	1.023	1.0095			7.4%
Coverage	1,612,742	0.827	1.000			1.0137	1.0003			6.4%
<u>Multiline Top</u>										
31 Motel/Hotel	82,838	0.726	0.878	0.018	0.998	1.013	0.9993	0.609	0.630	6.3%
32 Apartment	152,326	1.168	1.412	0.032	1.013	1.028	1.0141	0.525	0.551	7.8%
33 Office	120,033	0.343	0.415	0.023	0.987	1.002	0.9885	0.898	0.919	5.1%
34 Mercantile	255,943	0.856	1.035	0.052	1.002	1.017	1.0033	0.721	0.749	6.7%
35 Institutional	216,156	1.262	1.526	0.053	1.028	1.043	1.0289	0.677	0.721	9.4%
36 Services	250,696	1.194	1.444	0.051	1.023	1.038	1.0240	0.882	0.935	8.9%
37 Indust/Process	139,995	0.464	0.561	0.028	0.988	1.003	0.9894	0.619	0.634	5.2%
38 Contractors	55,435	0.494	0.597	0.013	0.995	1.010	0.9964	0.696	0.718	6.0%
	1,273,422	0.913	1.104		1.008	1.023	1.0095			7.4%

B - For Columns (2) - (10), the Multiline total is the average weighted by Column (1)

C - Credibility = $P/(P+K)$ where P represents the total 10-year adjusted loss costs and K = 45,000,000

D - $(5) = ((3) * (4)) + ((1.000 - (4)) * 1.000)$

E - $(6) = (5) * (1.023/1.008)$

F - $(7) = (6) / 1.0137$

G - $(9) = (7) * (8) / (0.9658)$

VERMONT
BASIC GROUP I
HISTORY OF STATEWIDE LOSS COST LEVEL CHANGES

Loss Cost Level History

(1)	(2)	(3)	(4)	(5)
Effective Date	Loss Cost Level Change	Loss Cost Level Index	Adjustment Factor	Weight
2000-03-01	-14.8%	0.852	0.657	0.833
2001-02-01	-16.1%	0.715	0.783	0.917
2002-02-01	-15.5%	0.604	0.927	0.917
2004-01-01	-9.2%	0.548	1.022	1.000
2007-10-01	-4.0%	0.527	1.063	0.250
2008-10-01	-0.2%	0.525	1.067	0.250
2009-09-01	5.6%	0.555	1.009	0.333
2012-10-01	9.2%	0.606	0.924	0.250
2013-10-01	11.4%	0.675	0.830	0.250
2014-10-01	-3.3%	0.653	0.858	0.250
2017-01-01	5.2%	0.687	0.815	1.000
2018-11-01	-8.1%	0.631	0.887	0.167
2019-11-01	-8.4%	0.578	0.969	0.167
2022-06-01	-3.1%	0.560	1.000	0.583

Time Element Only Loss Cost Level History

(1)	(2)	(3)	(4)	(5)
Effective Date	Loss Cost Level Change	Loss Cost Level Index	Adjustment Factor	Weight
2013-04-01	-13.1%	0.869	1.000	0.750

VERMONT
BASIC GROUP II
HISTORY OF STATEWIDE LOSS COST LEVEL CHANGES

Loss Cost Level History

(1)	(2)	(3)	(4)	(5)
Effective Date	Loss Cost Level Change	Loss Cost Level Index	Adjustment Factor	Weight
2000-03-01	0.0%	1.000	1.546	0.833
2001-02-01	4.8%	1.048	1.475	0.917
2002-02-01	4.2%	1.092	1.416	0.917
2004-01-01	1.8%	1.112	1.390	1.000
2007-10-01	7.6%	1.196	1.293	0.250
2008-10-01	4.1%	1.245	1.242	0.250
2009-09-01	4.3%	1.299	1.190	0.333
2012-10-01	6.6%	1.384	1.117	0.250
2013-10-01	6.1%	1.469	1.052	0.250
2014-10-01	5.7%	1.553	0.995	0.250
2017-01-01	5.6%	1.640	0.943	1.000
2018-11-01	-2.6%	1.597	0.968	0.167
2019-11-01	-0.2%	1.594	0.970	0.167
2022-06-01	-3.0%	1.546	1.000	0.583

Time Element Only Loss Cost Level History

(1)	(2)	(3)	(4)	(5)
Effective Date	Loss Cost Level Change	Loss Cost Level Index	Adjustment Factor	Weight
2013-04-01	-13.3%	0.867	1.000	0.750

VERMONT
SPECIAL CAUSES OF LOSS
HISTORY OF STATEWIDE LOSS COST LEVEL CHANGES

Loss Cost Level History

(1)	(2)	(3)	(4)	(5)
Effective Date	Loss Cost Level Change	Loss Cost Level Index	Adjustment Factor	Weight
2000-03-01	-12.9%	0.871	0.677	0.833
2001-02-01	-9.5%	0.788	0.749	0.917
2002-02-01	1.7%	0.802	0.736	0.917
2004-01-01	-1.4%	0.790	0.747	1.000
2007-10-01	-12.8%	0.689	0.856	0.250
2008-10-01	-0.8%	0.684	0.863	0.250
2009-09-01	5.2%	0.719	0.821	0.333
2012-10-01	2.6%	0.738	0.799	0.250
2013-10-01	-0.6%	0.734	0.804	0.250
2014-10-01	-7.2%	0.681	0.866	0.250
2017-01-01	2.0%	0.694	0.850	1.000
2018-11-01	-3.5%	0.670	0.881	0.167
2019-11-01	-3.8%	0.645	0.915	0.167
2022-06-01	-8.5%	0.590	1.000	0.583

Time Element Only Loss Cost Level History

(1)	(2)	(3)	(4)	(5)
Effective Date	Loss Cost Level Change	Loss Cost Level Index	Adjustment Factor	Weight
2013-04-01	-25.0%	0.750	1.000	0.750

VERMONT

HISTORY OF BASIC GROUP I
LOSS COST CHANGES BY TERRITORY, RATING ID AND RATING GROUP

TERRITORY: Entire State (Vermont)

(1) Effective Date	(2) Rating ID	(3) Rating Group																				
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	17	18	19	20	21	22
2007-10-01	Specific	-7.9%	-10.1%	-2.7%	-4.7%	-8.1%	-10.8%	-9.7%	-8.7%	-8.2%	-8.8%	-4.8%	-4.8%	-5.3%	-4.8%	-7.4%	-8.8%	-9.3%	-6.2%	-6.2%	-7.6%	-6.2%
2007-10-01	Class	-1.8%	-4.1%	3.7%	1.6%	-2.0%	-4.9%	-3.7%	-2.6%	-2.1%	-2.8%	1.5%	1.5%	0.9%	1.5%	-1.2%	-8.8%	-9.3%	-6.2%	-6.2%	-7.6%	-6.2%
2008-10-01	Specific	-7.0%	-8.8%	-1.9%	-5.1%	-4.0%	-7.5%	-6.5%	-6.8%	-6.8%	-7.3%	-4.0%	-4.0%	-5.0%	-4.0%	-6.6%	-5.9%	-5.2%	-5.6%	-5.6%	-6.3%	-5.6%
2008-10-01	Class	2.6%	0.6%	8.3%	4.8%	5.9%	2.1%	3.2%	2.8%	2.9%	2.3%	5.9%	5.9%	4.9%	5.9%	3.1%	-5.9%	-5.2%	-5.6%	-5.6%	-6.3%	-5.6%
2009-09-01	Specific	9.9%	8.8%	17.5%	21.5%	15.2%	16.3%	12.9%	10.6%	12.2%	9.9%	15.2%	15.2%	13.4%	15.2%	14.2%	13.9%	14.7%	14.2%	14.2%	13.4%	14.2%
2009-09-01	Class	-4.6%	-5.5%	2.0%	5.5%	0.0%	1.0%	-2.0%	-4.0%	-2.6%	-4.6%	0.0%	0.0%	-1.5%	0.0%	-0.8%	13.9%	14.7%	14.2%	14.2%	13.4%	14.2%
2012-10-01	Specific	3.5%	2.8%	9.8%	29.4%	4.9%	13.0%	1.7%	1.4%	10.7%	2.4%	4.9%	4.9%	10.1%	4.9%	10.5%	10.1%	11.3%	8.3%	8.3%	10.1%	8.3%
2012-10-01	Class	0.4%	-0.2%	6.6%	25.6%	1.8%	9.7%	-1.3%	-1.6%	7.4%	-0.7%	1.8%	1.8%	6.9%	1.8%	7.2%	6.9%	11.3%	5.1%	8.3%	10.1%	5.1%
2013-10-01	Specific	7.6%	4.6%	13.3%	22.1%	6.4%	14.3%	0.5%	-0.1%	9.0%	3.0%	8.5%	6.4%	8.4%	6.4%	9.7%	9.0%	8.8%	8.3%	8.3%	9.2%	8.3%
2013-10-01	Class	8.8%	5.8%	14.5%	23.5%	7.6%	15.5%	1.6%	1.0%	10.3%	4.1%	9.7%	7.6%	9.6%	7.6%	10.9%	10.3%	8.8%	9.5%	8.3%	9.2%	9.5%
2014-10-01	Specific	-14.7%	-15.0%	-13.3%	-17.0%	-14.7%	-12.7%	-15.6%	-13.8%	-14.1%	-16.1%	-15.0%	-14.7%	-14.3%	-14.7%	-14.4%	-15.1%	-15.4%	-15.4%	-15.4%	-15.1%	-15.4%
2014-10-01	Class	4.3%	4.0%	6.0%	1.5%	4.3%	6.7%	3.2%	5.5%	5.0%	2.5%	4.0%	4.3%	4.8%	4.3%	4.6%	3.8%	-15.4%	3.5%	-15.4%	-15.1%	3.5%
2017-01-01	Specific	1.0%	1.4%	-1.4%	-3.8%	-1.3%	-1.4%	-2.0%	-1.8%	-1.4%	-2.1%	-0.9%	-1.3%	-0.7%	-1.3%	-0.7%	0.2%	0.4%	2.1%	2.1%	0.3%	2.1%
2017-01-01	Class	10.9%	11.3%	8.3%	5.6%	8.4%	8.3%	7.7%	7.9%	8.3%	7.6%	8.9%	8.4%	9.1%	8.4%	9.1%	10.0%	0.4%	12.1%	2.1%	0.3%	12.1%
2018-11-01	Specific	-2.7%	-3.1%	-7.0%	-13.1%	-6.4%	-12.0%	-7.9%	-8.8%	-9.0%	-6.8%	-5.9%	-6.6%	-4.6%	-6.6%	-7.0%	-5.3%	-6.1%	-2.4%	-2.4%	-6.0%	-2.4%
2018-11-01	Class	-2.7%	-3.1%	-7.0%	-13.1%	-6.4%	-12.0%	-7.9%	-8.8%	-9.0%	-6.8%	-5.9%	-6.6%	-4.6%	-6.6%	-7.0%	-5.3%	-6.1%	-2.4%	-2.4%	-6.0%	-2.4%
2019-11-01	Specific	-4.5%	-4.7%	-8.0%	-13.2%	-7.0%	-11.1%	-8.3%	-9.3%	-7.5%	-7.7%	-6.7%	-7.5%	-7.0%	-7.5%	-7.7%	-5.7%	-6.0%	-3.3%	-3.3%	-6.4%	-3.3%
2019-11-01	Class	-4.5%	-4.7%	-8.0%	-13.2%	-7.0%	-11.1%	-8.3%	-9.3%	-7.5%	-7.7%	-6.7%	-7.5%	-7.0%	-7.5%	-7.7%	-5.7%	-6.0%	-3.3%	-3.3%	-6.4%	-3.3%
2022-06-01	Specific	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%
2022-06-01	Class	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%

VERMONT
BASIC GROUP II
HISTORY OF LOSS COST LEVEL CHANGES
BY TERRITORY, SYMBOL, AND COVERAGE

(1)	(2)	(3)	(4)	(5)
<u>Territory</u>	<u>Effective Date</u>	<u>Symbol</u>	<u>Building</u>	<u>Contents</u>
Entire State	10/1/2007	A	0.0%	0.0%
		AA	0.0%	0.0%
		AB	44.4%	44.4%
		B	4.5%	4.5%
	10/1/2008	A	0.0%	0.0%
		AA	0.0%	0.0%
		AB	0.0%	0.0%
		B	4.3%	4.3%
	9/1/2009	A	0.0%	0.0%
		AA	0.0%	0.0%
		AB	7.7%	7.7%
		B	4.2%	4.2%
	10/1/2012	A	17.6%	17.4%
		AA	20.0%	14.3%
		AB	8.7%	6.9%
		B	6.7%	5.7%
	10/1/2013	A	5.0%	3.7%
		AA	5.6%	4.2%
		AB	4.0%	6.5%
		B	6.3%	5.4%
	10/1/2014	A	4.8%	3.6%
		AA	5.3%	4.0%
		AB	3.8%	3.0%
		B	5.9%	5.1%
	1/1/2017	A	4.5%	6.9%
		AA	5.0%	7.7%
		AB	7.4%	5.9%
		B	5.6%	4.9%
	11/1/2018	A	0.0%	-3.2%
		AA	0.0%	-3.6%
		AB	-3.4%	-2.8%
		B	-2.6%	-2.3%
	11/1/2019	A	0.0%	-3.3%
		AA	0.0%	-3.7%
		AB	-3.6%	-2.9%
		B	0.0%	0.0%

VERMONT
BASIC GROUP II
HISTORY OF LOSS COST LEVEL CHANGES
BY TERRITORY, SYMBOL, AND COVERAGE

(1)	(2)	(3)	(4)	(5)
<u>Territory</u>	Effective <u>Date</u>	<u>Symbol</u>	<u>Building</u>	<u>Contents</u>
	6/1/2022	A	-4.3%	-3.4%
		AA	0.0%	-3.8%
		AB	-3.7%	-2.9%
		B	-2.7%	-4.8%

VERMONT

SPECIAL CAUSES OF LOSS

HISTORY OF LOSS COST LEVEL CHANGES BY CATEGORY

(1) Effective Date	(2) Category													
	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>
2007-10-01	-11.3%	-16.7%	-16.7%	-21.7%	-17.6%									
2008-10-01	0.0%	-2.9%	-2.2%	-7.2%	-2.7%									
2009-09-01	5.9%	3.2%	1.9%	-0.5%	4.1%									
2012-10-01	0.9%	4.1%	4.7%	3.7%	4.0%	4.0%	3.9%	6.0%	5.5%	4.1%	5.5%	6.1%	4.6%	6.8%
2013-10-01	-1.6%	0.4%	0.5%	1.4%	0.9%	0.6%	0.5%	1.1%	1.0%	0.0%	-0.1%	1.3%	-0.8%	3.2%
2014-10-01	-7.5%	-6.6%	-6.7%	-6.1%	-6.5%	-6.8%	-6.9%	-7.4%	-6.6%	-7.2%	-6.8%	-6.9%	-9.0%	-5.9%
2017-01-01	1.3%	3.1%	3.7%	6.1%	3.8%	3.3%	2.8%	1.5%	3.4%	3.7%	3.2%	2.9%	3.1%	3.4%
2018-11-01	-4.0%	-3.1%	-2.4%	-1.8%	-2.5%	-2.7%	-2.1%	-3.0%	-2.9%	-2.3%	-2.7%	-2.8%	-2.6%	-2.5%
2019-11-01	-6.1%	0.0%	2.8%	5.5%	2.7%	2.3%	4.6%	0.1%	0.8%	3.6%	-0.1%	1.4%	2.2%	2.3%
2022-06-01	-8.8%	-7.7%	-7.7%	-7.2%	-7.6%	-7.7%	-6.7%	-7.7%	-7.8%	-7.5%	-7.6%	-7.5%	-7.7%	-7.6%

VERMONT

BASIC GROUP I IMPLICIT PACKAGE
MODIFICATION FACTORS (IPMFS) AND IPMF CAPS

<u>TOP</u>	<u>Description</u>	<u>IPMF</u>	<u>Low Cap</u>	<u>High Cap</u>
31	Motel/Hotel	1.029	0.500	1.500
32	Apartment	0.745	0.500	1.500
33	Office	0.910	0.500	1.500
34	Mercantile	0.571	0.500	1.500
35	Institutional	0.959	0.500	1.500
36	Services	0.829	0.500	1.500
37	Indust/Processing	0.931	0.500	1.500
38	Contractors	0.780	0.500	1.500

VERMONT

BASIC GROUP II IMPLICIT PACKAGE
MODIFICATION FACTORS (IPMFS) AND IPMF CAPS

<u>TOP</u>	<u>Description</u>	<u>IPMF</u>	<u>Low</u> <u>Cap</u>	<u>High</u> <u>Cap</u>
31	Motel/Hotel	0.609	0.500	1.500
32	Apartment	0.525	0.500	1.500
33	Office	0.898	0.500	1.500
34	Mercantile	0.721	0.500	1.500
35	Institutional	0.677	0.500	1.500
36	Services	0.882	0.500	1.500
37	Indust/Processing	0.619	0.500	1.500
38	Contractors	0.696	0.500	1.500

VERMONT

SPECIAL CAUSES OF LOSS IMPLICIT PACKAGE
MODIFICATION FACTORS (IPMFS) AND IPMF CAPS

<u>TOP</u>	<u>Description</u>	<u>IPMF</u>	<u>Low Cap</u>	<u>High Cap</u>
31	Motel/Hotel	1.214	0.500	1.500
32	Apartment	1.477	0.500	1.500
33	Office	1.320	0.500	1.500
34	Mercantile	1.239	0.500	1.500
35	Institutional	0.759	0.500	1.500
36	Services	0.955	0.500	1.500
37	Indust/Processing	0.859	0.500	1.500
38	Contractors	0.991	0.500	1.500

VERMONT

DEVELOPMENT OF CURRENT COST FACTORS AND LOSS PROJECTION FACTORS

Period ending March 31, 2023

Part A: Quarterly Indices for Buildings, Contents and Time Element

Building - Xactware Commercial Index (XCI) (Base: 2009 = 100.0)

Contents - Producer Price Index (PPI) from U.S. Dept. of Labor (Finished Goods Less Energy) (Base: 2009 = 100.0)

Time Element Combined Index - Weighted average of IMSEP and RSALES indices ^(a)

Quarter	Buildings	Contents	IMSEP	RSALES	Time Element Combined
					Index
Q2-2020	126.0	122.6	1.046	0.949	0.978
Q3-2020	128.4	122.0	1.058	0.965	0.993
Q4-2020	129.8	122.9	1.067	0.969	0.998
Q1-2021	130.7	123.9	1.081	0.986	1.015
Q2-2021	135.9	126.7	1.105	1.012	1.040
Q3-2021	137.7	129.1	1.135	1.033	1.064
Q4-2021	140.9	131.8	1.166	1.058	1.090
Q1-2022	145.2	135.4	1.209	1.092	1.127
Q2-2022	146.2	139.7	1.248	1.118	1.157
Q3-2022	147.6	142.1	1.259	1.123	1.164
Q4-2022	149.6	144.7	1.268	1.122	1.166
Q1-2023	152.6	145.2	1.273	1.123	1.168

Part B: Computation of Loss Projection Factor (LPF) based on 12 points

	<u>Buildings</u>	<u>Contents</u>	<u>Time Element</u>
Annual Rate of Change (AROC)	+7.49%	+7.59%	+7.84%
Coefficient of Determination (R ²)	0.984	0.962	0.963
Loss Projection Factor = $(1.0 + \text{AROC})^{(24.5/12)}$	1.1589	1.1611	1.1666

VERMONT

DEVELOPMENT OF CURRENT COST FACTORS AND LOSS PROJECTION FACTORS

Period ending March 31, 2023

Part C: Calculation of Current Cost Factors (CCF)

<u>Calendar Year Averages</u>				<u>Current Cost Factors Based on Average Index Values for Period ending March 31, 2023</u>		
<u>Year</u>	<u>XCI</u>	<u>PPI</u>	<u>Index</u>	<u>Buildings</u>	<u>Contents</u>	<u>Time Element</u>
2011	100.0	105.2	0.985	152.6 / 100.0 = 1.526	145.2 / 105.2 = 1.380	1.168 / 0.985 = 1.186
2012	101.0	108.0	1.000	152.6 / 101.0 = 1.511	145.2 / 108.0 = 1.345	1.168 / 1.000 = 1.168
2013	102.7	109.7	1.003	152.6 / 102.7 = 1.486	145.2 / 109.7 = 1.323	1.168 / 1.003 = 1.165
2014	104.7	112.5	1.005	152.6 / 104.7 = 1.457	145.2 / 112.5 = 1.291	1.168 / 1.005 = 1.162
2015	109.1	113.8	0.986	152.6 / 109.1 = 1.398	145.2 / 113.8 = 1.276	1.168 / 0.986 = 1.185
2016	111.1	114.4	0.975	152.6 / 111.1 = 1.374	145.2 / 114.4 = 1.269	1.168 / 0.975 = 1.198
2017	114.3	116.4	0.983	152.6 / 114.3 = 1.335	145.2 / 116.4 = 1.248	1.168 / 0.983 = 1.188
2018	117.8	118.4	0.996	152.6 / 117.8 = 1.295	145.2 / 118.4 = 1.227	1.168 / 0.996 = 1.172
2019	121.5	120.9	0.999	152.6 / 121.5 = 1.256	145.2 / 120.9 = 1.201	1.168 / 0.999 = 1.170
2020	127.2	122.3	0.992	152.6 / 127.2 = 1.200	145.2 / 122.3 = 1.187	1.168 / 0.992 = 1.178
2021	136.3	127.9	1.052	152.6 / 136.3 = 1.120	145.2 / 127.9 = 1.136	1.168 / 1.052 = 1.110
2022	147.2	140.5	1.154	152.6 / 147.2 = 1.037	145.2 / 140.5 = 1.034	1.168 / 1.154 = 1.013

(a) 30% weight for IMSEP and 70% weight for RSALES. IMSEP & RSALES indices were rescaled to a 2012 year base.

(b) Assuming a rate or loss cost revision date of 3/01/2024, and all one year policies, the time interval between the midpoint of the latest period (2/15/2023) and the average date of accident (3/01/2025) would be 24.5 months.

VERMONT

SUMMARY OF LOSS TREND ADJUSTMENTS (LTA'S)

(1)	(2)	(3)	(4)
<u>Coverage</u>	<u>Subline</u>	<u>5-Year Incurred</u>	<u>LTA's*</u>
Buildings	Basic Group I	3,657,062,915	-0.3%
	Basic Group II	4,450,315,838	0.5%
	Special Causes of Loss	2,327,811,519	0.2%
	Total	10,435,190,272	0.2%
Contents	Basic Group I	1,034,779,617	0.3%
	Basic Group II	486,799,243	3.1%
	Special Causes of Loss	800,403,105	-0.2%
	Total	2,321,981,965	0.7%
Time Element	Basic Group I	544,184,465	1.8%
	Basic Group II	296,823,948	2.4%
	Special Causes of Loss	242,926,481	1.8%
	Total	1,083,934,894	2.0%
Grand Total		13,841,107,130	0.4%

*The LTA's are based on internal severity and frequency data. They apply to both the historical period and projection period.

VERMONT

DEVELOPMENT OF LTA'SI. EXTERNAL RATE OF CHANGE^a

Calendar Year	(1) Buildings Current Cost Factor	(2) Contents Current Cost Factor	(3) Time Element Cost Factor	(4) Basic Group I (BGI)& Special Causes of Loss (SCL) Weights	(5) Basic Group II (BGII) Weights
2012	1.395	1.221	1.090		0.10
2013	1.372	1.201	1.087		0.10
2014	1.346	1.171	1.085		0.10
2015	1.291	1.158	1.105		0.10
2016	1.268	1.152	1.118		0.10
2017	1.233	1.133	1.109	0.10	0.10
2018	1.196	1.113	1.094	0.15	0.10
2019	1.160	1.090	1.092	0.20	0.10
2020	1.108	1.077	1.099	0.25	0.10
2021	1.034	1.031	1.036	0.30	0.10

(6) AVERAGE CURRENT COST FACTORS

	Buildings	Contents	Time Element
Basic Group I and Special Causes of Loss (Weighted on Column (4))	1.122	1.077	1.079
Basic Group II (Weighted on Column (5))	1.240	1.135	1.091

(7) LOSS PROJECTION FACTORS

	Buildings	Contents	Time Element
Annual Rate of Change	0.060	0.029	0.027
Loss Projection Factor: ^b $(1.0 + \text{Annual Rate of Change})^{(X/12)}$	1.164	1.078	1.074

(8) TOTAL TREND FACTOR (Average Current Cost Factor \times Loss Projection Factor)

	Buildings	Contents	Time Element
Basic Group I and Special Causes of Loss	1.306	1.161	1.158
Basic Group II	1.444	1.223	1.171

(9) EXTERNAL ANNUAL RATE OF CHANGE^c

	Buildings	Contents	Time Element
Basic Group I and Special Causes of Loss: $(\text{Total Trend Factor})^{12/54}$	1.061	1.034	1.033
Basic Group II: $(\text{Total Trend Factor})^{12/90}$	1.050	1.027	1.021

- (a) The Current Cost Factors and Loss Projection Factors on this exhibit are based on external economic indices through December 31, 2021 for Buildings, Contents and Time Element.
- (b) Assuming a loss cost revision date of July 1, 2023, the time interval between the midpoint of the latest period of external trend information (November 15, 2021) and the prospective average date of loss (July 1, 2024) is 31.5 months for Buildings, Contents and Time Element.
- (c) The time interval from the weighted midpoint of the experience period to the prospective average date of loss (July 1, 2024) is 54 months for BG I and SCL, and 90 months for BG II. The weighted midpoint is January 1, 2020 for BG I and SCL, and January 1, 2017 for BG II.

II. INTERNAL ANNUAL RATES OF CHANGE:

(10) SELECTED COMFAL

VERMONT

Severity	Buildings	Contents	Time Element
Basic Group I (BGI)	1.075	1.060	1.070
Basic Group II (BGII)	1.060	1.090	1.070
Special Causes of Loss	1.065	1.050	1.070

Frequency	Buildings	Contents	Time Element
Basic Group I (BGI)	0.990	0.990	1.000
Basic Group II (BGII)	1.000	1.000	1.000
Special Causes of Loss	1.000	0.990	1.000

III. LTA CALCULATION:

CALCULATION OF LTAs - BUILDINGS

	(11)	(12)	(13)	(14)	(15)	(16)
	External	Internal	Indicated	Formula		
	Rate of	Rate of	Severity LTA	Severity	Frequency	Final
	<u>Change^d</u>	<u>Change</u>	<u>[(12)/(11)-1.0]</u>	<u>LTA^e</u>	<u>Effect</u>	<u>LTA^f</u>
Basic Group I (BGI)	1.061	1.075	1.3	0.7	-1.0	-0.3
Basic Group II (BGII)	1.050	1.060	1.0	0.5	0.0	0.5
Special Causes of Loss	1.061	1.065	0.4	0.2	0.0	0.2

CALCULATION OF LTAs - CONTENTS

	(11)	(12)	(13)	(14)	(15)	(16)
	External	Internal	Indicated	Formula		
	Rate of	Rate of	Severity LTA	Severity	Frequency	Final
	<u>Change^d</u>	<u>Change</u>	<u>[(12)/(11)-1.0]</u>	<u>LTA^e</u>	<u>Effect</u>	<u>LTA^f</u>
Basic Group I (BGI)	1.034	1.060	2.5	1.3	-1.0	0.3
Basic Group II (BGII)	1.027	1.090	6.1	3.1	0.0	3.1
Special Causes of Loss	1.034	1.050	1.5	0.8	-1.0	-0.2

CALCULATION OF LTAs - TIME ELEMENT

	(11)	(12)	(13)	(14)	(15)	(16)
	External	Internal	Indicated	Formula		
	Rate of	Rate of	Severity LTA	Severity	Frequency	Final
	<u>Change^d</u>	<u>Change</u>	<u>[(12)/(11)-1.0]</u>	<u>LTA^e</u>	<u>Effect</u>	<u>LTA^f</u>
Basic Group I (BGI)	1.033	1.070	3.6	1.8	0.0	1.8
Basic Group II (BGII)	1.021	1.070	4.8	2.4	0.0	2.4
Special Causes of Loss	1.033	1.070	3.6	1.8	0.0	1.8

(d) The external rates of change are based on external economic indices through December 31, 2021 for Buildings, Contents and Time Element.

(e) The formula severity LTA for Buildings, Contents and Time Element is calculated as one-half of the indicated severity LTA. This is equivalent to calculating the overall severity trend giving 50% weight to the external trend and 50% weight to the selected internal trend.

(f) The final LTA is calculated as the product (in factor form) of the formula severity LTA and frequency effect.

VERMONT

EXPOSURE TREND
DEVELOPMENT OF CURRENT AND PROJECTED EARNED EXPOSURE FACTORS

	Buildings				Contents			
	(1) ^a Annual Written Increase	(2) ^a 7/1/2022 Written Factors	(3) ^b 9/1/2024 Projected Factors	(4) ^c 9/1/2024 Earned Factors	(5) ^a Annual Written Increase	(6) ^a 7/1/2022 Written Factors	(7) ^b 9/1/2024 Projected Factors	(8) ^c 9/1/2024 Earned Factors
Year								
2010	2.5%	1.380	1.528	1.578	1.7%	1.275	1.354	1.384
2011	2.5%	1.346	1.490	1.536	1.8%	1.252	1.329	1.359
2012	2.7%	1.311	1.451	1.499	1.8%	1.230	1.306	1.335
2013	2.6%	1.278	1.415	1.461	2.1%	1.205	1.279	1.312
2014	2.5%	1.247	1.380	1.424	2.1%	1.180	1.253	1.286
2015	2.3%	1.219	1.349	1.389	1.9%	1.158	1.229	1.260
2016	2.1%	1.194	1.322	1.357	1.8%	1.138	1.208	1.235
2017	2.1%	1.169	1.294	1.329	1.8%	1.118	1.187	1.213
2018	2.7%	1.138	1.260	1.301	1.9%	1.097	1.165	1.192
2019	2.9%	1.106	1.224	1.268	2.2%	1.073	1.139	1.170
2020	2.2%	1.082	1.198	1.233	2.1%	1.051	1.116	1.146
2021	3.2%	1.048	1.160	1.204	2.2%	1.028	1.091	1.122
2022	4.8%	1.000	1.107	1.169	2.8%	1.000	1.062	1.097

Notes

- a The percentages in columns (1) and (5) represent the change in written exposures from 07/01/n-1 to 07/01/n. Columns (2) and (6) contain the cumulative changes in written exposures for each year relative to the latest year.
- b The selected average annual changes in Amount of Insurance for projection purposes are 4.8% and 2.8% for Buildings and Contents, respectively. Consequently, the written factors at 7/1/2022 levels in column (2) and column (6) are brought to the level of the average date of writing in the effective period, 9/1/2024 (i.e., 6 months beyond an assumed revision date of 3/1/2024), by applying a factor of $(1.048)^{(26/12)}$ for Buildings and $(1.028)^{(26/12)}$ for Contents.
- c Written factors are earned into each accident year ending 12/31 using the following factors which assume all one year policies:

Year	Earning Factors (All Years)
n-2	9/32
n-1	11/16
n	1/32

For example, the factors used to adjust earned exposures for the period from 01/01/2022 to 12/31/2022 to the projected level are 1.169 for Buildings and 1.097 for Contents.

EXPOSURE TREND
DEVELOPMENT OF CURRENT AND PROJECTED EARNED EXPOSURE FACTORS

Time Element				
	(1) ^a	(2) ^a	(3) ^b	(4) ^c
	Annual	7/1/2022	9/1/2024	9/1/2024
	Written	Written	Projected	Earned
<u>Year</u>	<u>Increase</u>	<u>Factors</u>	<u>Factors</u>	<u>Factors</u>
2010	0.7%	1.126	1.165	1.177
2011	0.8%	1.117	1.156	1.168
2012	0.8%	1.108	1.147	1.158
2013	0.9%	1.098	1.136	1.149
2014	1.0%	1.087	1.125	1.139
2015	1.1%	1.075	1.113	1.128
2016	1.1%	1.063	1.100	1.116
2017	0.9%	1.054	1.091	1.103
2018	0.7%	1.047	1.084	1.093
2019	1.0%	1.037	1.073	1.086
2020	0.9%	1.028	1.064	1.076
2021	1.2%	1.016	1.052	1.066
2022	1.6%	1.000	1.035	1.055

Notes

- a The percentages in columns (1) and (5) represent the change in written exposures from 07/01/n-1 to 07/01/n. Columns (2) and (6) contain the cumulative changes in written exposures for each year relative to the latest year.
- b The selected average annual change in Net Income (Time Element exposure) for projection purposes is 1.6%. Consequently, the written factors at 7/1/2022 levels in column (2) are brought to the level of the average date of writing in the effective period, 9/1/2024 (i.e., 6 months beyond an assumed revision date of 3/1/2024), by applying a factor of $(1.016)^{(26/12)}$ for Time Element.
- c Written factors are earned into each accident year ending 12/31 using the following factors which assume all one year policies:

<u>Year</u>	<u>Earning Factors (All Years)</u>
n-2	9/32
n-1	11/16
n	1/32

For example, the factors used to adjust earned exposures for the period from 01/01/2022 to 12/31/2022 to the projected level is 1.055 for Time Element

PREMIUM TREND - BASIC GROUP I
DEVELOPMENT OF CURRENT AND PROJECTED EARNED PREMIUM FACTORS

	Buildings				Contents			
	(1) ^a Annual Written Increase	(2) ^a 7/1/2022 Written Factors	(3) ^b 9/1/2024 Projected Factors	(4) ^c 9/1/2024 Earned Factors	(5) ^a Annual Written Increase	(6) ^a 7/1/2022 Written Factors	(7) ^b 9/1/2024 Projected Factors	(8) ^c 9/1/2024 Earned Factors
Year								
2010	2.0%	1.297	1.409	1.447	1.4%	1.225	1.287	1.311
2011	2.0%	1.272	1.382	1.416	1.5%	1.207	1.268	1.291
2012	2.2%	1.245	1.353	1.389	1.5%	1.189	1.249	1.273
2013	2.1%	1.219	1.324	1.360	1.8%	1.168	1.227	1.254
2014	2.0%	1.195	1.298	1.331	1.8%	1.147	1.205	1.233
2015	1.9%	1.173	1.274	1.305	1.6%	1.129	1.186	1.211
2016	1.7%	1.153	1.253	1.280	1.5%	1.112	1.168	1.191
2017	1.7%	1.134	1.232	1.258	1.5%	1.096	1.151	1.173
2018	2.2%	1.110	1.206	1.237	1.6%	1.079	1.133	1.155
2019	2.3%	1.085	1.179	1.212	1.8%	1.060	1.114	1.137
2020	1.8%	1.066	1.158	1.186	1.8%	1.041	1.094	1.119
2021	2.6%	1.039	1.129	1.163	1.8%	1.023	1.075	1.099
2022	3.9%	1.000	1.086	1.136	2.3%	1.000	1.051	1.080

Notes

- a The percentages in columns (1) and (5) represent the change in written premium (reflecting the combined effect of change in exposures and limit of insurance factors) from 07/01/n-1 to 07/01/n. Columns (2) and (6) contain the cumulative changes in written premiums for each year relative to the latest year.
- b The average annual changes in Premium for projection purposes are 3.9% and 2.3% for Buildings and Contents, respectively. Consequently, the written factors at 7/1/2022 levels in column (2) and column (6) are brought to the level of the average date of writing in the effective period, 9/1/2024 (i.e., 6 months beyond an assumed revision date of 3/1/2024), by applying a factor of $(1.039)^{(26/12)}$ for Buildings and $(1.023)^{(26/12)}$ for Contents.
- c Written factors are earned into each accident year ending 12/31 using the following factors which assume all one year policies:

<u>Year</u>	<u>Earning Factors (All Years)</u>
n-2	9/32
n-1	11/16
n	1/32

For example, the factors used to adjust earned exposures for the period from 01/01/2022 to 12/31/2022 to the projected level are 1.136 for Buildings and 1.08 for Contents.

PREMIUM TREND - BASIC GROUP II - OTHER THAN SOUTHEAST
DEVELOPMENT OF CURRENT AND PROJECTED EARNED PREMIUM FACTORS

	Buildings				Contents			
	(1) ^a Annual Written Increase	(2) ^a 7/1/2022 Written Factors	(3) ^b 9/1/2024 Projected Factors	(4) ^c 9/1/2024 Earned Factors	(5) ^a Annual Written Increase	(6) ^a 7/1/2022 Written Factors	(7) ^b 9/1/2024 Projected Factors	(8) ^c 9/1/2024 Earned Factors
Year								
2010	1.9%	1.271	1.369	1.404	1.3%	1.203	1.258	1.281
2011	1.9%	1.247	1.343	1.376	1.4%	1.186	1.241	1.262
2012	2.0%	1.223	1.318	1.350	1.4%	1.170	1.224	1.245
2013	1.9%	1.200	1.293	1.324	1.6%	1.152	1.205	1.228
2014	1.9%	1.178	1.269	1.299	1.6%	1.134	1.186	1.210
2015	1.7%	1.158	1.248	1.275	1.4%	1.118	1.169	1.191
2016	1.6%	1.140	1.228	1.253	1.4%	1.103	1.154	1.173
2017	1.6%	1.122	1.209	1.233	1.4%	1.088	1.138	1.158
2018	2.0%	1.100	1.185	1.214	1.4%	1.073	1.122	1.142
2019	2.1%	1.077	1.160	1.191	1.7%	1.055	1.104	1.126
2020	1.6%	1.060	1.142	1.166	1.6%	1.038	1.086	1.109
2021	2.4%	1.035	1.115	1.146	1.7%	1.021	1.068	1.091
2022	3.5%	1.000	1.077	1.121	2.1%	1.000	1.046	1.072

Notes

- a The percentages in columns (1) and (5) represent the change in written premium (reflecting the combined effect of change in exposures and limit of insurance factors) from 07/01/n-1 to 07/01/n. Columns (2) and (6) contain the cumulative changes in written premiums for each year relative to the latest year.
- b The average annual changes in Premium for projection purposes are 3.5% and 2.1% for Buildings and Contents, respectively. Consequently, the written factors at 7/1/2022 levels in column (2) and column (6) are brought to the level of the average date of writing in the effective period, 9/1/2024 (i.e., 6 months beyond an assumed revision date of 3/1/2024), by applying a factor of $(1.035)^{(26/12)}$ for Buildings and $(1.021)^{(26/12)}$ for Contents.
- c Written factors are earned into each accident year ending 12/31 using the following factors which assume all one year policies:

<u>Year</u>	<u>Earning Factors (All Years)</u>
n-2	9/32
n-1	11/16
n	1/32

For example, the factors used to adjust earned exposures for the period from 01/01/2022 to 12/31/2022 to the projected level are 1.121 for Buildings and 1.072 for Contents.

PREMIUM TREND - SPECIAL CAUSES OF LOSS
DEVELOPMENT OF CURRENT AND PROJECTED EARNED PREMIUM FACTORS

Year	Buildings				Contents			
	(1) ^a	(2) ^a	(3) ^b	(4) ^c	(5) ^a	(6) ^a	(7) ^b	(8) ^c
	Annual Written Increase	7/1/2022 Written Factors	9/1/2024 Projected Factors	9/1/2024 Earned Factors	Annual Written Increase	7/1/2022 Written Factors	9/1/2024 Projected Factors	9/1/2024 Earned Factors
2010	1.9%	1.280	1.385	1.420	1.1%	1.173	1.219	1.237
2011	1.9%	1.256	1.359	1.392	1.2%	1.159	1.205	1.223
2012	2.1%	1.230	1.331	1.365	1.2%	1.145	1.190	1.208
2013	2.0%	1.206	1.305	1.338	1.4%	1.129	1.173	1.194
2014	1.9%	1.184	1.281	1.312	1.4%	1.113	1.157	1.177
2015	1.8%	1.163	1.258	1.287	1.2%	1.100	1.143	1.161
2016	1.6%	1.145	1.239	1.264	1.2%	1.087	1.130	1.147
2017	1.6%	1.127	1.219	1.244	1.2%	1.074	1.116	1.133
2018	2.1%	1.104	1.194	1.224	1.2%	1.061	1.103	1.120
2019	2.2%	1.080	1.168	1.200	1.4%	1.046	1.087	1.106
2020	1.7%	1.062	1.149	1.175	1.4%	1.032	1.073	1.091
2021	2.4%	1.037	1.122	1.154	1.4%	1.018	1.058	1.076
2022	3.7%	1.000	1.082	1.128	1.8%	1.000	1.039	1.062

Notes

- a The percentages in columns (1) and (5) represent the change in written premium (reflecting the combined effect of change in exposures and limit of insurance factors) from 07/01/n-1 to 07/01/n. Columns (2) and (6) contain the cumulative changes in written premiums for each year relative to the latest year.
- b The average annual changes in Premium for projection purposes are 3.7% and 1.8% for Buildings and Contents, respectively. Consequently, the written factors at 7/1/2022 levels in column (2) and column (6) are brought to the level of the average date of writing in the effective period, 9/1/2024 (i.e., 6 months beyond an assumed revision date of 3/1/2024), by applying a factor of $(1.037)^{(26/12)}$ for Buildings and $(1.018)^{(26/12)}$ for Contents.
- c Written factors are earned into each accident year ending 12/31 using the following factors which assume all one year policies:

<u>Year</u>	<u>Earning Factors (All Years)</u>
n-2	9/32
n-1	11/16
n	1/32

For example, the factors used to adjust earned exposures for the period from 01/01/2022 to 12/31/2022 to the projected level are 1.128 for Buildings and 1.062 for Contents.

VERMONT

BASIC GROUP I

ADDITIONAL INFORMATION ON TREND ADJUSTMENTS

<u>Year</u>	(1)	(2)	(3)	(4)		
	Unadjusted	Trended	Average	Split %		
	Incurring <u>Losses</u>	Incurring <u>Losses</u>	Total Loss Trend Factor <u>(2) / (1)</u>	<u>Buildings</u>	<u>Contents</u>	Time <u>Element</u>
2018	2,002,145	3,282,239	1.639	83.3%	11.4%	5.3%
2019	7,360,738	11,438,645	1.554	74.9%	19.4%	5.7%
2020	8,259,706	12,507,767	1.514	71.8%	7.4%	20.8%
2021	2,467,941	3,509,619	1.422	90.3%	9.7%	0.0%
2022	6,519,674	8,520,264	1.307	84.9%	8.4%	6.7%

VERMONT

BASIC GROUP II

ADDITIONAL INFORMATION ON TREND ADJUSTMENTS

Year	(1)	(2)	(3)	(4)		
	Non-Hurricane**	Non-Hurricane**	Average			
	Unadjusted	Trended	Total Loss	Split %		
	Incurred	Incurred	Trend Factor			Time
	Losses	Losses	(2) / (1)	Buildings	Contents	Element
2013	598,979	1,248,530	2.084	79.2%	20.8%	0.0%
2014	301,398	652,192	2.164	81.4%	18.6%	0.0%
2015	2,922,716	5,433,796	1.859	90.4%	3.2%	6.4%
2016	184,013	351,711	1.911	64.8%	21.3%	13.9%
2017	330,972	596,674	1.803	76.0%	24.0%	0.0%
2018	1,247,279	2,131,330	1.709	88.6%	9.6%	1.8%
2019	698,824	1,157,047	1.656	84.4%	14.0%	1.6%
2020	216,175	351,937	1.628	62.8%	27.1%	10.1%
2021	176,830	274,420	1.552	86.4%	13.6%	0.0%
2022	166,731	227,437	1.364	89.8%	10.2%	0.0%

** Losses incurred during the month of a hurricane have been excluded and replaced with average non-hurricane losses.

VERMONT

SPECIAL CAUSES OF LOSS

ADDITIONAL INFORMATION ON TREND ADJUSTMENTS

<u>Year</u>	(1) Unadjusted Incurred <u>Losses</u>	(2) Trended Incurred <u>Losses</u>	(3) Average Total Loss Trend Factor <u>(2) / (1)</u>	(4) Split %		
				<u>Buildings</u>	<u>Contents</u>	<u>Time Element</u>
2018	1,477,821	2,383,523	1.613	86.2%	13.2%	0.6%
2019	1,751,420	2,720,798	1.553	78.3%	19.7%	2.0%
2020	1,072,570	1,601,448	1.493	51.3%	48.1%	0.6%
2021	1,676,315	2,411,176	1.438	61.4%	36.9%	1.7%
2022	1,634,436	2,127,747	1.302	71.8%	26.2%	2.0%

VERMONT

INCURRED LOSS DEVELOPMENT
LOSS YEARS 2013-2022
EVALUATED AS OF 6/2022

Basic Group I

Year Ending	Losses as of				
	15 Months	27 Months	39 Months	51 Months	63 Months
3/31/2013	1,012,822,436	978,303,913	960,632,416	954,443,822	939,940,813
3/31/2014	951,879,049	958,422,699	948,754,918	938,726,454	934,290,188
3/31/2015	913,863,972	889,814,140	879,331,484	869,579,731	868,104,960
3/31/2016	924,062,258	899,547,344	889,946,789	878,882,512	874,109,861
3/31/2017	1,044,833,276	1,021,866,839	1,011,410,129	1,005,939,485	1,003,384,561
3/31/2018	1,279,815,744	1,270,684,838	1,223,981,990	1,190,222,962	1,199,128,177
3/31/2019	1,158,698,777	1,105,484,203	1,074,772,766	1,062,262,090	
3/31/2020	1,368,182,517	1,348,664,095	1,291,410,233		
3/31/2021	1,409,855,932	1,414,307,005			
3/31/2022	1,293,994,799				

Year Ending	Ratios			
	27:15 Months	39:27 Months	51:39 Months	63:51 Months
3/31/2013	0.966	0.982	0.994	0.985
3/31/2014	1.007	0.990	0.989	0.995
3/31/2015	0.974	0.988	0.989	0.998
3/31/2016	0.973	0.989	0.988	0.995
3/31/2017	0.978	0.990	0.995	0.997
3/31/2018	0.993	0.963	0.972	1.007
3/31/2019	0.954	0.972	0.988	
3/31/2020	0.986	0.958		
3/31/2021	1.003			
5 Point Average	0.983	0.974	0.986	0.998

Development Factors to Ultimate

15 Months to Ultimate =	0.942
27 Months to Ultimate =	0.958
39 Months to Ultimate =	0.984
51 Months to Ultimate =	0.998

VERMONT

INCURRED LOSS DEVELOPMENT
LOSS YEARS 2013-2022
EVALUATED AS OF 6/2022

Basic Group II

Year Ending	Losses as of				
	15 Months	27 Months	39 Months	51 Months	63 Months
3/31/2013	730,923,556	762,162,828	773,199,687	781,937,142	788,474,896
3/31/2014	582,406,621	590,624,142	594,634,092	599,962,382	606,524,537
3/31/2015	557,330,293	581,503,713	598,937,336	604,398,791	608,896,967
3/31/2016	552,013,995	575,965,058	589,152,237	595,594,348	603,128,806
3/31/2017	836,240,194	875,953,870	889,964,516	900,792,135	900,084,782
3/31/2018	744,597,981	790,042,770	804,719,142	814,609,058	827,803,665
3/31/2019	720,292,559	750,156,631	775,159,666	785,123,364	
3/31/2020	960,977,127	990,290,890	994,238,235		
3/31/2021	1,176,039,287	1,238,557,787			
3/31/2022	783,997,515				

RATIOS

Year Ending	27:15 Months	39:27 Months	51:39 Months	63:51 Months
3/31/2013	1.043	1.014	1.011	1.008
3/31/2014	1.014	1.007	1.009	1.011
3/31/2015	1.043	1.030	1.009	1.007
3/31/2016	1.043	1.023	1.011	1.013
3/31/2017	1.047	1.016	1.012	0.999
3/31/2018	1.061	1.019	1.012	1.016
3/31/2019	1.041	1.033	1.013	
3/31/2020	1.031	1.004		
3/31/2021	1.053			
5 Point Average	1.047	1.019	1.011	1.009

Development Factors to Ultimate

15 Months to Ultimate =	1.088
27 Months to Ultimate =	1.039
39 Months to Ultimate =	1.020
51 Months to Ultimate =	1.009

VERMONT

INCURRED LOSS DEVELOPMENT
LOSS YEARS 2013-2022
EVALUATED AS OF 6/2022

Special Causes of Loss

Year Ending	<u>Losses as of</u>				
	15 Months	27 Months	39 Months	51 Months	63 Months
3/31/2013	493,590,690	488,199,699	480,926,635	483,379,459	483,551,964
3/31/2014	751,538,816	744,779,356	737,440,307	736,885,367	734,722,952
3/31/2015	657,796,967	662,919,273	659,738,378	659,067,893	661,448,879
3/31/2016	460,671,716	459,060,994	457,032,320	461,109,021	459,611,323
3/31/2017	446,809,534	467,178,093	465,034,225	464,845,989	465,404,198
3/31/2018	625,623,856	620,302,768	617,070,162	606,389,019	603,118,642
3/31/2019	577,086,257	577,882,765	573,594,566	576,088,655	
3/31/2020	477,307,051	476,626,662	475,792,624		
3/31/2021	1,012,093,393	1,023,649,185			
3/31/2022	577,153,293				

RATIOS

Year Ending	27:15 Months	39:27 Months	51:39 Months	63:51 Months
3/31/2013	0.989	0.985	1.005	1.000
3/31/2014	0.991	0.990	0.999	0.997
3/31/2015	1.008	0.995	0.999	1.004
3/31/2016	0.997	0.996	1.009	0.997
3/31/2017	1.046	0.995	1.000	1.001
3/31/2018	0.991	0.995	0.983	0.995
3/31/2019	1.001	0.993	1.004	
3/31/2020	0.999	0.998		
3/31/2021	1.011			
5 Point Average	1.010	0.995	0.999	0.999

Development Factors to Ultimate

15 Months to Ultimate =	1.003
27 Months to Ultimate =	0.993
39 Months to Ultimate =	0.998
51 Months to Ultimate =	0.999

VERMONT

COUNTRYWIDE BASIC GROUP I EXCESS LOSS FACTORS
BY CONSTRUCTION, PROTECTION AND EXPOSURE

		Amount of Insurance *										
		1	2	3	4	5	6	7	8	9	10	11
Const. 1-3	Prot. 1-4	1.000	1.058	1.120	1.185	1.254	1.326	1.404	1.485	1.571	1.663	1.759
	Prot. 5-7	1.000	1.074	1.153	1.239	1.330	1.429	1.534	1.648	1.770	1.901	2.041
	Prot. 8-10	1.000	1.133	1.284	1.454	1.648	1.867	2.116	2.397	2.716	3.077	3.486

		Amount of Insurance *										
		1	2	3	4	5	6	7	8	9	10	11
Const. 4-6	Prot. 1-4	1.000	1.058	1.120	1.185	1.254	1.326	1.404	1.485	1.571	1.663	1.759
	Prot. 5-7	1.000	1.074	1.153	1.239	1.330	1.429	1.534	1.648	1.770	1.901	2.041
	Prot. 8-10	1.000	1.133	1.284	1.454	1.648	1.867	2.116	2.397	2.716	3.077	3.486

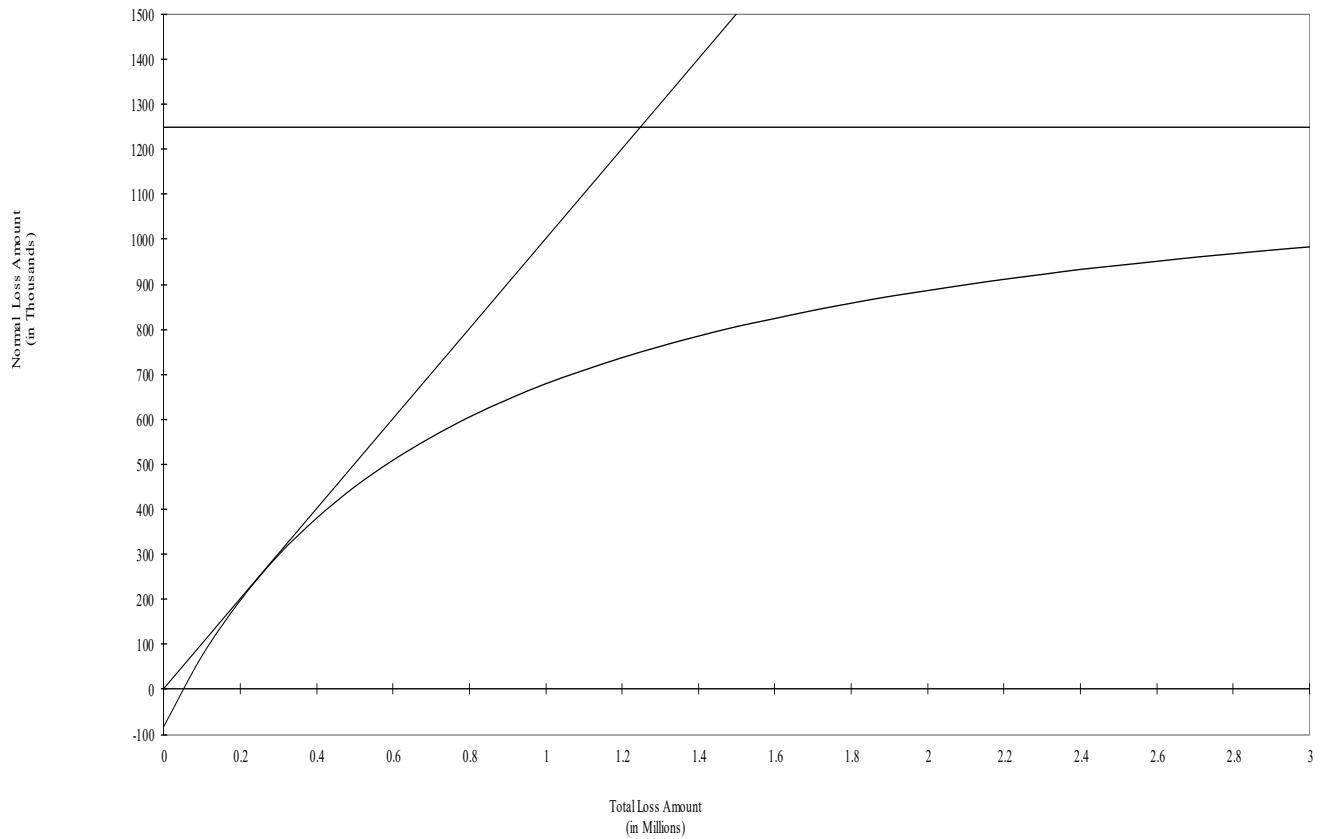
* Amount of
Insurance

Intervals

1	0-599,000
2	599,001-750,000
3	750,001-1,000,000
4	1,000,001-1,250,000
5	1,250,001-1,500,000
6	1,500,001-2,500,000
7	2,500,001-3,500,000
8	3,500,001-5,500,000
9	5,500,001-7,500,000
10	7,500,001-10,000,000
11	10,000,001 and over

Countrywide Basic Group I
Normal vs. Total Loss Amount

$$\text{Normal Loss} = \$1,250,000 \times (1 - (\$800,000 \div (\text{Total Loss} + \$750,000)))$$



VERMONT

BASIC GROUP I

ADDITIONAL EXCESS LOSS INFORMATION

	(1)	(2)	(3)	(4)	(5)	(6)
				Multi-		State
	Trended	Trended	State	State	Adjusted	Average
	Incurred	Normal	Normal %	Normal	Incurred	Excess
<u>Year</u>	<u>Losses</u>	<u>Losses</u>	<u>(2)/(1)</u>	<u>%</u>	<u>Losses</u>	<u>(5)/(2)</u>
2018	3,282,239	3,270,477	99.6%	67.8%	3,797,849	1.161
2019	11,438,645	7,020,171	61.4%	73.4%	9,407,344	1.340
2020	12,507,767	8,157,443	65.2%	64.1%	14,539,879	1.782
2021	3,509,619	3,061,735	87.2%	69.7%	7,152,478	2.336
2022	8,520,264	7,415,529	87.0%	72.8%	12,860,362	1.734

VERMONT
DEVELOPMENT OF BASIC GROUP II EXCESS MULTIPLIER

	(1)	(2)	(3)	(4)	(5)
		Non-Hurricane	Normal	Normal	State
	Earned	Incurred	Incurred	Loss	Excess
Year	<u>Premiums</u>	<u>Losses</u>	<u>Losses</u>	<u>Ratio</u>	<u>Ratio</u>
1950	57,599	63,124	28,800	0.500	0.596
1951	66,053	322,026	33,027	0.500	4.375
1952	79,043	48,904	39,522	0.500	0.119
1953	91,985	22,528	22,528	0.245	0.000
1954	106,043	51,751	51,751	0.488	0.000
1955	110,548	34,062	34,062	0.308	0.000
1956	111,940	27,873	27,873	0.249	0.000
1957	117,309	35,521	35,521	0.303	0.000
1958	123,571	13,035	13,035	0.105	0.000
1959	133,599	50,935	50,935	0.381	0.000
1960	147,224	48,677	48,677	0.331	0.000
1961	159,021	87,755	79,511	0.500	0.052
1962	161,064	45,850	45,850	0.285	0.000
1963	155,767	65,911	65,911	0.423	0.000
1964	153,433	3,953	3,953	0.026	0.000
1965	150,908	98,421	75,454	0.500	0.152
1966	157,048	64,606	64,606	0.411	0.000
1967	162,920	85,823	81,460	0.500	0.027
1968	174,250	45,447	45,447	0.261	0.000
1969	210,832	106,761	105,416	0.500	0.006
1970	315,660	101,690	101,690	0.322	0.000
1971	328,933	68,493	68,493	0.208	0.000
1972	398,246	179,833	179,833	0.452	0.000
1973	409,236	157,369	157,369	0.385	0.000
1974	489,565	188,148	188,148	0.384	0.000
1975	684,440	413,251	342,220	0.500	0.104
1976	861,725	296,329	296,329	0.344	0.000
1977	1,056,929	359,151	359,151	0.340	0.000
1978	1,211,575	281,878	281,878	0.233	0.000
1979	1,304,490	396,229	396,229	0.304	0.000
1980	1,198,109	468,505	468,505	0.391	0.000
1981	1,021,809	686,794	510,905	0.500	0.172
1982	985,992	533,687	492,996	0.500	0.041
1983	954,744	382,126	382,126	0.400	0.000
1984	950,232	287,914	287,914	0.303	0.000
1985	1,152,432	226,415	226,415	0.196	0.000
1986	1,757,616	438,463	438,463	0.249	0.000
1987	1,771,572	463,921	463,921	0.262	0.000
1988	1,630,722	515,849	515,849	0.316	0.000
1989	1,498,716	519,874	519,874	0.347	0.000
1990	1,556,643	415,439	415,439	0.267	0.000
1991	1,354,710	224,319	224,319	0.166	0.000
1992	1,212,027	194,832	194,832	0.161	0.000
1993	1,186,608	245,597	245,597	0.207	0.000

VERMONT
DEVELOPMENT OF BASIC GROUP II EXCESS MULTIPLIER

	(1)	(2)	(3)	(4)	(5)
		Non-Hurricane	Normal	Normal	State
	Earned	Incurred	Incurred	Loss	Excess
Year	Premiums	Losses	Losses	Ratio	Ratio
1994	1,081,281	326,990	326,990	0.302	0.000
1995	952,716	245,608	245,608	0.258	0.000
1996	851,622	177,071	177,071	0.208	0.000
1997	749,958	213,236	213,236	0.284	0.000
1998	698,652	639,487	349,326	0.500	0.415
1999	707,133	661,673	353,567	0.500	0.436
2000	725,538	428,448	362,769	0.500	0.091
2001	701,904	272,867	272,867	0.389	0.000
2002	787,650	331,381	331,381	0.421	0.000
2003	968,211	774,332	484,106	0.500	0.300
2004	1,248,129	206,768	206,768	0.166	0.000
2005	1,238,130	370,006	370,006	0.299	0.000
2006	1,255,500	603,508	603,508	0.481	0.000
2007	1,301,046	1,301,541	650,523	0.500	0.500
2008	1,343,067	847,834	671,534	0.500	0.131
2009	1,312,383	329,289	329,289	0.251	0.000
2010	1,330,047	1,155,420	665,024	0.500	0.369
2012	1,597,191	513,111	513,111	0.321	0.000
2013	1,501,692	598,979	598,979	0.399	0.000
2014	1,633,350	301,398	301,398	0.185	0.000
2015	1,833,204	2,922,716	916,602	0.500	1.094
2016	1,993,080	184,013	184,013	0.092	0.000
2017	2,183,253	330,972	330,972	0.152	0.000
2018	2,356,659	1,247,279	1,178,330	0.500	0.029
2019	2,382,006	705,113	705,113	0.296	0.000
2020	2,481,522	220,500	220,500	0.089	0.000
2021	2,540,364	183,728	183,728	0.072	0.000
2022	2,717,238	181,403	181,403	0.067	0.000
Total				24.285	9.009

(7) State Excess Component = Total (5) ÷ Total (4) = 0.371

(9) State Excess Multiplier = (1.00 + (7)) = 1.371

VERMONT
DEVELOPMENT OF SPECIAL CAUSES OF LOSS EXCESS MULTIPLIER

	(1)	(2)	(3)	(4)	(5)
			Normal	Normal	State
	Earned	Incurred	Incurred	Loss	Excess
Year	Premiums	Losses	Losses	Ratio	Ratio
1986	1,048,662	877,012	798,739	0.762	0.074
1987	1,315,827	719,123	699,925	0.532	0.015
1988	1,425,846	1,542,672	1,063,141	0.746	0.336
1989	1,454,346	546,591	546,591	0.376	-
1990	1,629,195	1,096,849	963,669	0.592	0.081
1991	2,009,913	1,022,770	1,022,770	0.509	-
1992	2,387,502	1,719,736	1,587,101	0.665	0.055
1993	2,651,847	1,708,489	1,397,159	0.527	0.117
1994	2,507,262	2,201,044	1,693,392	0.675	0.203
1995	2,472,792	2,133,335	2,133,335	0.863	-
1996	2,326,110	2,162,951	1,969,821	0.847	0.083
1997	2,026,575	1,371,227	1,371,227	0.677	-
1998	1,969,239	1,362,926	1,167,706	0.593	0.099
1999	1,971,663	1,785,142	1,413,422	0.717	0.188
2000	2,035,044	1,777,713	1,751,585	0.861	0.013
2001	2,296,056	4,262,902	1,658,955	0.723	1.134
2002	2,442,705	1,325,118	1,325,118	0.542	-
2003	2,816,595	3,180,114	2,571,218	0.913	0.216
2004	3,470,811	2,482,203	2,157,419	0.622	0.093
2005	3,771,606	970,019	970,019	0.257	-
2006	3,145,140	596,904	596,904	0.190	-
2007	3,083,133	2,180,703	1,433,502	0.465	0.242
2008	2,910,039	1,676,126	1,676,126	0.576	-
2009	3,153,459	1,680,173	1,680,173	0.533	-
2010	3,015,162	1,041,418	1,041,418	0.345	-
2011	3,036,444	1,977,084	1,674,633	0.552	0.099
2012	3,097,284	3,320,342	1,984,879	0.641	0.431
2013	3,304,197	978,347	978,347	0.296	-
2014	3,370,194	1,960,379	1,960,379	0.582	-
2015	3,408,858	3,266,378	2,301,115	0.675	0.283
2016	3,482,169	675,146	675,146	0.194	-
2017	3,668,499	1,448,635	1,317,439	0.359	0.036
2018	4,059,081	1,477,821	1,477,821	0.364	-
2019	4,005,399	1,751,420	1,510,738	0.377	0.060
2020	4,142,217	1,072,570	1,072,570	0.259	-
2021	4,156,341	1,676,315	1,676,315	0.403	-
2022	4,115,097	1,634,436	1,634,436	0.397	-
Total	103,182,309	62,662,133	52,954,253	20.207	3.858

(6) State Excess Component = Total (5) ÷ Total (4) = 0.191

(7) State Excess Multiplier = 1.00 + (6) = 1.191

VERMONT
BASIC GROUP I STATEWIDE CREDIBILITY CALCULATION

(1A) Full Credibility Claims Standard For Frequency With (P,K) = (95.00% , 5.00%)	1,537
(1B) Severity Modification Factor	7.646
(1C) Full Credibility Claims Standard Adjusted For Severity ((1A) X (1B))	11,751
(2) Multistate Five Year Ratio Of Earned Risks To Claims	367.630
(3) Full Credibility Earned Risks Standard (1C)X(2)	4,320,020
(4) Five Year Statewide Earned Risks	110,952
(5) Five Year Aggregate Loss Costs	40,817,339
(6) Aggregate Loss Costs Per Earned Risk (5)/(4)	367.883
(7) Aggregate Loss Costs For 100% Credibility (3) X (6)	1,589,261,918
(8) Statewide Credibility ((5)/(7))**(5)	25.0%

VERMONT
BASIC GROUP II STATEWIDE CREDIBILITY CALCULATION

(1) Full Credibility Claims Standard	30,000
(2) Multistate Ten Year Ratio Of Earned Risks To Claims	495.209
(3) Full Credibility Earned Risks Standard (1)X(2)	14,856,270
(4) Ten Year Statewide Earned Risks	221,563
(5) Ten Year Aggregate Loss Costs	15,176,406
(6) Aggregate Loss Costs Per Earned Risk (5)/(4)	68.497
(7) Aggregate Loss Costs For 100% Credibility (3) X (6)	1,017,609,926
(8) Statewide Credibility ((5)/(7))**(.5)	25.0%

VERMONT
SPECIAL CAUSES OF LOSS STATEWIDE CREDIBILITY CALCULATION

(1) Full Credibility Claims Standard	25,000
(2) Multistate Ten Year Ratio Of Earned Risks To Claims	219.819
(3) Full Credibility Earned Risks Standard (1)X(2)	5,495,475
(4) Five Year Statewide Earned Risks	108,324
(5) Five Year Aggregate Loss Costs	18,829,594
(6) Aggregate Loss Costs Per Earned Risk (5)/(4)	173.827
(7) Aggregate Loss Costs For 100% Credibility (3) X (6)	955,261,933
(8) Statewide Credibility $((5)/(7))^{**}(.5)$	25.0%

VERMONT
CALCULATION OF INDICATED BASIC GROUP II LOSS COSTS

			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Accident Year			Statewide	Indicated		Indicated	Indicated
			BGII Agg	Current	Current	Monoline	Non-Hurr	Hurricane	Total	Percent
<u>Territory</u>	<u>Coverage</u>	<u>Symbol</u>	<u>Loss Costs</u>	<u>Loss Cost</u>	<u>Non-Hurr</u> <u>Loss Cost</u>	<u>Non-Hurr.</u> <u>Change</u>	<u>Loss Cost</u> <u>(3) * (4)</u>	<u>Modeled</u> <u>Loss Cost</u>	<u>Loss Cost</u> <u>(5) + (6)</u>	<u>Change</u> <u>(7)/(2) - 1</u>
Entire State	Buildings	AA	995	0.021	0.019	1.018	0.019	0.002	0.021	0.0%
		A	18,862	0.022	0.020	1.018	0.020	0.002	0.022	0.0%
		AB	191,422	0.026	0.024	1.018	0.024	0.002	0.026	0.0%
		B	1,135,120	0.036	0.030	1.018	0.031	0.006	0.037	2.8%
	Contents	AA	16	0.025	0.023	1.018	0.023	0.002	0.025	0.0%
		A	1,765	0.028	0.026	1.018	0.026	0.002	0.028	0.0%
		AB	39,922	0.033	0.031	1.018	0.032	0.002	0.034	3.0%
		B	206,066	0.040	0.035	1.018	0.036	0.006	0.042	5.0%
	Sub-Total		1,594,168							
State Total			1,594,168							2.7%

VERMONT

BASIC GROUP I RATING GROUP DEFINITIONS

The following CSP Classes comprise the Basic Group I Rating Groups:

01 Apartments

- 0311 Apartments without Mercantile Occupancies - Up to 10 Units
- 0312 Apartments without Mercantile Occupancies - 11 to 30 Units
- 0313 Apartments without Mercantile Occupancies - Over 30 Units
- 0321 Apartments with Mercantile Occupancies - Up to 10 Units
- 0322 Apartments with Mercantile Occupancies - 11 to 30 Units
- 0323 Apartments with Mercantile Occupancies - Over 30 Units
- 0331 Residential Condominiums without Mercantile Occupancies - Up to 10 Units
- 0332 Residential Condominiums without Mercantile Occupancies - 11 to 30 Units
- 0333 Residential Condominiums without Mercantile Occupancies - Over 30 Units
- 0341 Residential Condominiums with Mercantile Occupancies - Up to 10 Units
- 0342 Residential Condominiums with Mercantile Occupancies - 11 to 30 Units
- 0343 Residential Condominiums with Mercantile Occupancies - Over 30 Units

02 OTHER HABITATIONAL

- 0074 Boarding and Lodging Houses, Rooming Houses, Fraternities and Sororities, Dormitories - Up to 10 Units
- 0075 Boarding and Lodging Houses, Rooming Houses, Fraternities and Sororities, Dormitories - 11 to 30 Units
- 0076 Boarding and Lodging Houses, Rooming Houses, Fraternities and Sororities, Dormitories - Over 30 Units
- 0077 Convents, Monasteries and Rectories, Orphan Homes, Nurses' Homes, Sisters' Homes - Up to 10 Units
- 0078 Convents, Monasteries and Rectories, Orphan Homes, Nurses' Homes, Sisters' Homes - 11 to 30 Units
- 0079 Convents, Monasteries and Rectories, Orphan Homes, Nurses' Homes, Sisters' Homes - Over 30 Units
- 0196 Dwellings Written in Conjunction with Commercial Risks from the Commercial Lines Manual - 1 Family
- 0197 Dwellings Written in Conjunction with Commercial Risks from the Commercial Lines Manual - 2 Family
- 0198 Dwellings Written in Conjunction with Commercial Risks from the Commercial Lines Manual - 3 and 4 Family
- 0300 Large Area Housing Developments (Special Rating Treatment)

03 RESTAURANTS & BARS

- 0541 Bars and Taverns
- 0542 Restaurants with Commercial Cooking
- 0545 Restaurants with Limited Cooking

04 OTHER MERCANTILES

BASIC GROUP I RATING GROUP DEFINITIONS

- 0431 Sole Occupancy Mercantile, Over 15,000 Square Feet, Building Coverage, Other than Food Risks
- 0432 Sole Occupancy Mercantile, Over 15,000 Square Feet, Food Risks, Buildings and Personal Property
- 0433 Multiple Occupancy Mercantile, Over 15,000 Square Feet, Building Coverage Only, Not Fire Class Rated
- 0434 Multiple Occupancy Mercantile, Less than 15,000 Square Feet, Building Coverage Only, Not Fire Class Rated
- 0511 Risks Having Low Susceptibility Personal Property, NOC
- 0512 Tire, Battery and Accessory Dealers Without Tire Recapping and Vulcanizing
- 0520 Wearing Apparel, Textiles, Shoes
- 0531 Alcoholic Beverages other than Bars
- 0532 Food Products including Retail Bakeries (no baking and no cooking on premises; sales only); Beverages other than Alcoholic
- 0533 Retail Bakeries - Baking on Premises (No delivery to other outlets)
- 0534 Food Products with Limited Cooking, Excluding Bakeries
- 0535 Retail Bakeries - Baking on Premises (No delivery to other outlets) - Using Cannabis as an Ingredient
- 0550 Motor Vehicle (Auto, Aircraft, Marine) Sales, No Repair
- 0561 Boat and Marine Supply Dealers
- 0562 Drugs
- 0563 Electrical Goods, Hardware and Machinery
- 0564 Furniture and Home Furnishings other than Appliances
- 0565 Jewelry
- 0566 Sporting Goods
- 0567 Risks Having Moderate Susceptibility Personal Property, NOC
- 0570 Risks Having High Susceptibility Personal Property, NOC
- 0574 Cannabis containing Products Distributors or Retail Sales, Cannabis, NOC
- 0575 Mercantile - Cannabis - Growers other than Greenhouses - including hydroponics
- 0580 Greenhouses
- 0581 Multiple Occupancy Mercantile, Fire Class Rated, without furniture Occupant
- 0582 Multiple Occupancy Mercantile, Fire Class Rated, with furniture Occupant
- 0585 Greenhouses - Cannabis

05 PUBLIC BUILDINGS

- 0701 Governmental Offices
- 1000 Penal Institutions
- 1051 Museums, Libraries, Art Galleries (non-profit)
- 1070 Other Public Buildings, Fire Dept., Police, Water/Sewer

06 CHURCHES

- 0900 Churches and Synagogues

BASIC GROUP I RATING GROUP DEFINITIONS07 SCHOOLS

1052 Schools, Academic

08 OFFICE AND BANKS

0702 Non-Governmental Offices and Banks

09 RECREATIONAL FACILITIES

0755 Golf Clubs, Tennis Clubs and Similar Sports Facilities with Cooking

0756 Golf Clubs, Tennis Clubs and Similar Sports Facilities without Cooking

0757 Clubs, NOC, Including Fraternal and Union Halls

0831 Motion Picture Studios

0832 Theaters

0833 Drive-in Theaters

0834 Skating Rinks--Roller Rinks

0841 Bowling Alleys

0843 Halls and Auditoriums

0844 Recreational Facilities, NOC

0845 Boys' and Girls' Camps

0846 Dance Halls, Ballrooms & Discotheques

0951 Gambling Casinos with Restaurants

0952 Gambling Casinos without Restaurants

10 HOTELS & MOTELS

0742 Motels and Hotels with Restaurant - Up to 10 Units

0743 Motels and Hotels with Restaurant - 11 to 30 Units

0744 Motels and Hotels with Restaurant - Over 30 Units

0745 Motels and Hotels without Restaurant - Up to 10 Units

0746 Motels and Hotels without Restaurant - 11 to 30 Units

0747 Motels and Hotels without Restaurant - Over 30 Units

11 HOSPITALS & NURSING HOMES

0851 Hospitals

0852 Nursing and Convalescent Homes

12 BUILDINGS UNDER CONSTRUCTION

BASIC GROUP I RATING GROUP DEFINITIONS

1150 Buildings Under Construction

13 MOTOR VEHICLE RISKS

0931 Auto Parking Garages, Car Washes

0932 Gasoline Service Stations

0933 Aircraft Hangars with Repairing, Motor Vehicle Repairing Including Auto Body Shops, with or without Sales

0934 Tire Recapping and Vulcanizing with or without Sales

0940 Aircraft Hangars without Repairing

14 OTHER NON-MANUFACTURING

0911 Dry Cleaner and Dyeing Plants, other than Self-Service

0912 Laundries, other than Self-Service

0913 Self-Service Laundries and Dry Cleaners

0921 Light Hazard Service Occupancies

0922 Services Occupancies, Other than Light Hazard, NOC

0923 Funeral Homes

1180 Vacant Buildings

1185 Billboards and Signs

1190 Yard Property, NOC, Including Property in the Open

15 STORAGE

1200 Piers, Wharves, Bridges

1211 Freight Terminals

1212 General Storage Warehouses - Bailee

1213 Miscellaneous Products Storage - (other than Retail or Wholesale or Cold Storage)

1220 Household Goods Storage

1230 Cold Storage Warehouses

1251 Farm Products (other than Grain, Cotton, Tobacco)

1252 Grain, Seed, Bean Warehouses

1255 Sales Warehouses - Cannabis

1300 Cotton Compresses and Storage

1400 Waste and Reclaimed Material, including Yards

1450 Whiskey and Liquor Warehouses in Connection with Distilleries

1501 Tobacco Warehouses, Storage

1502 Tobacco Sales Warehouses

1550 Grain Elevators - Terminal

1610 Grain Elevators - Country

1650 Building Supply Yards, including Retail Lumberyards, Coal and Coke Yards

BASIC GROUP I RATING GROUP DEFINITIONS

1700 Mill Yards

1751 Oil Distributing, Oil Terminals and LPG Tank Farms, Including Stock

1752 Oil Distributing, Oil Terminals and LPG Tank Farms, Excluding Stock

17 FOOD MANUFACTURING

2000 Dairy Products

2059 Meat, Poultry and Fish Products

2150 Grain Milling, Including Feed, Stock, Flour Mills

2200 Bakeries and Bakery Products - other than Cannabis

2205 Bakeries and Bakery Products - Using Cannabis as an Ingredient

2215 Cannabis Processing or Manufacturing - No extraction

2250 Fruit, Nut and Vegetable Products

2300 Sugar, Molasses and Syrup Refining

2350 Beverages excluding Alcoholic Beverages

2400 Breweries

2459 Distilleries and Wineries

2550 Tobacco and Tobacco Products

2600 Food Products, NOC

18 WOOD MANUFACTURING

3809 Basic Wood Production including Veneer and Plywood Plants

3959 Furniture and Other Wood Products, NOC

19 WEARING APPAREL

2800 Textile Mill Products - Natural and Synthetic

3009 Clothing and Apparel including Furs and Finished Products

20 CHEMICAL MANUFACTURING

5000 Chemicals and Pharmaceuticals - Low Hazard

5050 Chemicals and Pharmaceuticals - Moderate Hazard

5100 Chemicals and Pharmaceuticals - High Hazard

5105 Cannabis Processing or Manufacturing - Extraction using noncombustible gases or chemicals

5155 Cannabis Processing or Manufacturing - Extraction using combustible gases or chemicals, or rapid burning

21 METAL MANUFACTURING

6810 Heavy Metalworking including Basic Metalwork

BASIC GROUP I RATING GROUP DEFINITIONS

6850 Metalworking, NOC

22 OTHER MANUFACTURING

2750 Cotton Gins

3409 Leather and Leather Products

4400 Paper Manufacturing

4450 Paper and Paper Products Processing

4809 Printing

5500 Plastic Products

5759 Rubber Products

6009 Stone, Glass, Concrete, Gypsum, Brick, Tile and Clay Products, Abrasives, Plaster and Other Mineral, NOC

6210 Mining Other than Coal

6250 Coal Mining

6900 Precision Products, Electronic, Radio and Television Manufacturing

VERMONT

SPECIAL CAUSES OF LOSS CATEGORY DEFINITIONSCATEGORY 01 - BUILDING AND TIME ELEMENT COVERAGECATEGORY 02 - APARTMENT AND CONDOMINIUM CONTENTS COVERAGECATEGORY 03 - OFFICE CONTENTS COVERAGECATEGORIES 04, 05, & 06 - MERCANTILE CONTENTS COVERAGE

An establishment in which the principal business is the retail or wholesale buying or selling of goods, wares and merchandise. Included are bars, grills and restaurants.

CATEGORY 04 - MERCANTILE CONTENTS COVERAGE (HIGH)

Occupancy classes 0511, 0520, 0535, 0550, 0562, 0566, 0567, 0574, 0581, 0702, 1180, 1185, 1190, 1200, 1211, 1212, 1213, 1251, 1255, 1300, 1400, 1751, 1752, or 2205.

CATEGORY 05 - MERCANTILE CONTENTS COVERAGE (MEDIUM)

Occupancy classes not listed in Category 04 or Category 06

CATEGORY 06 - MERCANTILE CONTENTS COVERAGE (LOW)

Occupancy classes 0512, 0541, 0563, 0921, 0922, 0933, 0940, or 1230

CATEGORY 07 - MOTEL & HOTEL CONTENTS COVERAGE

Hotels, motels, motor inns, motor lodges, tourist courts and similar risks whose business is principally the providing of lodging accommodations for transients, including premises and operations necessary or incidental to such lodging accommodations.

CATEGORIES 08 & 09 - INSTITUTIONAL CONTENTS COVERAGE

An establishment principally occupied by an educational, religious, sanitary, charitable or governmental organization. It does not include buildings containing manufacturing of any kind, or sale, storage, processing, or repair of clothing or furniture, or paper or rag storage, or sorting or supplying of food or lodging to itinerants.

CATEGORY 08 - INSTITUTIONAL CONTENTS COVERAGE (HIGH)

Occupancy classes 0701, 0702, 0851, 0921, 1051, or 1052

SPECIAL CAUSES OF LOSS CATEGORY DEFINITIONSCATEGORY 09 - INSTITUTIONAL CONTENTS COVERAGE (LOW)

Occupancy classes not listed in Category 08

CATEGORIES 10 & 11 - INDUSTRIAL & PROCESSING CONTENTS COVERAGE

An establishment in which the principal activity is the manufacturing of goods and wares or processing of raw materials or finished goods.

CATEGORY 10 - INDUSTRIAL & PROCESSING CONTENTS COVERAGE (HIGH)

Occupancy classes 1252, 1300, 1400, 1700, 2000, 2059, 2150, 2200, 2215, 2250, 2300, 2350, 2400, 2459, 2550, 2600, 2750, 2800, 2805, 3009, 3409, 3809, 3959, 5105, or 5155.

CATEGORY 11 - INDUSTRIAL & PROCESSING CONTENTS COVERAGE (LOW)

Occupancy classes not listed in Category 10

CATEGORIES 12 & 13 - SERVICE CONTENTS COVERAGE

An establishment in which the principal operation is the providing of a personal or commercial service. Included are establishments providing entertainment or recreation; warehousing of property of others; and automobile risks, such as service, repair or garaging of automobiles and parking lots.

CATEGORY 12 - SERVICE CONTENTS COVERAGE (HIGH)

Occupancy classes 0520, 0542, 0545, 0550, 0567, 0702, 0755, 0831, 0832, 0911, 0912, 0913, 0921, 0931, 0932, 0934, 1213, or 4809

CATEGORY 13 - SERVICE CONTENTS COVERAGE (LOW)

Occupancy classes not listed in Category 12

CATEGORY 14 - CONTRACTOR CONTENTS COVERAGE

An establishment in which the principal operation is that of installation, construction, demolition or maintenance. This includes any owner/contractor, general contractor or sub-contractor whether or not he or she actually performs any part of such work or has employees on the site.

Vermont

BASIC GROUP I

UNADJUSTED AGGREGATE LOSS COSTS, LOSSES, AND EXPERIENCE RATIOS

<u>Year</u>	<u>Total Unadjusted Loss Costs</u>	<u>Total Unadjusted Incurred Losses</u>	<u>Experience Ratio</u>
2018	6,165,928	2,002,145	0.325
2019	6,252,273	7,360,738	1.177
2020	6,448,892	8,259,706	1.281
2021	6,240,258	2,467,941	0.395
2022	6,088,840	6,519,674	1.071

VERMONT

BASIC GROUP II

UNADJUSTED AGGREGATE LOSS COSTS, LOSSES, AND EXPERIENCE RATIOS

<u>Year</u>	Total		Experience
	Total Unadjusted <u>Loss Costs</u>	Non-Hurricane Unadjusted <u>Incurred Losses</u>	
2013	848,456	598,979	0.706
2014	922,842	301,398	0.327
2015	1,035,762	2,922,716	2.822
2016	1,126,091	184,013	0.163
2017	1,233,538	330,972	0.268
2018	1,331,513	1,247,279	0.937
2019	1,345,831	698,824	0.519
2020	1,402,060	216,175	0.154
2021	1,435,305	176,830	0.123
2022	1,535,239	166,731	0.109

VERMONT

SPECIAL CAUSES OF LOSS

UNADJUSTED AGGREGATE LOSS COSTS, LOSSES, AND EXPERIENCE RATIOS

<u>Year</u>	<u>Total Unadjusted Loss Costs</u>	<u>Total Unadjusted Incurred Losses</u>	<u>Experience Ratio</u>
2018	2,293,380	1,477,821	0.644
2019	2,263,050	1,751,420	0.774
2020	2,340,353	1,072,570	0.458
2021	2,348,333	1,676,315	0.714
2022	2,325,030	1,634,436	0.703

VERMONT

FIRE AND ALLIED LINES INSURANCE

COUNTRYWIDE LOSS ADJUSTMENT EXPENSE EXPERIENCE (A)

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Selected</u>
(1) Fire						
(a) Direct Losses Incurred	7,748,589	8,518,012	7,422,977	9,568,271	11,503,724	
(b) Direct Loss Adjustment Expense Incurred	692,190	668,759	679,946	884,227	973,556	
(2) Allied Lines						
(a) Direct Losses Incurred	17,946,675	10,350,661	7,620,219	12,480,499	12,836,520	
(b) Direct Loss Adjustment Expense Incurred	1,157,440	998,273	973,445	1,234,938	1,362,840	
(3) Loss Adjustment Expense as a Ratio to Losses						
(a) Fire (1b) / (1a)	8.9%	7.9%	9.2%	9.2%	8.5%	9.0%
(b) Allied Lines (2b) / (2a)	6.4%	9.6%	12.8%	9.9%	10.6%	11.0%

NOTE: All dollar amounts are displayed in thousands.

(A) Items (1) and (2) are based on Insurance Expense Exhibit information compiled by A. M. Best.

VERMONT
COMMERCIAL PROPERTY INSURANCE

SECTION E - REVISED LOSS COST PAGES

Basic Group II Loss Costs.....	E2
Special Causes of Loss Loss Costs.....	E3
Basic Group I Loss Costs.....	E4-15

70. CAUSES OF LOSS – BASIC FORM

E. Rating Procedure**2. Property Damage – Group II Causes Of Loss****e. Loss Costs**

- (1) Determine the Basic Group II symbol from the specific publication or from Rule **70.E.2.a**.
- (2) For Symbols **AA**, **A**, **AB** and **B**, use the applicable rate.
- (3) For symbols with numerical prefixes, multiply the applicable rate by the prefix shown in Rule **70.E.2.a**.

Symbol	Building Loss Cost	Contents Loss Cost
AA	.021	.025
A	.022	.028
AB	.026	<u>.034-.033</u>
B	<u>.037-.036</u>	<u>.042-.040</u>

72. CAUSES OF LOSS – SPECIAL FORM

E.2. Rating Procedure – Property Damage – Other than Builders' Risk**b.(1)** Building Coverage – Loss Cost: .044.046**c.(2)** Personal Property Coverage – Loss Costs

Occupancy Category	Loss Cost
Residential Apartments and Condominiums	<u>.159.158</u>
Offices	<u>.102.101</u>
Mercantile – High	<u>.113.112</u>
Mercantile – Medium	<u>.087.086</u>
Mercantile – Low	.071
Motels and Hotels	.049
Institutional – High	.049
Institutional – Low	.032
Industrial and Processing – High	<u>.116.114</u>
Industrial and Processing – Low	<u>.086.083</u>
Service – High	<u>.100.098</u>
Service – Low	.072
Contractors	<u>.116.117</u>
Territory (County)	Territorial Multiplier
Entire State	1.000

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85. BASIC GROUP I CLASS LOSS COSTS

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0074	Boarding and Lodging Houses, Rooming Houses, Fraternities and Sororities, Dormitories – Up to 10 Units					
0075	Boarding and Lodging Houses, Rooming Houses, Fraternities and Sororities, Dormitories – 11 to 30 Units					
0076	Boarding and Lodging Houses, Rooming Houses, Fraternities and Sororities, Dormitories – Over 30 Units					
0077	Convents, Monasteries and Rectories, Orphan Homes, Nurses' Homes, Sisters' Homes – Up to 10 Units					
0078	Convents, Monasteries and Rectories, Orphan Homes, Nurses' Homes, Sisters' Homes – 11 to 30 Units					
0079	Convents, Monasteries and Rectories, Orphan Homes, Nurses' Homes, Sisters' Homes – Over 30 Units					
0196	1 Family Dwellings (Lessor's Risk)					
0197	2 Family Dwellings (Lessor's Risk)					
0198	3 or 4 Family Dwellings (Lessor's Risk)					
0311	Apartments without Mercantile Occupancies – Up to 10 Units					
0312	Apartments without Mercantile Occupancies – 11 to 30 Units					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0074	Building (1)	0.140	0.127	0.112	0.091	0.083
	Contents (2)	0.142	0.129	0.120	0.106	0.100
0075	Building (1)	0.140	0.127	0.112	0.091	0.083
	Contents (2)	0.142	0.129	0.120	0.106	0.100
0076	Building (1)	0.140	0.127	0.112	0.091	0.083
	Contents (2)	0.142	0.129	0.120	0.106	0.100
0077	Building (1)	0.130	0.114	0.103	0.082	0.078
	Contents (2)	0.134	0.120	0.113	0.101	0.094
0078	Building (1)	0.130	0.114	0.103	0.082	0.078
	Contents (2)	0.134	0.120	0.113	0.101	0.094
0079	Building (1)	0.130	0.114	0.103	0.082	0.078
	Contents (2)	0.134	0.120	0.113	0.101	0.094
0196	Building (1)	0.085	0.078	0.071	0.056	0.051
	Contents (2)	0.097	0.085	0.080	0.073	0.068
0197	Building (1)	0.085	0.078	0.071	0.056	0.051
	Contents (2)	0.097	0.085	0.080	0.073	0.068
0198	Building (1)	0.085	0.078	0.071	0.056	0.051
	Contents (2)	0.097	0.085	0.080	0.073	0.068
0311	Building (1)	0.240	0.216	0.190	0.156	0.143
	Contents (2)	0.271	0.243	0.228	0.202	0.188
0312	Building (1)	0.240	0.216	0.190	0.156	0.143
	Contents (2)	0.271	0.243	0.228	0.202	0.188
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0313	Apartments without Mercantile Occupancies – Over 30 Units					
0321	Apartments with Mercantile Occupancies – Up to 10 Units					
0322	Apartments with Mercantile Occupancies – 11 to 30 Units					
0323	Apartments with Mercantile Occupancies – Over 30 Units					
0331	Residential Condominiums without Mercantile Occupancies – Up to 10 Units					
0332	Residential Condominiums without Mercantile Occupancies – 11 to 30 Units					
0333	Residential Condominiums without Mercantile Occupancies – Over 30 Units					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0313	Building (1)	0.240	0.216	0.190	0.156	0.143
	Contents (2)	0.271	0.243	0.228	0.202	0.188
0321	Building (1)	0.368	0.331	0.293	0.240	0.221
	Contents (2)					
	A	0.546	0.493	0.466	0.410	0.381
	B&C	0.640	0.575	0.544	0.480	0.451
0322	Building (1)	0.368	0.331	0.293	0.240	0.221
	Contents (2)					
	A	0.546	0.493	0.466	0.410	0.381
	B&C	0.640	0.575	0.544	0.480	0.451
0323	Building (1)	0.368	0.331	0.293	0.240	0.221
	Contents (2)					
	A	0.546	0.493	0.466	0.410	0.381
	B&C	0.640	0.575	0.544	0.480	0.451
0331	Building (1)	0.133	0.119	0.107	0.084	0.080
	Contents (2)	0.116	0.105	0.101	0.087	0.080
0332	Building (1)	0.133	0.119	0.107	0.084	0.080
	Contents (2)	0.116	0.105	0.101	0.087	0.080
0333	Building (1)	0.133	0.119	0.107	0.084	0.080
	Contents (2)	0.116	0.105	0.101	0.087	0.080
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0341	Residential Condominiums with Mercantile Occupancies – Up to 10 Units					
0342	Residential Condominiums with Mercantile Occupancies – 11 to 30 Units					
0343	Residential Condominiums with Mercantile Occupancies – Over 30 Units					
0511	Mercantile – Sole Occupancy Only – Not Otherwise Classified – Low Susceptibility					
0512	Mercantile – Sole Occupancy Only – Tire, Battery and Accessory Dealers without Tire Recapping and Vulcanizing					
0520	Mercantile – Sole Occupancy Only – Wearing Apparel, Textiles, Shoes					
0531	Mercantile – Sole Occupancy Only – Alcoholic Beverages other than Bars					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0341	Building (1)	0.208	0.186	0.169	0.135	0.122
	Contents (2)					
	A	0.238	0.214	0.201	0.177	0.166
	B&C	0.277	0.248	0.238	0.208	0.194
0342	Building (1)	0.208	0.186	0.169	0.135	0.122
	Contents (2)					
	A	0.238	0.214	0.201	0.177	0.166
	B&C	0.277	0.248	0.238	0.208	0.194
0343	Building (1)	0.208	0.186	0.169	0.135	0.122
	Contents (2)					
	A	0.238	0.214	0.201	0.177	0.166
	B&C	0.277	0.248	0.238	0.208	0.194
0511	Building (1)	0.191	0.173	0.153	0.123	0.114
	Contents (2)	0.377	0.340	0.321	0.283	0.265
0512	Building (1)	0.181	0.165	0.145	0.117	0.109
	Contents (2)	0.336	0.303	0.284	0.251	0.235
0520	Building (1)	0.227	0.205	0.181	0.147	0.137
	Contents (2)	0.491	0.442	0.420	0.368	0.343
0531	Building (1)	0.194	0.174	0.155	0.127	0.114
	Contents (2)	0.397	0.357	0.336	0.299	0.278
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0532	Merc – Sole Occy Only – Food Products Inc. Retail Bakeries; Non-Alcoholic Beverages (Sales Only – No Baking or Cooking)					
0533	Mercantile – Sole Occupancy Only – Baking on Premises, No Delivery to Outlets					
0534	Mercantile – Sole Occupancy Only – Food Products with Limited Cooking, Excluding Bakeries					
0535	Mercantile – Sole Occupancy Only – Baking on Premises, No Delivery to Outlets – Using Cannabis as an Ingredient					
0541	Mercantile – Sole Occupancy Only – Bars and Taverns					
0545	Mercantile – Sole Occupancy Only – Restaurants with Limited Cooking					
0550	Mercantile – Sole Occupancy Only – Motor Vehicles, No Repair					
0561	Mercantile – Sole Occupancy Only – Boat and Marine Supply Dealers					
0562	Mercantile – Sole Occupancy Only – Drugs					
0563	Mercantile – Sole Occupancy Only – Electrical Goods, Hardware and Machinery					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0532	Building (1)	0.295	0.267	0.237	0.191	0.177
	Contents (2)	0.491	0.442	0.420	0.368	0.343
0533	Building (1)	0.232	0.209	0.186	0.150	0.141
	Contents (2)	0.395	0.353	0.334	0.297	0.274
0534	Building (1)	0.324	0.292	0.259	0.210	0.196
	Contents (2)	0.411	0.370	0.351	0.310	0.288
0535	Building (1)	0.232	0.209	0.186	0.150	0.141
	Contents (2)	0.395	0.353	0.334	0.297	0.274
0541	Building (1)	0.441	0.396	0.353	0.286	0.265
	Contents (2)	0.471	0.424	0.401	0.353	0.330
0545	Building (1)	0.521	0.469	0.419	0.338	0.312
	Contents (2)	0.588	0.528	0.500	0.441	0.409
0550	Building (1)	0.174	0.157	0.141	0.113	0.106
	Contents (2)	0.407	0.368	0.346	0.307	0.284
0561	Building (1)	0.185	0.166	0.146	0.117	0.111
	Contents (2)	0.407	0.368	0.346	0.307	0.284
0562	Building (1)	0.209	0.186	0.168	0.137	0.127
	Contents (2)	0.453	0.407	0.384	0.340	0.317
0563	Building (1)	0.208	0.186	0.166	0.136	0.123
	Contents (2)	0.336	0.303	0.284	0.251	0.235
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0564	Mercantile – Sole Occupancy Only – Furniture and Home Furnishings other than Appliances					
0565	Mercantile – Sole Occupancy Only – Jewelry					
0566	Mercantile – Sole Occupancy Only – Sporting Goods					
0567	Mercantile – Sole Occupancy Only – Not Otherwise Classified – Moderate Susceptibility					
0570	Mercantile – Sole Occupancy Only – Not Otherwise Classified – High Susceptibility					
0574	Mercantile – Sole Occupancy Only – Cannabis containing Products Distributors or Retail Sales, Cannabis, NOC					
0575	Mercantile – Sole Occupancy Only – Cannabis - Growers other than Greenhouses					
0580	Greenhouses – Sole Occupancy Only					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0564	Building (1)	0.286	0.258	0.227	0.186	0.171
	Contents (2)	0.593	0.534	0.503	0.445	0.416
0565	Building (1)	0.190	0.171	0.152	0.123	0.113
	Contents (2)	0.330	0.297	0.278	0.250	0.232
0566	Building (1)	0.214	0.194	0.173	0.141	0.130
	Contents (2)	0.445	0.401	0.377	0.334	0.313
0567	Building (1)	0.191	0.173	0.153	0.123	0.114
	Contents (2)	0.377	0.340	0.321	0.283	0.265
0570	Building (1)	0.191	0.173	0.153	0.123	0.114
	Contents (2)	0.397	0.357	0.336	0.299	0.278
0574	Building (1)	0.191	0.173	0.153	0.123	0.114
	Contents (2)	0.377	0.340	0.321	0.283	0.265
0575	Building (1)	0.191	0.173	0.153	0.123	0.114
	Contents (2)	0.397	0.357	0.336	0.299	0.278
0580	Building (1)	0.191	0.173	0.153	0.123	0.114
	Contents (2)	0.416	0.374	0.353	0.313	0.292
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0581	Mercantile – Multiple Occupancy without 0564 Occupant					
0582	Mercantile – Multiple Occupancy with 0564 Occupant					
0585	Greenhouses – Sole Occupancy Only – Cannabis					
0701	Government Offices					
0702	Banks and Offices other than Governmental					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0581	Building (1)	0.204	0.181	0.162	0.132	0.122
	Contents (2)					
	A	0.397	0.357	0.336	0.299	0.278
	B	0.483	0.435	0.411	0.364	0.340
	C	0.438	0.395	0.374	0.330	0.307
0582	Building (1)	0.224	0.201	0.180	0.146	0.136
	Contents (2)					
	A	0.353	0.321	0.303	0.265	0.250
	B	0.435	0.391	0.370	0.326	0.303
	C	0.395	0.353	0.334	0.297	0.274
0585	Building (1)	0.191	0.173	0.153	0.123	0.114
	Contents (2)	0.416	0.374	0.353	0.313	0.292
0701	Building (1)	0.097	0.085	0.075	0.062	0.057
	Contents (2)					
	A	0.106	0.097	0.087	0.079	0.074
	B	0.155	0.141	0.133	0.115	0.110
	C	0.121	0.111	0.103	0.092	0.085
0702	Building (1)	0.119	0.107	0.095	0.079	0.072
	Contents (2)					
	A	0.143	0.127	0.120	0.106	0.099
	B	0.196	0.177	0.168	0.147	0.137
	C	0.174	0.157	0.149	0.132	0.121
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0742	Motels and Hotels with Limited Cooking Restaurant – Up to 10 Units					
0743	Motels and Hotels with Limited Cooking Restaurant – 11 to 30 Units					
0744	Motels and Hotels with Limited Cooking Restaurant – Over 30 Units					
0745	Motels and Hotels without Restaurant – Up to 10 Units					
0746	Motels and Hotels without Restaurant – 11 to 30 Units					
0747	Motels and Hotels without Restaurant – Over 30 Units					
0755	Golf, Tennis and Similar Sport Facilities with Limited Cooking					
0756	Golf, Tennis and Similar Sport Facilities without Cooking					
0757	Clubs, Not Otherwise Classified, Including Fraternal and Union Halls					
0831	Motion Picture Studios					
0832	Theaters Excluding Drive-in Theaters					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0742	Building (1)	0.182	0.162	0.145	0.117	0.109
	Contents (2)	0.198	0.179	0.170	0.149	0.139
0743	Building (1)	0.182	0.162	0.145	0.117	0.109
	Contents (2)	0.198	0.179	0.170	0.149	0.139
0744	Building (1)	0.182	0.162	0.145	0.117	0.109
	Contents (2)	0.198	0.179	0.170	0.149	0.139
0745	Building (1)	0.078	0.070	0.064	0.050	0.047
	Contents (2)	0.084	0.076	0.072	0.066	0.061
0746	Building (1)	0.078	0.070	0.064	0.050	0.047
	Contents (2)	0.084	0.076	0.072	0.066	0.061
0747	Building (1)	0.078	0.070	0.064	0.050	0.047
	Contents (2)	0.084	0.076	0.072	0.066	0.061
0755	Building (1)	0.320	0.287	0.256	0.209	0.192
	Contents (2)	0.368	0.331	0.313	0.275	0.258
0756	Building (1)	0.131	0.117	0.104	0.084	0.079
	Contents (2)	0.149	0.134	0.127	0.112	0.104
0757	Building (1)	0.141	0.127	0.112	0.092	0.084
	Contents (2)	0.149	0.134	0.127	0.112	0.104
0831	Building (1)	0.110	0.098	0.088	0.072	0.065
	Contents (2)	0.127	0.112	0.107	0.095	0.088
0832	Building (1)	0.140	0.125	0.112	0.092	0.082
	Contents (2)	0.149	0.134	0.127	0.112	0.104
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0833	Drive-in Theaters					
0834	Skating Rinks – Roller Rinks					
0841	Bowling Alleys without Cooking					
0843	Halls and Auditoriums					
0844	Recreational Facilities, Not Otherwise Classified					
0845	Boys' and Girls' Camps					
0846	Dance Halls, Ballrooms and Discotheques					
0851	Hospitals					
0852	Nursing and Convalescent Homes					
0900	Churches and Synagogues					
0911	Dry Cleaners and Dyeing Plants, other than Self-Service					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0833	Building (1)	0.118	0.107	0.095	0.078	0.072
	Contents (2)	0.138	0.122	0.117	0.104	0.096
0834	Building (1)	0.190	0.172	0.153	0.122	0.113
	Contents (2)	0.193	0.174	0.166	0.145	0.136
0841	Building (1)	0.193	0.174	0.153	0.127	0.116
	Contents (2)	0.202	0.182	0.173	0.151	0.142
0843	Building (1)	0.096	0.088	0.078	0.062	0.058
	Contents (2)	0.103	0.093	0.088	0.078	0.072
0844	Building (1)	0.131	0.117	0.104	0.084	0.079
	Contents (2)	0.144	0.130	0.121	0.108	0.101
0845	Building (1)	0.086	0.078	0.070	0.056	0.051
	Contents (2)	0.098	0.088	0.084	0.075	0.070
0846	Building (1)	0.179	0.164	0.144	0.117	0.108
	Contents (2)	0.177	0.156	0.151	0.133	0.122
0851	Building (1)	0.073	0.066	0.058	0.048	0.045
	Contents (2)	0.084	0.077	0.073	0.065	0.060
0852	Building (1)	0.077	0.068	0.061	0.049	0.046
	Contents (2)	0.087	0.079	0.076	0.066	0.063
0900	Building (1)	0.201	0.179	0.162	0.131	0.120
	Contents (2)	0.212	0.190	0.179	0.159	0.148
0911	Building (1)	0.355	0.320	0.286	0.232	0.214
	Contents (2)	0.419	0.377	0.357	0.314	0.293
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0912	Laundries, other than Self-Service					
0913	Self-Service Laundries and Dry Cleaners					
0921	Light Hazard Service Occupancies					
0922	Service Occupancies, other than Light Hazard					
0923	Funeral Homes					
0931	Auto Parking Garages, Car Washes					
0932	Gasoline Service Stations					
0933	Motor Vehicle and Aircraft Repair, with or without Sales					
0934	Tire Recapping and Vulcanizing, with or without Sales					
0940	Aircraft Hangars without Repair					
0951	Gambling Casinos with Limited Cooking Restaurants					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0912	Building (1)	0.469	0.424	0.376	0.304	0.280
	Contents (2)	0.580	0.522	0.493	0.434	0.403
0913	Building (1)	0.309	0.278	0.246	0.203	0.184
	Contents (2)	0.363	0.326	0.308	0.272	0.252
0921	Building (1)	0.184	0.167	0.149	0.119	0.112
	Contents (2)	0.220	0.199	0.187	0.165	0.154
0922	Building (1)	0.204	0.184	0.165	0.134	0.122
	Contents (2)	0.249	0.225	0.214	0.188	0.177
0923	Building (1)	0.137	0.122	0.111	0.087	0.080
	Contents (2)	0.145	0.132	0.125	0.111	0.101
0931	Building (1)	0.103	0.091	0.082	0.067	0.061
	Contents (2)	0.118	0.106	0.103	0.087	0.083
0932	Building (1)	0.145	0.130	0.116	0.093	0.085
	Contents (2)	0.177	0.159	0.149	0.134	0.125
0933	Building (1)	0.123	0.110	0.100	0.080	0.073
	Contents (2)	0.152	0.140	0.131	0.116	0.107
0934	Building (1)	0.159	0.143	0.127	0.104	0.097
	Contents (2)	0.188	0.170	0.161	0.141	0.134
0940	Building (1)	0.077	0.070	0.062	0.049	0.047
	Contents (2)	0.097	0.085	0.082	0.071	0.068
0951	Building (1)	0.372	0.338	0.300	0.243	0.225
	Contents (2)	0.413	0.369	0.350	0.309	0.288
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
0952	Gambling Casinos without Restaurants					
1000	Penal Institutions					
1051	Museums, Libraries, Art Galleries (Non-Profit)					
1052	Schools, Academic					
1070	Fire Departments, Police, Sewage, Water Works and Other Public Buildings					
1150	Builders' Risk					
1180	Vacant Buildings – See CSP Class Code of previous or intended occupancy. Add loss cost of .015 unless Class Code of previous or intended occupancy is 0580, 0585, 0742-0747, 0833, 0834, 0841, 0843, 0844, 0846, 0900, 0951, 0952, 1051 or 1052.					
1211	Freight Terminals					
1212	General Storage Warehouses – Bailee					
1213	Miscellaneous Products Storage – (Other Than Retail Or Wholesale Or Cold Storage)					
1220	Household Goods Storage					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
0952	Building (1)	0.127	0.112	0.102	0.080	0.076
	Contents (2)	0.181	0.164	0.153	0.136	0.127
1000	Building (1)	0.093	0.082	0.074	0.060	0.056
	Contents (2)	0.081	0.073	0.070	0.061	0.057
1051	Building (1)	0.059	0.052	0.047	0.038	0.035
	Contents (2)	0.074	0.068	0.064	0.057	0.052
1052	Building (1)	0.082	0.075	0.067	0.055	0.049
	Contents (2)	0.096	0.084	0.080	0.071	0.067
1070	Building (1)	0.087	0.080	0.072	0.059	0.054
	Contents (2)	0.108	0.097	0.091	0.079	0.074
1150	Building (1)	0.117	0.107	0.094	0.077	0.070
1211	Building (1)	0.329	0.297	0.263	0.214	0.198
	Contents (2)	0.387	0.349	0.329	0.290	0.271
1212	Building (1)	0.260	0.237	0.209	0.171	0.157
	Contents (2)	0.320	0.288	0.271	0.240	0.225
1213	Building (1)	0.230	0.209	0.183	0.150	0.141
	Contents (2)	0.306	0.276	0.260	0.230	0.214
1220	Building (1)	0.276	0.247	0.219	0.177	0.165
	Contents (2)	0.336	0.301	0.286	0.252	0.237
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

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VERMONT (44)

85. BASIC GROUP I CLASS LOSS COSTS (Cont'd)

All rates are subject to protection class and territorial multipliers.

CSP Class Codes And Description						
1230	Cold Storage Warehouses					
1400	Waste and Reclaimed Materials Including Yards					
1650	Building Supply Yards, Including Retail Lumberyards, Coal and Coke Yards					
1700	Mill Yards					
1751	Oil Distributing, Oil Terminals and LPG Tank Farms – Including Stock					
1752	Oil Distributing, Oil Terminals and LPG Tank Farms – Excluding Stock					
2200	Baking on Premises, Delivery to Outlets					
2205	Baking on Premises, Delivery to Outlets, and Food Products Manufacturing – Using Cannabis as an Ingredient					
2350	Beverage Bottlers Excluding Alcoholic Beverages					
CSP Class Code	Coverage	Construction (Code)				
		Frame (1)	Joisted Masonry (2)	Non-Comb. (3)	Mas. Non-Comb. (4)	Mod. F.R. (5) Or Fire Res. (6)
1230	Building (1)	0.239	0.214	0.190	0.155	0.144
	Contents (2)	0.325	0.292	0.276	0.242	0.226
1400	Building (1)	0.712	0.642	0.569	0.463	0.425
	Contents (2)	0.865	0.780	0.736	0.650	0.606
	Yard	1.076		0.111		
1650	Building (1)	0.424	0.382	0.339	0.276	0.255
	Contents (2)	0.536	0.484	0.459	0.402	0.377
	Yard	0.297		0.038		
1700	Building (1)	0.346	0.311	0.278	0.226	0.209
	Contents (2)	0.530	0.472	0.449	0.398	0.369
	Yard	0.290		0.034		
1751	Building (1)	0.221	0.200	0.177	0.144	0.135
	Contents (2)	0.290	0.260	0.247	0.219	0.204
1752	Building (1)	0.209	0.188	0.167	0.137	0.126
	Contents (2)	0.209	0.186	0.177	0.155	0.144
2200	Building (1)	0.677	0.613	0.546	0.446	0.406
	Contents (2)	0.810	0.729	0.685	0.606	0.568
2205	Building (1)	0.677	0.613	0.546	0.446	0.406
	Contents (2)	0.810	0.729	0.685	0.606	0.568
2350	Building (1)	0.436	0.394	0.350	0.284	0.262
	Contents (2)	0.519	0.466	0.436	0.385	0.364
Territory					Territorial Multiplier	
Entire State (Vermont)					1.000	

All rates are subject to protection class and territorial multipliers.

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PROPERTY CLAIMS SERVICES INFORMATION

ISO's Property Claims Services defines a catastrophe as an event that:

- reaches a threshold dollar amount of total insured property losses, and
- affects a significant number of property and casualty insurance policyholders and property and casualty insurers.

From 1949 to 1981, the threshold was \$1 million. From 1982 to 1996, it was \$5 million, and since January 1, 1997, the threshold has been \$25 million.

All of the events listed may not have resulted in unexpected loss experience for commercial property coverage in this state since catastrophes are defined based on total insured property losses spreading across state lines and lines of business.

For more information concerning Property Claims Services, please see "Persons to Contact" in the circular cover letter.

Vermont
Commercial Property

The following events have been identified as catastrophes by ISO's Property Claims Services.

<u>From</u>	<u>To</u>	<u>Perils</u>
3/11/93	3/14/93	Wind, Hail, Tornadoes, Freezing, Ice, Snow
1/14/94	1/16/94	Wind, Snow, Ice, Freezing
1/17/94	1/20/94	Wind, Snow, Ice, Freezing
1/6/96	1/9/96	Wind, Snow, Ice, Freezing, Flooding
10/18/96	10/21/96	Wind, Flooding
12/6/96	12/8/96	Wind, Ice, Snow
3/4/97	3/6/97	Wind, Hail, Tornadoes, Flooding
1/7/98	1/12/98	Ice, Snow, Wind, Flooding, Freezing
5/30/98	6/1/98	Hail, Wind, Tornadoes
8/22/98	8/25/98	Hail, Wind, Tornadoes
9/6/98	9/8/98	Hail, Wind, Flooding, Tornadoes
1/13/99	1/16/99	Ice, Hail, Snow, Wind, Flooding, Freezing
9/14/99	9/17/99	Hurricane Floyd - Wind, Flooding, Tornadoes
1/14/00	1/19/00	Ice, Snow, Wind, Freezing
1/13/03	1/25/03	Freezing, Ice, Snow, Wind
2/14/03	2/18/03	Flooding, Freezing, Ice, Snow, Wind
2/21/03	2/23/03	Flooding, Hail, Tornadoes, Wind
8/14/03	8/17/03	Power Outage
1/9/04	1/12/04	Freezing, Wind
1/14/04	1/17/04	Freezing, Ice, Snow, Wind
6/8/04	6/9/04	Flooding, Hail, Tornadoes, Wind
1/22/05	1/23/05	Freezing, Ice, Snow, Wind
10/7/05	10/15/05	Flooding, Wind
4/13/07	4/17/07	Flooding, Hail, Tornadoes, Wind
12/11/08	12/13/08	Flooding, Ice, Snow, Wind
2/23/10	2/28/10	Flooding, Freezing, Ice, Snow, Wind
8/26/11	8/28/11	Hurricane Irene - Flooding, Tornadoes, Wind
10/28/12	10/31/12	Hurricane Sandy - Flooding, Snow, Wind
2/16/15	2/22/15	Freezing, Ice, Snow, Wind
2/13/16	2/15/16	Freezing, Ice, Snow, Wind
10/29/17	10/30/17	Flooding, Wind
1/3/18	1/6/18	Flood, Freezing, Ice, Snow, Wind
4/28/18	5/5/18	Flooding, Hail, Tornadoes, Wind
10/16/19	10/17/19	Flooding, Wind
10/31/19	11/1/19	Flooding, Tornadoes, Wind
7/30/20	8/5/20	Flooding, Hurricane, Tornadoes, Tropical Storm, Wind
12/21/22	12/25/22	Flooding, Freezing, Ice, Power Outage, Snow, Wind

VERMONT

BASIC GROUP I PROSPECTIVE LOSS COST CHANGES
BY RATING GROUP AND TERRITORY (A)

<u>Rating Group</u>	<u>Description</u>	Vermont Entire State
01	Apartments	2.6%
02	Other Habitational	1.7%
03	Restaurants & Bars	3.0%
04	Other Mercantile Risks	-0.5%
05	Public Buildings	2.1%
06	Churches	2.3%
07	Schools	1.4%
08	Offices And Banks	4.0%
09	Recreational Facilities	2.2%
10	Hotels & Motels	2.2%
11	Hospitals & Nursing Homes	1.9%
12	Buildings Under Construction	2.3%
13	Motor Vehicle Risks	5.1%
14	Other Non-Manufacturing	2.3%
15	Storage	1.8%
17	Food Manufacturing	1.9%
18	Wood Manufacturing	3.3%
19	Wearing Apparel	2.2%
20	Chemical Manufacturing	2.2%
21	Metal Manufacturing	2.1%
22	Other Manufacturing	1.8%
	Total	2.1%

(A) For each rating group, the loss cost change for each CSP class in the rating group, by coverage and construction, is identical to the overall change shown for the rating group.

VERMONT
BASIC GROUP I RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	Statewide Coverage Loss Cost Change Of	1.103 10.3%
<u>TOP</u>	<u>\$ Lst Sq Formula Relativity</u>	<u>Credibility Z</u>	<u>Credibility Weighted Relativity</u>	<u>Balanced Relativity</u>	<u>Or</u>	
10	0.174	0.047	0.921	0.926		
31	1.130	0.023	1.003	1.008		
32	1.309	0.054	1.015	1.020		
33	0.918	0.022	0.998	1.003		
34	1.432	0.057	1.021	1.026		
35	1.404	0.061	1.021	1.026		
36	0.768	0.053	0.986	0.991		
37	0.801	0.051	0.989	0.994		
38	0.860	0.021	0.997	1.002		
Rating Group						
1	1.034	0.102	1.003	1.005		
2	0.875	0.045	0.994	0.996		
3	1.222	0.030	1.006	1.008		
4	0.823	0.147	0.972	0.974		
5	0.786	0.008	0.998	1.000		
6	0.994	0.073	1.000	1.002		
7	0.786	0.039	0.991	0.993		
8	1.181	0.098	1.016	1.018		
9	0.992	0.063	0.999	1.001		
10	0.986	0.059	0.999	1.001		
11	0.805	0.019	0.996	0.998		
13	1.595	0.057	1.027	1.029		
14	0.984	0.031	1.000	1.002		
15	0.867	0.035	0.995	0.997		
17	0.876	0.032	0.996	0.998		
18	1.369	0.028	1.009	1.011		
19	0.894	0.010	0.999	1.001		
20	0.880	0.007	0.999	1.001		
21	0.881	0.019	0.998	1.000		
22	0.892	0.042	0.995	0.997		
					Indicated Monoline Loss Cost Level	
<u>Territory</u>					<u>Change</u>	
Entire State	1.000	0.426	1.000	1.000	2.1%	

VERMONT
BASIC GROUP I RELATIVITY ANALYSIS

Sample Loss Cost Level Change Calculation for Rating Group 1:

Statewide Coverage Loss Cost Change	=	1.103
Territorial Relativity	=	1.000
Monoline (TOP 10) Relativity	=	0.926
Rating Group 01 Relativity	=	1.005
Indicated Monoline Loss Cost Level Change		
= 1.103 X 1.000 X 0.926 X 1.005	=	1.026
	or	2.6%

VERMONT
BASIC GROUP I RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

Type of Policy	Rating Group	(1) Accident Year Ending 03/31/2022 Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
TOP 10: Monoline						
	1 Apartments	61,876	324,788	0.269	0.247	0.215
	2 Other Habitational	63,521	368,958	0.019	0.173	0.151
	3 Restaurants & Bars	24,402	94,296	0.000	0.192	0.167
	4 Other Mercantile Risks	184,350	923,680	0.015	0.139	0.121
	5 Public Buildings	7,305	75,758	0.000	0.194	0.169
	6 Churches	21,432	95,618	0.000	0.192	0.167
	7 Schools	29,798	227,627	0.057	0.193	0.168
	8 Offices and Banks	92,583	493,938	0.066	0.180	0.157
	9 Recreational Facilities	66,407	435,955	0.403	0.291	0.253
	10 Hotels and Motels	15,100	137,491	0.611	0.317	0.276
	11 Hospitals and Nursing Homes	80,434	302,877	1.282	0.525	0.457
	13 Motor Vehicle Risks	94,057	461,305	0.119	0.199	0.173
	14 Other Non-Manufacturing	55,202	258,058	0.363	0.270	0.235
	15 Storage	62,139	222,826	0.000	0.180	0.157
	17 Food Manufacturing	16,862	69,429	0.000	0.195	0.170
	18 Wood Manufacturing	2,763	21,703	0.000	0.200	0.174
	19 Wearing Apparel	395	26,686	0.000	0.199	0.173
	20 Chemical Manufacturing	3,937	64,716	0.000	0.195	0.170
	21 Metal Manufacturing	17,329	91,440	0.000	0.192	0.167
	22 Other Manufacturing	42,344	189,379	1.121	0.443	0.386
	TOTAL	942,236	4,886,528	0.261	0.236	0.206
TOP 31: Multiline Hotels/Motels						
	10 Hotels and Motels	412,859	2,352,811	0.320	1.296	1.128
	TOTAL	412,859	2,352,811	0.320	1.296	1.128
TOP 32: Multiline Apartment						
	1 Apartments	682,366	4,229,516	1.976	1.574	1.370
	2 Other Habitational	289,224	1,491,925	0.523	1.332	1.159
	TOTAL	971,590	5,721,441	1.543	1.502	1.307
TOP 33: Multiline Office						

VERMONT
BASIC GROUP I RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

Type of Policy	Rating Group	(1) Accident Year Ending 03/31/2022 Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
	8 Offices and Banks	430,121	2,256,514	0.105	1.260	1.097
	TOTAL	430,121	2,256,514	0.105	1.260	1.097
TOP 34: Multiline Mercantile						
	3 Restaurants & Bars	112,325	1,065,658	4.880	2.038	1.774
	4 Other Mercantile Risks	696,941	3,597,934	0.773	1.368	1.191
	8 Offices and Banks	61,663	219,135	0.259	1.295	1.127
	13 Motor Vehicle Risks	75,054	327,499	11.820	3.133	2.727
	14 Other Non-Manufacturing	25,997	161,422	0.129	1.274	1.109
	15 Storage	123,482	687,018	1.112	1.429	1.244
	TOTAL	1,095,462	6,058,666	1.945	1.558	1.356
TOP 35: Multiline Institutional						
	2 Other Habitational	1,005	12,023	0.000	1.255	1.092
	5 Public Buildings	49,787	265,316	0.190	1.283	1.117
	6 Churches	576,040	3,045,012	2.275	1.622	1.412
	7 Schools	244,670	1,408,596	0.227	1.284	1.117
	8 Offices and Banks	107,926	600,622	6.423	2.279	1.983
	9 Recreational Facilities	104,464	427,456	0.000	1.252	1.090
	11 Hospitals and Nursing Homes	99,678	459,423	0.205	1.285	1.118
	13 Motor Vehicle Risks	357	10,491	0.000	1.255	1.092
	14 Other Non-Manufacturing	41,957	248,854	0.000	1.253	1.091
	TOTAL	1,225,884	6,477,793	1.704	1.527	1.329
TOP 36: Multiline Services						
	3 Restaurants & Bars	17,379	88,836	0.000	0.821	0.715
	4 Other Mercantile Risks	65,960	392,520	0.138	0.837	0.728
	8 Offices and Banks	85,671	401,590	0.255	0.855	0.744
	9 Recreational Facilities	367,977	1,838,305	0.844	0.940	0.818
	13 Motor Vehicle Risks	273,973	1,619,956	3.425	1.361	1.185
	14 Other Non-Manufacturing	76,308	502,100	2.240	1.150	1.001
	15 Storage	99,247	549,412	0.000	0.815	0.709
	21 Metal Manufacturing	1,880	35,164	0.000	0.821	0.715

VERMONT
BASIC GROUP I RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

Type of Policy	Rating Group	(1) Accident Year Ending 03/31/2022 Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
TOP 37: Multiline Industrial/Processing	22 Other Manufacturing	29,189	159,413	0.000	0.820	0.714
	TOTAL	1,017,584	5,587,296	1.426	1.037	0.903
	4 Other Mercantile Risks	59,051	242,734	0.000	0.819	0.713
	8 Offices and Banks	10,429	49,711	0.000	0.821	0.715
	14 Other Non-Manufacturing	4,059	11,412	0.000	0.822	0.715
	17 Food Manufacturing	304,157	1,231,634	0.059	0.816	0.710
	18 Wood Manufacturing	191,934	1,138,922	2.968	1.274	1.109
	19 Wearing Apparel	76,501	381,904	0.098	0.832	0.724
	20 Chemical Manufacturing	50,627	220,547	0.000	0.819	0.713
	21 Metal Manufacturing	122,646	635,441	0.039	0.820	0.714
	22 Other Manufacturing	272,286	1,426,004	0.150	0.829	0.721
	TOTAL	1,091,690	5,338,309	0.587	0.902	0.785
	4 Other Mercantile Risks	317,196	1,758,495	0.226	0.838	0.729
	8 Offices and Banks	52,993	302,184	0.052	0.826	0.719
	14 Other Non-Manufacturing	13,793	77,304	0.000	0.821	0.715
	TOTAL	383,982	2,137,983	0.194	0.836	0.727
TOP 38: Multiline Contractors						

VERMONT
BASIC GROUP I RELATIVITY ANALYSIS
SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

Type of Policy	Rating Group	(1) Accident Year Ending 03/31/2022 Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
TOP: All TOPS						
	1 Apartments	744,242	4,554,304	1.834	1.464	1.274
	2 Other Habitational	353,750	1,872,906	0.431	1.124	0.978
	3 Restaurants & Bars	154,106	1,248,790	3.557	1.608	1.400
	4 Other Mercantile Risks	1,323,498	6,915,363	0.470	1.019	0.887
	5 Public Buildings	57,092	341,074	0.166	1.144	0.996
	6 Churches	597,472	3,140,630	2.193	1.571	1.367
	7 Schools	274,468	1,636,223	0.209	1.166	1.014
	8 Offices and Banks	841,386	4,323,694	0.933	1.200	1.045
	9 Recreational Facilities	538,848	2,701,716	0.626	0.921	0.801
	10 Hotels and Motels	427,959	2,490,302	0.330	1.261	1.098
	11 Hospitals and Nursing Homes	180,112	762,300	0.686	0.946	0.823
	13 Motor Vehicle Risks	443,441	2,419,251	4.142	1.414	1.231
	14 Other Non-Manufacturing	217,316	1,259,150	0.894	0.934	0.813
	15 Storage	284,868	1,459,256	0.482	0.943	0.820
	17 Food Manufacturing	321,019	1,301,063	0.056	0.783	0.682
	18 Wood Manufacturing	194,697	1,160,625	2.926	1.259	1.096
	19 Wearing Apparel	76,896	408,590	0.097	0.829	0.721
	20 Chemical Manufacturing	54,564	285,263	0.000	0.774	0.674
	21 Metal Manufacturing	141,855	762,045	0.034	0.743	0.647
	22 Other Manufacturing	343,819	1,774,796	0.257	0.781	0.679
	TOTAL	7,571,408	40,817,341	1.097	1.149	1.000