

RULES – IMPLEMENTATION

FEBRUARY 7, 2024

COMMERCIAL MULTIPLE LINE

LI-ML-2024-003

MONTANA COMMERCIAL PACKAGE POLICY REVISED PACKAGE MODIFICATION FACTOR REVISION TO BE IMPLEMENTED

KEY MESSAGE

Revised Commercial Package Policy package modification factors for an overall statewide change of **4.0%** to be implemented.

BACKGROUND

In circular [LI-ML-2023-002](#), we provided you with information about the Commercial Package Policy modification factor experience review.

CONSIDERATION OF COVID-19

ISO has considered whether any adjustments need to be made to prospective loss costs or rating factors, which are based on historical experience (pre-COVID-19), to reflect the conditions in which these loss costs or rating factors will be effective (post-COVID-19). Commercial Package Policy Modification Factors are applied to separate underlying coverages that are then combined to create a package policy. Any adjustment that is made to the underlying coverage loss costs to reflect the potential impact of COVID-19 will, therefore, also be reflected in commercial package policy rating. While there will almost certainly be long-term behavioral, social and economic changes as a result of COVID-19, we expect, based on the information currently available, that those changes will have negligible effects on Commercial Package Policy Modification Factors. Therefore, ISO is not making any explicit adjustment to those factors due to COVID-19.

ISO ACTION

We are implementing [ML-2023-RLA1](#), which presents a review of Commercial Package Policy modification factors experience.

Refer to the attachment(s) for complete details.

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.

EFFECTIVE DATE

The ISO revision is subject to the following rule of application:

These changes are applicable to all policies written on or after July 1, 2024.

COMPANY ACTION

If you have authorized us to file on your behalf and decide:

- To use our revision and effective date, you are not required to file anything with the Insurance Department.
- To use our revision with a different effective date, to use our revision with modification, or to not use our revision, you must make an appropriate submission with the Insurance Department.

For guidance on submission requirements, consult the ISO State Filing Handbook.

In all correspondence with the Insurance Department on this revision, you should refer to ISO Filing Number ML-2023-RLA1 and SERFF Tracking Number ISOF-133971118, NOT this circular number. Communications with the regulator concerning a filing affecting multiple lines of business (i.e., CL, PL, AL filing designation) should specify the line(s) of business that you are addressing.

RATING SOFTWARE IMPACT

No new attributes are being introduced with this revision.

POLICYHOLDER NOTIFICATION

If you decide to implement this revision, you should check all applicable laws for the state(s) to which this revision applies to determine whether or not a specific policyholder notice requirement may apply. Please note that circular [LI-CL-2023-005](#) contains the ISO Guide To Renewals With Changed Conditions For Commercial Lines, which is available only as a guide to assist participating companies in complying with various conditional renewal statutes or regulations, for the major commercial lines of insurance serviced by ISO. The information in the Guide does not necessarily reflect all requirements or exceptions that may apply, and it is not intended as a substitute for your review of all applicable statutes and regulations concerning policyholder notification.

REVISION DISTRIBUTION

We will issue a Notice to Manualholders with an edition date of 7-24 (or the earliest possible subsequent date), along with any new and/or revised manual pages.

REFERENCE(S)

- [LI-ML-2023-002](#) (07/26/2023) Commercial Package Policy Experience Reviewed By Staff
- [LI-CL-2023-005](#) (02/21/2023) Commercial Lines Revised Lead Time Requirements Listing

ATTACHMENT(S)

Filing ML-2023-RLA1

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.

DATA QUALITY

Statistical plan data reported to ISO is first processed through a system of rigorous automated data verification procedures so that only valid data would be used for ratemaking. Subsequent to this initial data submission review, additional analyses on the statistical plan data involving an even more customized data review for this line were performed by staff. During these processes, various data records were excluded from the review. The ISO staff responsible for this circular also reviewed the data for reasonableness.

ACKNOWLEDGMENT OF ACTUARIAL QUALIFICATIONS

The American Academy of Actuaries' "Qualification 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 this rule revision 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, Bei Zhou, am an Actuarial Product Director 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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MONTANA
ADVISORY PACKAGE MODIFICATION FACTOR REVIEW
COMMERCIAL PACKAGE POLICY
ML-2023-RLA1
EXECUTIVE SUMMARY

PURPOSE

This document:

- presents a review of advisory Package Modification Factors (PMFs). PMFs are relativity factors used to adjust monoline loss costs as appropriate for multiline risks.
 - provides the analyses used to derive these advisory PMFs.
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CONSIDERATION
OF COVID-19

ISO has considered whether any adjustments need to be made to prospective loss costs or rating factors, which are based on historical experience (pre-COVID-19), to reflect the conditions in which these loss costs or rating factors will be effective (post-COVID-19). Commercial Package Policy Modification Factors are applied to separate underlying coverages that are then combined to create a package policy. Any adjustment that is made to the underlying coverage loss costs to reflect the potential impact of COVID-19 will therefore also be reflected in commercial package policy rating. While there will almost certainly be long-term behavioral, social and economic changes as a result of COVID-19, we expect, based on the information currently available, that those changes will have negligible effects on Commercial Package Policy Modification Factors. Therefore, ISO is not making any explicit adjustment to those factors due to COVID-19.

PMF CHANGES

The proposed Commercial Package Policy (CPP) Package Modification Factor changes are:

<u>Type of Policy</u>	<u>Property</u>	<u>Liability</u>	<u>Prop. & Liab.</u> <u>Total</u>
Motel/Hotel	0.0%	0.0%	0.0%
Apartment	12.6%	1.1%	10.8%
Office	-1.1%	3.1%	0.9%
Mercantile	6.9%	0.0%	3.8%
Institutional	8.6%	2.2%	7.4%
Services	3.1%	3.1%	3.1%
Indust./Proc.	4.5%	2.5%	3.7%
Contractors	<u>6.5%</u>	<u>1.0%</u>	<u>2.0%</u>
Statewide	6.3%	1.2%	4.0%

MONTANA

ADVISORY PACKAGE MODIFICATION FACTOR REVIEW

COMMERCIAL PACKAGE POLICY

ML-2023-RLA1

EXECUTIVE SUMMARY

INDICATED VS. CAPPED	Indicated PMF changes are based on standard ISO methodology. Differences between indicated and capped PMF changes are caused by rounding each indicated PMF to the nearest one percent and applying an upper cap of 1.00, where necessary.
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HISTORICAL SOURCE DATA	<p>The data used in this review is from ISO reporting companies for:</p> <ul style="list-style-type: none">• Basic Group I: five fiscal accident years ending 03/31/22.• Basic Group II: ten fiscal accident years ending 03/31/22.• Special Causes of Loss: five fiscal accident years ending 03/31/22.• Crime: calendar year ending 06/30/22.• Inland Marine: five calendar accident years ending 12/31/16.• Fidelity: policy year ending 12/31/21.• Owners, Landlords, and Tenants: five fiscal accident years ending 12/31/21.• Manufacturers and Contractors: five fiscal accident years ending 12/31/21.• Products: five calendar accident years ending 12/31/21.• Local Products and Completed Operations: five calendar accident years ending 12/31/21.
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PRIOR ISO REVISIONS	The latest revisions in this state are:
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<u>Filing</u>	ML-21-RLA1	ML-15-RLA1	ML-10-RLA1
<u>Dates</u>			
Implemented	7/1/2022	11/1/2015	11/1/2010
<u>Changes</u>			
Indicated	1.7%	1.6%	-1.7%
Filed	1.7%	1.6%	-1.8%
Implemented	1.7%	1.6%	-1.8%

MONTANA
ADVISORY PACKAGE MODIFICATION FACTOR REVIEW
COMMERCIAL PACKAGE POLICY
ML-2023-RLA1
EXECUTIVE SUMMARY

ADJUSTMENTS
TO REPORTED
EXPERIENCE

Standard actuarial procedures have been used in the reviews underlying the calculation of the PMFs, including adjusting the fire and liability losses to ultimate settlement level and, for all coverages, reflecting all loss adjustment expenses and trend. Specific procedures vary by subline.

TEN LARGEST
GROUPS IN
ISO DATA BASE

Insurers are listed in descending order based on the percent of statewide written premium volume from Annual Statement Page 15 for the year ending 12/31/21 for the Annual Statement Line of Business (ASLOB) indicated.

COMMERCIAL MULTI PERIL (ASLOB 51 & 52)

1. Liberty Mutual Insurance Company
 2. Cincinnati Insurance Company
 3. Travelers Indemnity Company
 4. Tokio Marine Companies
 5. American Hallmark Insurance Company Of Texas
 6. American International Group
 7. Insurance Company Of North America
 8. Nationwide Mutual Insurance Company
 9. Acuity - A Mutual Insurance Company
 10. Firemans Fund Insurance Company
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SIZE OF ISO
DATA BASE

The market share of ISO participating insurers as measured by Annual Statement Page 15 written premium for the year ending 12/31/2021 is:

Commercial Multi Peril (ASLOB 51 & 52). 49.9%.

ADDITIONAL
SUPPORTING
MATERIAL

Additional supporting material underlying the calculation of the experience review indications used in this PMF analysis may be found in the respective monoline experience review documents for each line.

MONTANA
ADVISORY PACKAGE MODIFICATION FACTOR REVIEW
COMMERCIAL PACKAGE POLICY
ML-2023-RLA1
EXECUTIVE SUMMARY

COMPANY DECISION

We encourage each insurer to decide independently whether the judgments made and the procedures or data used by ISO in developing the PMFs contained herein are appropriate for your 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 a 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 projection based on the aggregate data.

Some calculations included in this document involve areas of ISO staff judgment. Each company should carefully review and evaluate whether the ISO selected PMFs are appropriate for its use.

The material has been developed exclusively by the staff of Insurance Services Office, Inc.

COMMERCIAL PACKAGE POLICY

TABLE OF CONTENTS

	<u>Explanatory Pages</u>	<u>Corresponding Exhibits</u>
<u>SECTION A – SCOPE OF REVISION</u>		
Methodology Overview	Page 6	--
Summary of Package Modification Factor (PMF) Review	--	Exhibit A1
Calculation of Revised Package Modification Factors	Page 7-9	Exhibit A2
<u>SECTION B – CALCULATION OF PROPOSED CHANGES</u>		
PROPERTY COVERAGES		
Commercial Fire and Allied Lines		
Distribution of Advisory Loss Cost Level Change	Page 10-19	Exhibits B1-B5
Crime, Fidelity, and Inland Marine	Page 20	--
LIABILITY COVERAGES		
Distribution of Advisory Loss Cost Level Change	Page 21-26	Exhibits B8-B17

COMMERCIAL PACKAGE POLICY

SECTION A: SCOPE OF REVISION METHODOLOGY OVERVIEW

OBJECTIVE	A Commercial Package Policy (CPP) is essentially a combination of monoline coverages. CPP pricing employs monoline loss costs modified by Package Modification Factors (PMFs). These factors vary by the eight CPP types of policy and are reviewed annually. Monoline and multiline experience are combined and reviewed via a monoline/multiline relativity analysis. The resulting indicated PMFs represent the loss cost for a CPP <u>relative to</u> that for monoline policies providing the same coverages.
STEP 1: THE RELATIVITY ANALYSES	Each line of insurance develops indicated changes to monoline and multiline aggregate loss costs based on an experience ratio relativity analysis for that coverage. The monoline indication represents the needed change to monoline loss costs. The multiline indication represents the needed change to multiline aggregate loss costs, which is implemented through changes to the PMFs. For this PMF analysis, multiline indications are developed for each line of insurance and Type of Policy. Relativity analyses are explained in Section B.
STEP 2: CALCULATION OF THE PMFs	The procedure described above generates indicated Implicit PMFs (IPMFs) which vary by the various lines of insurance and by type of policy. IPMFs represent what the PMF would be for the CPP risk if only a single coverage were written. For each Type of Policy, IPMFs are weighted by CPP aggregate loss costs to determine the indicated property and liability PMFs. These PMFs may be capped, or rounded to the nearest one percent, and certain component IPMFs appropriately adjusted for this change. These calculations are explained in the remainder of Section A.

COMMERCIAL PACKAGE POLICY

SECTION A: SCOPE OF REVISION

CALCULATION OF REVISED PACKAGE MODIFICATION FACTORS (EXHIBIT A2)

OBJECTIVE Commercial package policies were introduced in the 1960's as a convenient tool for both insurer and insured to have the many types of insurance needed by commercial risks packaged under one cover. Thus fire, extended coverage, crime, liability insurance, etc. could be written using a single policy instead of several. Today, virtually any type of monoline coverage can also be purchased as part of a package policy such as the CPP.

The types of insured which can be written under a CPP are generally categorized into the following Types of Policy:

- . Motels and Hotels (TOP 31)
- . Apartments (TOP 32)
- . Offices (TOP 33)
- . Mercantile Operations (TOP 34)
- . Institutions (TOP 35)
- . Service Operations (TOP 36)
- . Industrial and Processing Operations (TOP 37)
- . Contractors (TOP 38)

PRICING OF POLICIES Since a CPP is essentially a combination of monoline coverages, CPP pricing employs monoline loss costs modified by PMFs (Package Modification Factors). These factors vary by the categories shown above and are reviewed annually.

CPP PMF REVIEW PROCEDURE The CPP review of Package Modification Factors, which appears in Table 2 of this document, determines the appropriate PMF loss cost level for each of the eight CPP categories. This is done by combining the indications of the simultaneous reviews of monoline and multiline experience for the various lines (or coverages).

A detailed explanation of the calculation of the revised PMFs follows.

COMMERCIAL PACKAGE POLICY

SECTION A: SCOPE OF REVISION

CALCULATION OF REVISED PACKAGE MODIFICATION FACTORS (EXHIBIT A2)

LINES OF INSURANCE (COVERAGES) INCLUDED

The CPP review reflects the contribution from each significant coverage which can be written on a CPP. Included are:

Property Coverages

- . Basic Group I (BGI) - the predominant property coverage included.
- . Basic Group II (BGII) - both Basic Group I and Basic Group II must be purchased under a CPP contract.
- . Special Causes of Loss (SCL) - typically a type of insurance which is purchased in addition to Basic Group I and Basic Group II in order to provide "all risk" property coverage for the insured.
- . Crime (CRIME) - Crime insurance is a commonly purchased CPP coverage.
- . Inland Marine (INL. MAR.) - A highly specialized line of property insurance, Inland Marine coverages can be purchased as part of a package policy.
- . Fidelity (FIDELITY) - Certain forms of fidelity insurance can be part of the CPP package. Various forms of employee dishonesty coverage are available.

Liability Coverages

- . Owners, Landlords and Tenants (OL&T) Liability - this is the prevalent type of Premises/Operations liability for CPP insureds.
- . Manufacturers and Contractors Liability (M&C) - this is the type of Premises/Operations liability insurance for risks whose liability exposure is more heavily off-premises than on.
- . Products/Completed Operations Liability (PROD) - this type of insurance protects against claims for damages arising from products/completed operations in conjunction with an insured's business. For review purposes, this line of insurance is split into the following two categories:
 - Products: experience for this category is reviewed on a multistate basis.
 - Local Products/ Completed Operations: experience for this category reflects an exposure to loss which is local in nature; therefore, individual state experience is used.

COMMERCIAL PACKAGE POLICY

SECTION A: SCOPE OF REVISION

CALCULATION OF REVISED PACKAGE MODIFICATION FACTORS (EXHIBIT A2)

THE IMPLICIT PACKAGE MODIFICATION FACTOR

For each applicable coverage listed under each of the eight (8) CPP categories, a "current implicit PMF" is shown in column (2). The definition of this factor follows:

For a given CPP category (e.g., apartments) the published Package Modification Factor (PMF) represents the loss cost for a CPP relative to that for monoline policies providing the same coverages. Thus a property (liability) PMF of .80 represents a 20% lower aggregate loss cost for a CPP than for the comparable monoline policies. This PMF, however, represents the CPP "loss cost" for all property (liability) coverages combined. Based on CPP experience, it has been determined that this CPP "loss cost" can differ significantly if it is determined for each property (liability) coverage individually. The IPMF represents what the PMF would be for that CPP risk if only a single coverage were written. The use of the IPMF in monoline/ multiline ratemaking and in the determination of revised CPP Package Modification Factors is significant in that it appropriately identifies how different the component parts of the multiline "loss cost" are.

THE MULTILINE INDICATION

Under the CPP ratemaking procedures, monoline and multiline experience are combined for each coverage. The results of these coverage analyses are indicated changes to monoline loss costs and also indicated CPP aggregate loss cost level changes. The CPP indications by coverage are then incorporated in the CPP PMF review. These indications (shown in column (3)) represent the needed adjustments to the IPMFs (shown in column (2)) described above.

The development of these indications is detailed in Section B.

THE INDICATED PMF

For each CPP category (and for property vs. liability), the indicated PMF is calculated as follows:

Each of the current IPMFs in column (2) is multiplied by the indicated percent change shown in column (3). A weighted average of the indicated IPMFs, using weights based on latest year aggregate loss costs at current ISO loss cost level (column (1) divided by column (2)), yields the indicated PMF at the bottom of column (4).

THE CAPPED PMF

The indicated PMF for each category (and for property vs. liability) shown at the bottom of column (4) is limited to a maximum of 1.00 in arriving at the proposed PMF (bottom of column (5)). All indicated PMFs which are below 1.00 are rounded to the nearest .01 in determining the proposed PMF. To the extent that any indicated PMFs are capped at 1.00, indicated PMFs below this value are adjusted in order to minimize any revenue changes which would result from capping.

In addition to the adjustments just described, the IPMFs (for property and liability) in column (4) are subject to minimum and maximum values and adjusted in column (5) so that they average to the proposed PMF shown at the bottom of column (5).

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE BASIC GROUP I AND SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS (EXHIBIT B1-B2)

OBJECTIVE	<p>The explanations which follow clarify Exhibits B1 and B2, the Basic Group I Relativity Analysis and the Special Causes of Loss Relativity Analysis, respectively. The purpose of these analyses is to:</p> <ol style="list-style-type: none">(1) determine monoline classification and territorial loss cost level needs for Basic Group I;(2) determine monoline category loss cost level need for Special Causes of Loss;(3) determine indicated changes to the eight property CPP Package Modification Factors based on Basic Group I/Special Causes of Loss experience.
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COLUMN (1)	<p><u>LEAST SQUARES FORMULA RELATIVITIES</u></p> <p>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).</p> <p>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 PMF); 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, or 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.</p>
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COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE BASIC GROUP I AND SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS (EXHIBIT B1-B2)

COLUMN (1)
(Cont'd)

The procedure uses 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 Exhibit B3 for Basic Group I and Exhibit B4 for Special Causes of Loss). Specifically, the iteration procedure uses the following formulas:

BASIC GROUP I:

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

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

SPECIAL CAUSES OF LOSS:

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

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

- 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;

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE BASIC GROUP I AND SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS (EXHIBIT B1-B2)

COLUMN (1)
(Cont'd)

- W_{ik} is the loss cost volume at current level for the i th Type of Policy and k th Territory;
- R_{ik} is the experience ratio relativity for the i th Type of Policy, k th Territory (Basic Group I);
- R_{ij} is the experience ratio relativity for the i th Type of Policy, j th Category (Special Causes of Loss);
- m is the number of Types of Policy in the analysis;
- n is the number of Rating Groups or 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 presents the five-year adjusted aggregate 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.

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE BASIC GROUP I AND SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS (EXHIBIT B1-B2)

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 CHANGES

The indicated changes by Type of Policy is calculated as follows:

$$\text{Indicated Change} = \frac{\text{Balanced Relativity for TOP}}{\text{Monoline Relativity}} - 1$$

MULTILINE CONSIDERATIONS

The type of policy (TOP) relativities are used to generate multiline indications which apply to the current Implicit Package Modification Factors (IPMFs). The indicated IPMFs are calculated 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 re-performed to take this into account. If an IPMF has been capped it is so noted at the bottom of Exhibits B1 and B2.

Loss cost changes for each TOP are calculated as described on Exhibits B1-B2.

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE BASIC GROUP I RELATIVITY ANALYSIS SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW (EXHIBIT B3)

INTRODUCTION	<p>The experience used in the relativity analysis and displayed in Exhibits B3 is the latest five years of accident year data as 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. Losses have also been developed to their ultimate settlement value by application of loss development factors.</p>
COLUMN (1)	<p><u>AGGREGATE LOSS COSTS</u></p> <p>The latest year adjusted 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 formulae used in the simultaneous review procedure.</p>
COLUMN (2)	<p><u>5 - YEAR 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 ratio 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>

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW (EXHIBIT B4)

INTRODUCTION	<p>The experience used in the relativity analysis and displayed on Exhibit B4 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 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>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>5 - YEAR 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>

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW (EXHIBIT B4)

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.

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE BASIC GROUP II RELATIVITY ANALYSIS (EXHIBIT B5)

OBJECTIVE	<p>The explanations which follow clarify Exhibit B5, the Basic Group II (BG II) relativity analysis. The purpose of this analysis is to:</p> <ol style="list-style-type: none">(1) determine the monoline loss cost level need;(2) determine indicated changes to the eight property Commercial Package Policy (CPP) Package Modification Factors (PMFs) based on Basic Group II experience.
COLUMN (1)	<p><u>AGGREGATE LOSS COSTS</u></p> <p>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.</p>
COLUMN (2)	<p><u>10 - YEAR EXPERIENCE RATIO</u></p> <p>These experience ratios are the ratio of the combined ten year CSP adjusted incurred losses (adjusted to current deductible and prospective cost levels including loss development, and also adjusted to reflect the BGII 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.</p>
COLUMN (3)	<p><u>FORMULA RELATIVITY</u></p> <p>The formula relativities are the ratios of the ten year 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.</p>

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE BASIC GROUP II RELATIVITY ANALYSIS (EXHIBIT B5)

COLUMN (3)
(Cont'd) Unlike the BGI and SCL relativity analyses, the BGII 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.

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 adjusted aggregate 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 and the monoline balanced formula relativity, divided by the current IPMF.

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES
PROPERTY COVERAGES: COMMERCIAL FIRE AND ALLIED LINES

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE
BASIC GROUP II RELATIVITY ANALYSIS (EXHIBIT B5)

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)

INDICATED LOSS COST CHANGES

The indicated multiline (by TOP) changes are calculated by taking the ratio of the TOP relativity (Column 7) to the monoline relativity.

For each 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.

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES PROPERTY COVERAGES: CRIME, FIDELITY, AND INLAND MARINE

Crime and Fidelity

The reviews for Crime (Burglary and Theft) and for Fidelity are performed on a multistate basis, combining both multiline and monoline experience. Unlike other coverages included in a Commercial Package Policy, there is no simultaneous review procedure for either Burglary and Theft or for Fidelity in which separate loss cost level changes can be determined for multiline and monoline experience. In the absence of a simultaneous review procedure, we are unable to determine Type of Policy relativities with which to price CPP policies relative to monoline policies and therefore have assumed a multiline change of 0.0% and thus no change to the historic Crime or Fidelity IPMFs.

Inland Marine

A simultaneous review procedure had been performed in the past to calculate indicated IPMFs for Inland Marine. Beginning with this review, the IPMFs for Inland Marine are being frozen at 0.910 since the results of the simultaneous review procedure were not used to calculate monoline loss cost level changes and the IPMFs have little impact, or weight, in the calculation of the overall Property PMFs. Indications for Inland Marine are to bring the current IPMFs to the 0.910 level.

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES LIABILITY COVERAGES: GENERAL LIABILITY

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE (EXHIBIT B8-B17)

OBJECTIVES	The objectives of this procedure are to: 1) determine monoline loss cost level needs for the appropriate rating variables; 2) determine indicated changes to the eight liability Commercial Package Policy (CPP) Package Modification Factors (PMFs) based on Premises/Operations and Products/Completed Operations data.	
EXPERIENCE BASE	The experience used in this relativity analysis is the latest five (5) years of accident year data, as reported under the Commercial Statistical Plan with aggregate loss costs adjusted to current loss cost level (multiline aggregate loss costs adjusted additionally by the current Implicit Package Modification Factors). Losses have been trended and developed in the Relativity Analysis. ALCCL have been trended.	
SIMULTANEOUS DETERMINATION OF RATING VARIABLE RELATIVITIES	<p>Once the aggregate loss costs at current level and incurred losses used in the analysis have been appropriately adjusted, the 5-year experience ratios are calculated for each combination of the appropriate rating variables. From these ratios, relativities to the statewide 5-year experience ratio are calculated. These relativities are then used in a minimum bias iterative review procedure, which simultaneously determines the relativities for each rating variable.</p> <p>The purpose of a simultaneous review procedure is to arrive at a set of relativities for each rating variable that best represent the experience. For example, the type of policy relativities will serve to derive the relationship of CPP policies relative to monoline policies, via the PMF, while the class group relativities will serve to derive the relationship of the various classifications relative to one another. An iterative technique is used to derive relativities for each rating variable. This procedure is in contrast to a one-way type of review, wherein relativities for each rating variable would each be reviewed separately.</p> <p>Such one-way types of review do not take into account differing percentages of experience of each rating variable within the other rating variables. The simultaneous review procedure accounts for these different distributions in generating relativities for each rating variable.</p>	
RATING VARIABLES USED	For Premises/Operations and Products/Completed Operations, the rating variables used in the relativity analysis are as follows:	
	Owners, Landlords and Tenants - Manufacturers and Contractors - Products - Local Products/Completed Operations-	Type of policy and Class group Type of policy and Class group Type of policy and Class group Type of policy, State and Class group

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES
LIABILITY COVERAGES: GENERAL LIABILITY

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE (EXHIBIT B8-B17)

ITERATIVE
PROCEDURE

The iterative technique referred to in the previous paragraph solves for a set of relativities for each rating variable based on the experience for the cells; that is, based on the experience ratio and latest year adjusted aggregate loss cost volume for each combination of rating variables relative to the experience ratio and adjusted aggregate loss cost volume for all combinations of rating variables combined. Specifically, the iterative procedure uses the following formulas:

For Owners, Landlords and Tenants:

$$TOP_i = \frac{\sum_j W_{ij} r_{ij}}{\sum_j W_{ij} CG_j} \quad \text{where } 1 \leq i \leq m$$
$$CG_j = \frac{\sum_i W_{ij} r_{ij}}{\sum_i W_{ij} TOP_i} \quad \text{where } 1 \leq j \leq n$$

TOP_i is the relative change for the i^{th} type of policy;

CG_j is the relative change for the j^{th} class group;

W_{ij} is the aggregate loss costs at current level for the i^{th} type of policy,

and j^{th} class group;

r_{ij} is the relative change for the i^{th} type of policy and j^{th} class group;

m is the number of types of policy in the analysis;

n is the number of class groups in the analysis;

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES
LIABILITY COVERAGES: GENERAL LIABILITY

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE (EXHIBIT B8-B17)

For Manufacturers and Contractors, and Products:

$$TOP_i = \frac{\sum_j W_{ij} r_{ij}}{\sum_j W_{ij} CG_j} \quad \text{where } 1 \leq i \leq m$$
$$CG_j = \frac{\sum_i W_{ij} r_{ij}}{\sum_i W_{ij} TOP_i} \quad \text{where } 1 \leq j \leq n$$

TOP_i is the relative change for the i^{th} type of policy;

CG_j is the relative change for the j^{th} class group;

W_{ij} is the aggregate loss costs at current level for the i^{th} type of policy,
and j^{th} class group;

r_{ij} is the relative change for the i^{th} type of policy, and j^{th} class group;

m is the number of types of policy in the analysis;

n is the number of class groups in the analysis;

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES
LIABILITY COVERAGES: GENERAL LIABILITY

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE (EXHIBIT B8-B17)

For Local Products/Completed Operations:

$$TOP_i = \frac{\sum_j \sum_k W_{ijk} r_{ijk}}{\sum_j \sum_k W_{ijk} CG_j ST_k} \quad \text{where } 1 \leq i \leq m$$
$$CG_j = \frac{\sum_i \sum_k W_{ijk} r_{ijk}}{\sum_i \sum_k W_{ijk} TOP_i ST_k} \quad \text{where } 1 \leq j \leq n$$
$$ST_k = \frac{\sum_i \sum_j W_{ijk} r_{ijk}}{\sum_i \sum_j W_{ijk} TOP_i CG_j} \quad \text{where } 1 \leq k \leq p$$

TOP_i is the relative change for the i^{th} type of policy;

CG_j is the relative change for the j^{th} class group;

ST_k is the relative change for the k^{th} state;

W_{ijk} is the aggregate loss costs at current level for the i^{th} type of policy,

j^{th} class group, and k^{th} state;

r_{ijk} is the relative change for the i^{th} type of policy, j^{th} class group, and k^{th} state;

m is the number of types of policy in the analysis;

n is the number of class groups in the analysis;

p is the number of states in the analysis;

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES
LIABILITY COVERAGES: GENERAL LIABILITY

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE (EXHIBIT B8-B17)

ITERATIVE
PROCEDURE
(Cont'd)

For example, for Owners, Landlords and Tenants, the procedure starts by inserting the actual relativities for type of policy into the second formula to get a class group relativity. The resultant class group relativities then produce a new set of type of policy relativities. The process continues on in that fashion until there is no appreciable difference from one iteration to the next.

APPLICATION OF
CREDIBILITY

Consideration is then given to the credibility of the experience for each rating variable. The credibility of each of these categories is based on the formula $Z = \sqrt{P/18,000}$ for Owners, Landlords and Tenants, $Z = \sqrt{P/18,000}$ for Manufacturers and Contractors and $Z = \sqrt{P/20,000}$ for Products, where P is the 5 year occurrence total for a given class group, territory or type of policy. For Local Products/Completed Operations, separate formulas are used to calculate the credibility of the experience for each type of policy and class group versus the credibility of the experience for each state, namely $Z = \sqrt{P/15,000}$ for type of policy and class group, and $Z = \sqrt{P/5,500}$ for state (in this case, P is the 5 year occurrence total for a given state). Credibility-weighted relativities are then calculated as follows:

$$W = RZ \quad \text{where:}$$

Z is the class group, state or type of policy credibility;
R is the class group, state or type of policy relativity;
W is the credibility-weighted relativity.

The resulting credibility-weighted relativities are then balanced to assure that the average relativity remains at unity.

INDICATED
CHANGES

The indicated changes by Type of Policy is calculated as follows:

$$\text{Indicated Change} = \frac{\text{Balanced Relativity for TOP}}{\text{Monoline Relativity}} - 1$$

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES
LIABILITY COVERAGES: GENERAL LIABILITY

DISTRIBUTION OF ADVISORY LOSS COST LEVEL CHANGE (EXHIBIT B8-B17)

MULTILINE
CONSIDERATIONS

The monoline relativities, the class group and state relativities which result from the aforementioned procedures are then used to generate indicated monoline classification loss cost changes. The multiline relativities, the class group and state relativities which result from the aforementioned procedures are then used to generate multiline indications that apply to the current Implicit Package Modification Factors. The indicated IPMFs are calculated 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 re-performed to take this into account.

CLM Divisions

- 2 - Equipment Breakdown
- 3 - Crime and Fidelity
- 4 - Commercial Farm
- 5 - Commercial Fire and Allied Lines
- 6 - General Liability
- 8 - Commercial Inland Marine

INSURANCE SERVICES OFFICE, INC.

MONTANA

COMMERCIAL PACKAGE POLICY
SUMMARY OF THIS REVIEW

TYPE OF POLICY	PROPERTY PMFS			LIABILITY PMFS			PROP. & LIAB. TOTAL
	CURRENT	CAPPED	% CHANGE	CURRENT	CAPPED	% CHANGE	% CHANGE
MOTEL/HOTEL(31)	1.00	1.00	0.0%	1.00	1.00	0.0%	0.0%
APARTMENT (32)	0.87	0.98	12.6%	0.93	0.94	1.1%	10.8%
OFFICE (33)	0.93	0.92	-1.1%	0.97	1.00	3.1%	0.9%
MERCANTILE (34)	0.87	0.93	6.9%	0.92	0.92	0.0%	3.8%
INSTITUTION(35)	0.81	0.88	8.6%	0.91	0.93	2.2%	7.4%
SERVICES (36)	0.97	1.00	3.1%	0.97	1.00	3.1%	3.1%
IND/PROC (37)	0.88	0.92	4.5%	0.80	0.82	2.5%	3.7%
CONTRACTORS(38)	0.93	0.99	6.5%	0.98	0.99	1.0%	2.0%
STATEWIDE			6.3%			1.2%	4.0%

INSURANCE SERVICES OFFICE, INC.

MONTANA
COMMERCIAL PACKAGE POLICY
CALCULATION OF REVISED CPP PACKAGE MODIFICATION FACTORS(PMF)

MOTEL/HOTEL(31) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	899,035	1.020	2.9%	1.050	0.975
BASIC GRP II	818,853	0.934	13.6%	1.061	0.987
SP CAUSE/LOSS	584,665	1.074	6.8%	1.147	1.066
* CRIME	3,988	0.774	0.0%	0.774	0.774
* INL. MAR.	8,401	0.910	0.0%	0.910	0.910
* FIDELITY	13,285	1.000	0.0%	1.000	1.000
TOTAL	2,328,227	1.000	7.5%	1.075	1.000
LIABILITY-					
OL&T	1,114,609	0.995	5.1%	1.046	1.000
TOTAL	1,114,609	1.000	4.6%	1.046	1.000

PROP. & LIAB.	3,442,836		6.6%		0.0%
TOTAL					
APARTMENT (32) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	1,045,489	0.667	3.8%	0.692	0.700
BASIC GRP II	1,268,600	1.030	22.7%	1.264	1.280
SP CAUSE/LOSS	763,017	1.009	3.9%	1.048	1.061
* CRIME	469	0.774	0.0%	0.774	0.774
* INL. MAR.	34	0.910	0.0%	0.910	0.910
* FIDELITY	2,090	1.000	0.0%	1.000	1.000
TOTAL	3,079,699	0.870	11.0%	0.966	0.980
LIABILITY-					
OL&T	576,660	0.930	1.0%	0.939	0.942
TOTAL	576,660	0.930	1.0%	0.939	0.940

PROP. & LIAB.	3,656,359		9.5%		10.8%
TOTAL					

* indicates coverage for which reviews are on a MULTISTATE basis.

INSURANCE SERVICES OFFICE, INC.

MONTANA
COMMERCIAL PACKAGE POLICY
CALCULATION OF REVISED CPP PACKAGE MODIFICATION FACTORS(PMF)

OFFICE (33) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	702,543	1.066	-7.4%	0.987	0.999
BASIC GRP II	784,288	0.787	6.5%	0.838	0.849
SP CAUSE/LOSS	530,335	0.957	-0.7%	0.950	0.961
* CRIME	949	0.774	0.0%	0.774	0.774
* INL. MAR.	14,090	0.910	0.0%	0.910	0.910
* FIDELITY	2,350	1.000	0.0%	1.000	1.000
TOTAL	2,034,555	0.930	-2.1%	0.911	0.920
LIABILITY-					
OL&T	1,687,597	1.002	3.0%	1.032	1.035
M&C	76,400	0.553	-0.2%	0.552	0.553
TOTAL	1,763,997	0.970	2.6%	0.996	1.000

PROP. & LIAB.	3,798,552		0.1%		0.9%
TOTAL					

MERCANTILE (34) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	2,687,958	0.887	6.1%	0.941	0.952
BASIC GRP II	1,955,521	0.960	6.1%	1.019	1.032
SP CAUSE/LOSS	870,522	0.699	3.5%	0.723	0.732
* CRIME	10,057	0.774	0.0%	0.774	0.774
* INL. MAR.	163,431	0.910	0.0%	0.910	0.910
* FIDELITY	67,686	1.000	0.0%	1.000	1.000
TOTAL	5,755,175	0.870	6.1%	0.923	0.930
LIABILITY-					
OL&T	3,126,476	0.913	0.0%	0.913	0.916
M&C	874,477	0.990	-5.2%	0.939	0.941
LOCAL PRODUCT	314,668	0.943	-0.2%	0.941	0.944
* MULTI PRODUCT	402,016	0.888	1.5%	0.901	0.901
TOTAL	4,717,637	0.920	-0.2%	0.918	0.920

PROP. & LIAB.	10,472,812		3.3%		3.8%
TOTAL					

* indicates coverage for which reviews are on a MULTISTATE basis.

INSURANCE SERVICES OFFICE, INC.

MONTANA
COMMERCIAL PACKAGE POLICY
CALCULATION OF REVISED CPP PACKAGE MODIFICATION FACTORS(PMF)

INSTITUTION(35) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	971,833	0.940	-5.3%	0.890	0.901
BASIC GRP II	1,045,268	0.801	27.0%	1.017	1.030
SP CAUSE/LOSS	495,371	0.585	1.9%	0.596	0.603
* CRIME	7,481	0.774	0.0%	0.774	0.774
* INL. MAR.	11,332	0.910	0.0%	0.910	0.910
* FIDELITY	18,039	1.000	0.0%	1.000	1.000
TOTAL	2,549,324	0.810	6.8%	0.865	0.880
LIABILITY-					
OL&T	577,833	0.937	1.7%	0.953	0.956
M&C	31,901	0.646	0.0%	0.646	0.648
TOTAL	609,734	0.910	2.2%	0.930	0.930

PROP. & LIAB.	3,159,058		5.9%		7.4%
TOTAL					

SERVICES (36) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	2,468,563	1.004	1.1%	1.015	0.985
BASIC GRP II	1,813,073	0.960	17.8%	1.131	1.098
SP CAUSE/LOSS	1,060,692	0.908	-0.4%	0.904	0.877
* CRIME	4,989	0.774	0.0%	0.774	0.774
* INL. MAR.	26,521	0.910	0.0%	0.910	0.910
* FIDELITY	37,951	1.000	0.0%	1.000	1.000
TOTAL	5,411,789	0.970	6.2%	1.030	1.000
LIABILITY-					
OL&T	831,721	1.024	-4.5%	0.978	1.042
M&C	760,197	0.771	-3.3%	0.746	0.795
LOCAL PRODUCT	543,236	1.365	-1.6%	1.343	1.432
* MULTI PRODUCT	128,634	0.964	0.5%	0.969	0.969
TOTAL	2,263,788	0.970	-2.9%	0.941	1.000

PROP. & LIAB.	7,675,577		3.5%		3.1%
TOTAL					

* indicates coverage for which reviews are on a MULTISTATE basis.

INSURANCE SERVICES OFFICE, INC.

MONTANA
COMMERCIAL PACKAGE POLICY
CALCULATION OF REVISED CPP PACKAGE MODIFICATION FACTORS(PMF)

IND/PROC (37) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	942,271	0.962	2.0%	0.981	0.993
BASIC GRP II	463,216	0.706	9.9%	0.776	0.786
SP CAUSE/LOSS	380,604	0.929	0.6%	0.935	0.946
* CRIME	1,786	0.774	0.0%	0.774	0.774
* INL. MAR.	2,354	0.910	0.0%	0.910	0.910
* FIDELITY	5,539	1.000	0.0%	1.000	1.000
TOTAL	1,795,770	0.880	3.0%	0.906	0.920
LIABILITY-					
M&C	888,738	0.784	2.2%	0.801	0.803
LOCAL PRODUCT	91,958	0.794	-2.1%	0.777	0.780
* MULTI PRODUCT	181,539	0.897	2.5%	0.919	0.919
TOTAL	1,162,235	0.800	2.0%	0.816	0.820

PROP. & LIAB.	2,958,005		2.6%		3.7%
TOTAL					

CONTRACTORS(38) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	924,909	0.884	2.5%	0.906	0.917
BASIC GRP II	572,983	1.020	11.6%	1.138	1.154
SP CAUSE/LOSS	338,969	0.923	1.0%	0.932	0.943
* CRIME	635	0.774	0.0%	0.774	0.774
* INL. MAR.	581	0.910	0.0%	0.910	0.910
* FIDELITY	6,794	1.000	0.0%	1.000	1.000
TOTAL	1,844,871	0.930	5.1%	0.977	0.990
LIABILITY-					
M&C	4,178,279	0.994	2.0%	1.014	1.017
LOCAL PRODUCT	4,203,901	0.958	-0.4%	0.954	0.958
TOTAL	8,382,180	0.980	0.3%	0.983	0.990

PROP. & LIAB.	10,227,051		1.2%		2.0%
TOTAL					

* indicates coverage for which reviews are on a MULTISTATE basis.

INSURANCE SERVICES OFFICE, INC.

MONTANA
COMMERCIAL PACKAGE POLICY
CALCULATION OF REVISED CPP PACKAGE MODIFICATION FACTORS(PMF)

STATEWIDE *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	10,642,601	0.913	1.8%	0.929	0.925
BASIC GRP II	8,721,802	0.913	14.8%	1.048	1.044
SP CAUSE/LOSS	5,024,175	0.853	2.1%	0.871	0.865
* CRIME	30,354	0.774	0.0%	0.774	0.774
* INL. MAR.	226,744	0.910	0.0%	0.910	0.910
* FIDELITY	153,734	1.000	0.0%	1.000	1.000
TOTAL	24,799,410	0.897	6.8%	0.958	0.953
LIABILITY-					
OL&T	7,914,896	0.956	1.1%	0.967	0.969
M&C	6,809,992	0.921	0.5%	0.926	0.934
LOCAL PRODUCT	5,153,763	0.984	-0.5%	0.979	0.989
* MULTI PRODUCT	712,189	0.903	1.6%	0.917	0.917
TOTAL	20,590,840	0.949	0.5%	0.954	0.960

PROP. & LIAB.	45,390,250		3.9%		4.0%
TOTAL					

* indicates coverage for which reviews are on a MULTISTATE basis.

INSURANCE SERVICES OFFICE, INC.

MONTANA
COMMERCIAL PACKAGE POLICY
CALCULATION OF REVISED CPP PACKAGE MODIFICATION FACTORS(PMF)

COMBINED PMFs

TYPE OF POLICY	CURRENT COMBINED	INDICATED COMBINED	CAPPED COMBINED
MOTEL/HOTEL(31)	1.000	1.066	1.000
APARTMENT (32)	0.880	0.962	0.970
OFFICE (33)	0.950	0.949	0.960
MERCANTILE (34)	0.900	0.921	0.930
INSTITUTION(35)	0.830	0.876	0.880
SERVICES (36)	0.970	1.004	1.000
IND/PROC (37)	0.840	0.869	0.880
CONTRACTORS(38)	0.970	0.982	0.990

NOTE: Combined PMFs are provided for informational purposes only.

INSURANCE SERVICES OFFICE, INC.
MONTANA
BASIC GROUP I RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	(5)
	LEAST SQUARES		CREDIBILITY		
TYPE OF	FORMULA		WEIGHTED	BALANCED	INDICATED
POLICY	RELATIVITY	CREDIBILITY	RELATIVITY	RELATIVITY	CHANGE
10	0.814	0.093	0.981	0.985	
31	1.334	0.034	1.010	1.014	2.9%
32	1.445	0.049	1.018	1.022	3.8%
33	0.071	0.036	0.909	0.912	-7.4%
34	1.403	0.120	1.041	1.045	6.1%
35	0.207	0.046	0.930	0.933	-5.3%
36	0.928	0.108	0.992	0.996	1.1%
37	1.020	0.046	1.001	1.005	2.0%
38	1.141	0.042	1.006	1.010	2.5%

INSURANCE SERVICES OFFICE, INC.

MONTANA

SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	(5)
	LEAST SQUARES		CREDIBILITY		
TYPE OF	FORMULA		WEIGHTED	BALANCED	INDICATED
POLICY	RELATIVITY	CREDIBILITY	RELATIVITY	RELATIVITY	CHANGE
10	0.844	0.133	0.978	0.983	
31	2.038	0.061	1.044	1.050	6.8%
32	1.187	0.085	1.015	1.021	3.9%
33	0.630	0.064	0.971	0.976	-0.7%
34	1.116	0.101	1.011	1.017	3.5%
35	0.928	0.059	0.996	1.002	1.9%
36	0.784	0.110	0.974	0.979	-0.4%
37	0.702	0.046	0.984	0.989	0.6%
38	0.726	0.014	0.996	0.993	1.0%
CATEGORY					
1	1.007	0.606	1.004	1.002	
2	0.554	0.050	0.971	0.969	
3	1.539	0.040	1.017	1.015	
4	0.765	0.039	0.990	0.988	
5	1.276	0.027	1.007	1.005	
6	1.228	0.016	1.003	1.001	
7	0.576	0.050	0.973	0.971	
8	0.855	0.026	0.996	0.994	
9	1.153	0.047	1.007	1.005	
10	0.977	0.019	1.000	0.998	
11	1.148	0.028	1.004	1.002	
12	0.960	0.061	0.998	0.996	
13	1.049	0.032	1.002	1.000	
14	0.990	0.046	1.000	0.998	

INSURANCE SERVICES OFFICE, INC.

MONTANA

BASIC GROUP I RELATIVITY ANALYSIS

SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

TYPE OF POLICY	(1)	(2)	(3)	(4)
	ACCIDENT YEAR			
	ENDING 3/31/22	5 - YEAR	5 - YEAR	RELATIVITY
	AGGREGATE LOSS COSTS	AGGREGATE LOSS COSTS	EXPERIENCE RATIO	

ENTIRE STATE				
10 MONOLINE	2,136,943	10,279,398	0.769	0.814
31 MULTILINE MOTEL/HOTEL	899,035	3,537,198	1.260	1.333
32 MULTILINE APARTMENT	1,045,489	5,141,381	1.365	1.444
33 MULTILINE OFFICE	702,543	3,784,273	0.067	0.071
34 MULTILINE MERCANTILE	2,687,958	13,681,819	1.325	1.402
35 MULTILINE INSTITUTIONAL	971,833	4,837,899	0.196	0.207
36 MULTILINE SERVICES	2,468,563	12,156,222	0.877	0.928
37 MULTILINE INDUST/PROCESS	942,271	4,840,711	0.964	1.020
38 MULTILINE CONTRACTORS	<u>924,909</u>	<u>4,340,560</u>	<u>1.077</u>	<u>1.140</u>
TOTAL ALL TOPS*	12,779,544	62,599,461	0.945	1.000

* TOTALS IN COLUMNS (3) & (4) ARE AVERAGES USING COLUMN (1) AS WEIGHTS.

INSURANCE SERVICES OFFICE, INC.

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

TYPE OF POLICY	CATEGORY	(1) ACCIDENT YEAR ENDING 3/31/22 AGGREGATE LOSS COSTS	(2) 5 - YEAR AGGREGATE LOSS COSTS	(3) 5 - YEAR EXPERIENCE RATIO	(4) CREDIBILITY WEIGHTED EXPERIENCE RATIO	(5) CREDIBILITY WEIGHTED RELATIVITY
10 MONOLINE	01 BUILDINGS	888,224	4,429,049	1.040	1.034	0.865
	02 RES. APTS. AND COND	31,450	166,465	0.204	0.654	0.547
	03 OFFICES	39,198	173,921	2.387	1.560	1.304
	04 MERCANTILE - HIGH	35,906	168,547	1.724	1.279	1.069
	05 MERCANTILE - MEDIUM	15,464	63,899	0.090	0.701	0.586
	06 MERCANTILE - LOW	5,969	25,309	0.420	0.830	0.694
	07 MOTELS AND HOTELS	17,677	357,255	0.067	0.480	0.401
	08 INSTITUTIONAL - HIG	17,091	81,472	0.086	0.682	0.570
	09 INSTITUTIONAL - LOW	20,995	186,469	0.550	0.789	0.660
	10 INDUST-PROC - HIGH	14,893	50,069	0.182	0.743	0.621
	11 INDUST-PROC - LOW	22,278	107,763	1.621	1.199	1.003
	12 SERVICE - HIGH	20,348	93,746	0.000	0.640	0.535
	13 SERVICE - LOW	20,998	101,719	0.437	0.783	0.655
	14 CONTRACTORS	21,284	109,404	1.762	1.250	1.045
	TOTAL*	1,171,775	6,115,087	1.015	1.018	0.851
31 MULTILINE	01 BUILDINGS	439,607	2,145,255	2.826	2.499	2.089
MOTEL/HOTEL	07 MOTELS AND HOTELS	145,058	440,052	1.491	1.430	1.196
	TOTAL*	584,665	2,585,307	2.495	2.234	1.867
32 MULTILINE	01 BUILDINGS	664,937	3,112,285	1.472	1.456	1.217
APARTMENT	02 RES. APTS. AND COND	98,080	619,704	0.251	0.794	0.664
	TOTAL*	763,017	3,731,989	1.315	1.371	1.146
33 MULTILINE	01 BUILDINGS	447,084	2,286,759	0.605	0.772	0.645
OFFICE	03 OFFICES	82,636	435,281	0.945	1.187	0.992
	04 MERCANTILE - HIGH	136	2,663	4.509	1.738	1.453
	08 INSTITUTIONAL - HIG	364	1,807	0.000	1.224	1.023
	12 SERVICE - HIGH	90	419	0.000	1.226	1.025
	14 CONTRACTORS	25	247	0.000	1.226	1.025
	TOTAL*	530,335	2,727,176	0.658	0.837	0.700
34 MULTILINE	01 BUILDINGS	665,539	3,451,678	1.366	1.368	1.144
MERCANTILE	03 OFFICES	279	1,755	0.000	1.224	1.023
	04 MERCANTILE - HIGH	89,365	430,743	0.469	0.979	0.819
	05 MERCANTILE - MEDIUM	71,196	357,671	2.310	1.755	1.467
	06 MERCANTILE - LOW	41,299	207,811	2.335	1.674	1.400
	08 INSTITUTIONAL - HIG	-	127	0.000	1.227	1.026
	11 INDUST-PROC - LOW	18	36	0.000	1.227	1.026
	12 SERVICE - HIGH	636	2,875	0.000	1.222	1.022

INSURANCE SERVICES OFFICE, INC.

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

TYPE OF POLICY	CATEGORY	(1) ACCIDENT YEAR ENDING 3/31/22 AGGREGATE LOSS COSTS	(2) 5 - YEAR AGGREGATE LOSS COSTS	(3) 5 - YEAR EXPERIENCE RATIO	(4) CREDIBILITY WEIGHTED EXPERIENCE RATIO	(5) CREDIBILITY WEIGHTED RELATIVITY
	13 SERVICE - LOW	522	2,750	0.000	1.222	1.022
	14 CONTRACTORS	1,668	15,278	0.000	1.202	1.005
	TOTAL*	870,522	4,470,724	1.392	1.374	1.149
35 MULTILINE INSTITUTIONAL	01 BUILDINGS	364,388	1,801,022	1.041	1.128	0.943
	03 OFFICES	843	1,652	0.000	1.224	1.023
	08 INSTITUTIONAL - HIG	42,548	266,150	0.276	0.995	0.832
	09 INSTITUTIONAL - LOW	85,684	429,512	1.563	1.461	1.222
	12 SERVICE - HIGH	99	329	0.000	1.226	1.025
	13 SERVICE - LOW	1,809	5,732	0.000	1.217	1.018
	14 CONTRACTORS	-	9	0.000	1.227	1.026
	TOTAL*	495,371	2,504,406	1.060	1.175	0.982
36 MULTILINE SERVICES	01 BUILDINGS	732,008	3,486,908	1.240	0.963	0.805
	03 OFFICES	29	45	0.000	0.827	0.691
	04 MERCANTILE - HIGH	1,610	9,104	4.320	1.290	1.079
	05 MERCANTILE - MEDIUM	348	1,466	0.000	0.827	0.691
	06 MERCANTILE - LOW	648	3,086	11.058	2.012	1.682
	08 INSTITUTIONAL - HIG	10,719	54,411	0.000	0.827	0.691
	09 INSTITUTIONAL - LOW	65,807	122,894	0.000	0.827	0.691
	10 INDUST-PROC - HIGH	770	4,356	0.000	0.827	0.691
	11 INDUST-PROC - LOW	-	236	47.038	5.867	4.906
	12 SERVICE - HIGH	172,729	871,105	0.871	0.921	0.770
	13 SERVICE - LOW	74,813	387,201	1.844	1.026	0.858
	14 CONTRACTORS	1,211	8,831	0.000	0.827	0.691
	TOTAL*	1,060,692	4,949,643	1.141	0.952	0.796
37 MULTILINE INDUST/PROC	01 BUILDINGS	270,969	1,349,999	0.327	0.860	0.719
	03 OFFICES	-	11	0.000	0.827	0.691
	04 MERCANTILE - HIGH	-	93	0.000	0.827	0.691
	08 INSTITUTIONAL - HIG	127	127	0.000	0.827	0.691
	10 INDUST-PROC - HIGH	45,535	234,243	0.384	0.868	0.726
	11 INDUST-PROC - LOW	63,345	327,160	1.403	0.978	0.818
	12 SERVICE - HIGH	-	311	0.000	0.827	0.691
	14 CONTRACTORS	628	5,265	0.000	0.827	0.691
	TOTAL*	380,604	1,917,209	0.512	0.881	0.736
38 MULTILINE CONTRACTORS	01 BUILDINGS	212,296	1,003,564	0.606	0.892	0.746
	03 OFFICES	796	6,056	0.173	0.846	0.707
	04 MERCANTILE - HIGH	-	169	855.408	92.479	77.324

INSURANCE SERVICES OFFICE, INC.

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

TYPE OF POLICY	CATEGORY	(1) ACCIDENT YEAR ENDING 3/31/22 AGGREGATE LOSS COSTS	(2) 5 - YEAR AGGREGATE LOSS COSTS	(3) 5 - YEAR EXPERIENCE RATIO	(4) CREDIBILITY WEIGHTED EXPERIENCE RATIO	(5) CREDIBILITY WEIGHTED RELATIVITY
	06 MERCANTILE - LOW	15	15	0.000	0.827	0.691
	08 INSTITUTIONAL - HIG	304	1,318	0.000	0.827	0.691
	11 INDUST-PROC - LOW	64	286	0.000	0.827	0.691
	12 SERVICE - HIGH	375	1,181	0.000	0.827	0.691
	14 CONTRACTORS	125,119	582,482	0.373	0.867	0.725
	Total	338,969	1,595,071	0.518	0.883	0.738
TOTAL ALL TOPS*	01 BUILDINGS	4,685,052	23,066,519	1.244	1.234	1.031
	02 RES. APTS. AND COND	129,530	786,169	0.240	0.760	0.636
	03 OFFICES	123,781	618,721	1.388	1.303	1.089
	04 MERCANTILE - HIGH	127,017	611,319	0.877	1.069	0.894
	05 MERCANTILE - MEDIUM	87,008	423,036	1.906	1.564	1.307
	06 MERCANTILE - LOW	47,931	236,221	2.214	1.573	1.316
	07 MOTELS AND HOTELS	162,735	797,307	1.336	1.327	1.110
	08 INSTITUTIONAL - HIG	71,153	405,412	0.186	0.895	0.748
	09 INSTITUTIONAL - LOW	172,486	738,875	0.843	1.137	0.951
	10 INDUST-PROC - HIGH	61,198	288,668	0.330	0.837	0.700
	11 INDUST-PROC - LOW	85,705	435,481	1.458	1.035	0.866
	12 SERVICE - HIGH	194,277	969,966	0.774	0.893	0.746
	13 SERVICE - LOW	98,142	497,402	1.499	0.979	0.818
	14 CONTRACTORS	149,935	721,516	0.561	0.925	0.773
	TOTAL*	6,195,950	30,596,612	1.181	1.196	1.000

* TOTALS IN COLUMNS (3), (4) & (5) ARE AVERAGES USING COLUMN (1) AS WEIGHTS.

INSURANCE SERVICES OFFICE, INC.

MONTANA

BASIC GROUP II RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ACCIDENT YEAR ENDING 3/31/22 AGGR. LOSS COSTS AT CURRENT IMPLICIT PMF	ACCIDENT YEARS 2013 - 2022 EXPER. RATIO AT CURRENT PMF	FORMULA RELATIVITY (2)/ 1.227	CREDIBILITY C	CREDIBILITY WEIGHTED RELATIVITY D	BALANCED FORMULA RELATIVITY E	NORMALIZED FORMULA RELATIVITY F	INDICATED CHANGE
	-----	-----	-----	-----	-----	-----	-----	-----
MONOLINE	1,887,532	0.834	0.6800	0.277	0.911	0.9110	0.8914	
MULTILINE	8,721,802	1.312	1.0690	0.650	1.045	1.0460	1.0230	
	-----	-----	-----	-----	-----	-----	-----	
COVERAGE	10,609,334	1.2270	1.0000			1.0220	0.9996	
MULTILINE TOP								
31 MOTEL/HOTEL	818,853	1.310	1.0680	0.133	1.009	1.0350	1.0127	13.6%
32 APARTMENT	1,268,600	1.721	1.4030	0.223	1.090	1.1180	1.0939	22.7%
33 OFFICE	784,288	0.731	0.5960	0.133	0.946	0.9700	0.9491	6.5%
34 MERCANTILE	1,955,521	0.990	0.8070	0.294	0.943	0.9670	0.9462	6.1%
35 INSTITUTIONAL	1,045,268	1.930	1.5730	0.223	1.128	1.1570	1.1321	27.0%
36 SERVICES	1,813,073	1.440	1.1740	0.265	1.046	1.0730	1.0499	17.8%
37 INDUST/PROCESS	463,216	0.877	0.7150	0.085	0.976	1.0010	0.9795	9.9%
38 CONTRACTORS	572,983	1.124	0.9160	0.096	0.992	1.0170	0.9951	11.6%
	-----	-----	-----	-----	-----	-----	-----	
	8,721,802	1.3120	1.0700		1.0190	1.0460	1.0230	

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 - $(6) = (5) * (1.045/1.019)$

F - $(7) = (6) / 1.022$

INSURANCE SERVICES OFFICE, INC.

MONTANA
OWNERS, LANDLORDS AND TENANTS
BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	(1) BAILEY FORMULA RELATIVITY	(2) CREDIBILITY CREDIBILITY	(3) CREDIBILITY WEIGHTED RELATIVITY	(4) BALANCED RELATIVITY	(5) INDICATED CHANGE
10	0.910	0.097	0.991	0.991	
31	1.701	0.077	1.042	1.042	5.1%
32	1.023	0.052	1.001	1.001	1.0%
33	1.225	0.102	1.021	1.021	3.0%
34	0.929	0.120	0.991	0.991	0.0%
35	1.135	0.061	1.008	1.008	1.7%
36	0.353	0.054	0.945	0.946	-4.5%
CLASS GROUP					
1	0.979	0.063	0.999	1.003	
2	0.423	0.061	0.949	0.952	
3	1.538	0.086	1.038	1.042	
4	0.283	0.015	0.981	0.985	
5	0.077	0.017	0.957	0.962	
6	1.793	0.029	1.017	1.021	
7	1.598	0.066	1.031	1.035	
8	0.583	0.015	0.992	0.996	
9	0.656	0.085	0.965	0.969	
10	1.699	0.057	1.031	1.035	
11	1.226	0.058	1.012	1.016	
12	1.123	0.118	1.014	1.018	
13	1.162	0.021	1.003	1.007	
16	0.013	0.007	0.970	0.972	

INSURANCE SERVICES OFFICE, INC.

MONTANA

MANUFACTURERS AND CONTRACTORS

BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	(1)	(2)	(3)	(4)	(5)
	BAILEY FORMULA RELATIVITY	CREDIBILITY	CREDIBILITY WEIGHTED RELATIVITY	BALANCED RELATIVITY	INDICATED CHANGE
10	1.027	0.109	1.003	0.997	
33	1.020	0.018	1.000	0.995	-0.2%
34	0.368	0.051	0.950	0.945	-5.2%
35	1.211	0.013	1.002	0.997	0.0%
36	0.623	0.065	0.970	0.964	-3.3%
37	1.692	0.046	1.024	1.019	2.2%
38	1.185	0.135	1.023	1.017	2.0%
CLASS GROUP					
30	1.117	0.051	1.006	1.006	
31	1.053	0.088	1.005	1.005	
32	0.982	0.132	0.998	0.998	
33	0.927	0.049	0.996	0.996	
34	1.585	0.072	1.034	1.034	
35	0.598	0.017	0.991	0.992	
36	0.103	0.025	0.945	0.945	
37	0.128	0.025	0.950	0.950	
38	1.649	0.050	1.025	1.025	

INSURANCE SERVICES OFFICE, INC.

MONTANA
OWNERS, LANDLORDS, AND TENANTS
SUMMARY OF EXPERIENCE USED IN BASIC LIMIT RELATIVE CHANGE ANALYSIS

TERRITORY ALL		(1)	(2)	(3)	(4)	(5)	(6)
TYPE OF POLICY	CLASS GROUP	CALENDAR A.Y.E. 12/31/21 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2017-2021 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
10 MONOLINE	01 FOOD&BEV.(RETAIL)	\$28,595	\$186,988	1.977	1.794	15	0.994
	02 RESTAURANTS	\$130,869	\$694,517	0.289	0.262	9	0.943
	03 STORES	\$24,046	\$273,277	1.067	0.968	13	1.033
	04 VENDING & RENTAL	\$4,067	\$25,764	0.270	0.245	1	0.976
	05 FOOD & BEV. DIST.	\$15,208	\$57,990	0.000	0.000	0	0.953
	06 NON-FOOD&BEV.DIST	\$18,455	\$79,933	0.076	0.069	2	1.012
	07 CLUBS,AMSMT&SPRTS	\$164,362	\$972,567	1.833	1.664	36	1.026
	08 HEALTH CARE FACIL	\$11,478	\$77,492	0.000	0.000	0	0.987
	09 HOTELS AND MOTELS	\$62,990	\$651,266	0.806	0.731	23	0.960
	10 SCHLS & CHURCHES	\$27,176	\$185,027	0.601	0.545	9	1.026
	11 APARTMENTS	\$146,829	\$859,285	1.330	1.207	20	1.007
	12 BUILDINGS&OFFICES	\$287,994	\$1,359,971	1.204	1.092	40	1.009
	13 MISC. PREMISES	\$12,299	\$88,545	0.000	0.000	0	0.998
	TOTAL *	\$934,368	\$5,512,622	1.105		168	
31 MULT MOTEL/HOTEL	09 HOTELS AND MOTELS	\$614,448	\$3,145,250	1.230	1.116	107	1.010
	TOTAL *	\$614,448	\$3,145,250	1.230		107	
32 MULT APARTMENT	11 APARTMENTS	\$249,380	\$1,203,466	1.322	1.199	40	1.017
	12 BUILDINGS&OFFICES	\$68,514	\$338,967	1.481	1.344	8	1.019
	TOTAL *	\$317,894	\$1,542,433	1.356		48	
33 MULT OFFICE	12 BUILDINGS&OFFICES	\$927,843	\$4,566,856	1.519	1.379	188	1.039
	13 MISC. PREMISES	\$2,475	\$12,128	0.000	0.000	0	1.028
	TOTAL *	\$930,318	\$4,578,984	1.515		188	
34 MULT MERCANTILE	01 FOOD&BEV.(RETAIL)	\$236,808	\$2,037,433	0.882	0.800	57	0.994
	02 RESTAURANTS	\$945,078	\$4,188,003	0.452	0.410	59	0.943
	03 STORES	\$381,670	\$1,891,535	1.589	1.442	114	1.033
	04 VENDING & RENTAL	\$1,061	\$6,329	0.856	0.777	1	0.976
	05 FOOD & BEV. DIST.	\$60,618	\$280,621	0.098	0.089	5	0.953
	06 NON-FOOD&BEV.DIST	\$36,724	\$205,897	2.700	2.450	13	1.012
	12 BUILDINGS&OFFICES	\$61,566	\$439,980	0.683	0.620	11	1.009
	TOTAL *	\$1,723,526	\$9,049,799	0.807		260	
35 MULT INSTITUT.	07 CLUBS,AMSMT&SPRTS	\$50,895	\$304,020	1.546	1.403	12	1.043
	08 HEALTH CARE FACIL	\$35,091	\$166,945	0.920	0.835	4	1.004
	10 SCHLS & CHURCHES	\$198,146	\$996,851	2.279	2.068	50	1.043
	12 BUILDINGS&OFFICES	\$2,265	\$12,464	0.548	0.497	1	1.026
	13 MISC. PREMISES	\$8,470	\$38,283	0.000	0.000	0	1.015
	16 GOVT SUBDIVISIONS	\$23,675	\$47,345	0.017	0.015	1	0.980
	TOTAL *	\$318,541	\$1,565,909	1.771		68	

INSURANCE SERVICES OFFICE, INC.

MONTANA
OWNERS, LANDLORDS, AND TENANTS
SUMMARY OF EXPERIENCE USED IN BASIC LIMIT RELATIVE CHANGE ANALYSIS

TERRITORY ALL		(1) CALENDAR A.Y.E. 12/31/21 AGGREGATE LOSS COSTS AT CURRENT LEVEL	(2) CALENDAR A.Y.E. 2017-2021 AGG LOSS COST CURRENT LEVEL	(3) FIVE YEAR EXPERIENCE RATIO	(4) RELATIVITY	(5) NUMBER OF OCCURRENCES	(6) BAL CELL RELATIVITY
TYPE OF POLICY	CLASS GROUP						
36 MULT SERVICES	03 STORES	\$61,573	\$210,870	0.687	0.624	7	0.986
	04 VENDING & RENTAL	\$14,939	\$82,496	0.074	0.067	2	0.932
	07 CLUBS,AMSMT&SPRTS	\$286,547	\$1,640,434	0.569	0.516	30	0.979
	08 HEALTH CARE FACIL	\$1	\$2	0.000	0.000	0	0.942
	09 HOTELS AND MOTELS	\$39,200	\$229,394	0.017	0.016	1	0.917
	10 SCHLS & CHURCHES	\$1,008	\$4,210	0.000	0.000	0	0.979
	12 BUILDINGS&OFFICES	\$31,089	\$227,423	0.095	0.086	4	0.963
	13 MISC. PREMISES	\$24,144	\$104,831	1.716	1.557	8	0.953
	TOTAL *	\$458,501	\$2,499,659	0.549		52	
TOTAL ALL TOP	01 FOOD&BEV.(RETAIL)	\$265,403	\$2,224,421	1.000		72	
	02 RESTAURANTS	\$1,075,948	\$4,882,521	0.432		68	
	03 STORES	\$467,289	\$2,375,682	1.444		134	
	04 VENDING & RENTAL	\$20,068	\$114,589	0.155		4	
	05 FOOD & BEV. DIST.	\$75,827	\$338,612	0.078		5	
	06 NON-FOOD&BEV.DIST	\$55,179	\$285,830	1.822		15	
	07 CLUBS,AMSMT&SPRTS	\$501,804	\$2,917,022	1.082		78	
	08 HEALTH CARE FACIL	\$46,570	\$244,439	0.693		4	
	09 HOTELS AND MOTELS	\$716,638	\$4,025,910	1.126		131	
	10 SCHLS & CHURCHES	\$226,329	\$1,186,088	2.068		59	
	11 APARTMENTS	\$396,209	\$2,062,751	1.325		60	
	12 BUILDINGS&OFFICES	\$1,379,271	\$6,945,660	1.380		252	
	13 MISC. PREMISES	\$47,387	\$243,787	0.874		8	
	16 GOVT SUBDIVISIONS	\$23,675	\$47,345	0.017		1	
	TOTAL *	\$5,297,596	\$27,894,657	1.102		891	

* TOTALS IN COLUMNS (3) ARE AVERAGES USING COLUMN (1) AS WEIGHTS.

INSURANCE SERVICES OFFICE, INC.

MONTANA
MANUFACTURERS AND CONTRACTORS
SUMMARY OF EXPERIENCE USED IN BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	CLASS GROUP	(1)	(2)	(3)	(4)	(5)	(6)
		CALENDAR A.Y.E. 12/31/21 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2017-2021 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
10 MONOLINE	30 SERVICE	\$88,904	\$384,265	0.242	0.387	10	1.003
	31 LIGHT CONTRACTING	\$244,466	\$1,135,039	0.891	1.426	30	1.002
	32 MEDIUM CONTRCTING	\$1,146,295	\$5,504,712	0.588	0.941	127	0.995
	33 HEAVY CONTRACTING	\$268,837	\$1,338,703	0.809	1.294	11	0.993
	34 DEALER OR DISTRIB	\$176,108	\$746,677	0.811	1.298	15	1.031
	35 LGT. MANUFACTURER	\$12,572	\$47,058	0.054	0.086	2	0.989
	36 MED. MANUFACTURER	\$76,586	\$345,866	0.007	0.011	2	0.942
	37 HVY. MANUFACTURER	\$151,826	\$430,634	0.176	0.282	7	0.947
	38 MISC. OPERATION	\$79,931	\$285,074	1.202	1.923	10	1.022
	TOTAL *	\$2,245,526	\$10,218,029	0.622		214	
33 MULT OFFICE	31 LIGHT CONTRACTING	\$5,619	\$24,623	0.106	0.170	1	1.000
	32 MEDIUM CONTRACTING	\$1,157	\$5,255	0	0.000	0	0.993
	33 HEAVY CONTRACTING	\$26,846	\$113,194	0.012	0.019	1	0.991
	38 MISC. OPERATION	\$8,496	\$38,014	3.341	5.346	4	1.020
	TOTAL *	\$42,117	\$181,086	0.696		6	
34 MULT MERCANTILE	30 SERVICE	\$17,172	\$54,072	0.263	0.421	3	0.951
	32 MEDIUM CONTRCTING	\$7,532	\$48,203	0.761	1.218	2	0.943
	34 DEALER OR DISTRIB	\$443,111	\$1,994,079	0.327	0.523	32	0.977
	36 MED. MANUFACTURER	\$307	\$601	0	0.000	0	0.893
	38 MISC. OPERATION	\$13,948	\$80,313	1.273	2.037	9	0.969
	TOTAL *	\$482,071	\$2,177,268	0.359		46	
35 MULT INSTITUT.	31 LIGHT CONTRACTING	\$35	\$4,642	15.969	25.550	2	1.002
	32 MEDIUM CONTRCTING	\$17,551	\$90,470	0.713	1.141	1	0.995
	TOTAL *	\$17,586	\$95,113	0.744		3	
36 MULT SERVICES	30 SERVICE	\$19,658	\$113,275	0.842	1.347	6	0.970
	31 LIGHT CONTRACTING	\$25,827	\$125,260	0.119	0.190	6	0.969
	32 MEDIUM CONTRCTING	\$27,874	\$136,255	0.115	0.184	2	0.962
	33 HEAVY CONTRACTING	\$6,081	\$29,856	0	0.000	0	0.960
	34 DEALER OR DISTRIB	\$231,591	\$1,106,887	0.845	1.352	44	0.997
	36 MED. MANUFACTURER	\$12,562	\$73,344	0	0.000	0	0.911
	38 MISC. OPERATION	\$95,480	\$463,688	0.194	0.310	17	0.988
	TOTAL *	\$419,072	\$2,048,565	0.566		75	

INSURANCE SERVICES OFFICE, INC.

MONTANA
MANUFACTURERS AND CONTRACTORS
SUMMARY OF EXPERIENCE USED IN BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	CLASS GROUP	(1)	(2)	(3)	(4)	(5)	(6)
		CALENDAR A.Y.E. 12/31/21 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2017-2021 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
37 MULT INDUST/PROC	31 LIGHT CONTRACTING	\$383	\$1,305	0	0.000	0	1.024
	32 MEDIUM CONTRCTING	\$111,513	\$556,696	0.981	1.570	12	1.017
	33 HEAVY CONTRACTING	\$2,790	\$23,120	1.937	3.099	3	1.015
	34 DEALER OR DISTRIB	\$3,208	\$11,622	1.785	2.856	2	1.054
	35 LGT. MANUFACTURER	\$23,368	\$140,448	0.81	1.296	3	1.011
	36 MED. MANUFACTURER	\$186,824	\$806,837	0.136	0.218	9	0.963
	37 HVY. MANUFACTURER	\$158,754	\$835,068	0.045	0.072	4	0.968
	38 MISC. OPERATION	\$3,093	\$12,974	4.64	7.424	5	1.044
	TOTAL *	\$489,933	\$2,388,069	0.38		38	
38 MULT CONTRACTORS	30 SERVICE	\$205,313	\$957,450	0.995	1.592	27	1.023
	31 LIGHT CONTRACTING	\$530,125	\$2,596,018	0.702	1.123	101	1.022
	32 MEDIUM CONTRCTING	\$1,218,473	\$5,888,194	0.777	1.243	172	1.015
	33 HEAVY CONTRACTING	\$341,765	\$1,716,832	0.563	0.901	29	1.013
	38 MISC. OPERATION	\$7,675	\$44,849	0	0.000	0	1.042
	TOTAL *	\$2,303,351	\$11,203,343	0.745		329	
TOTAL ALL TOP	30 SERVICE	\$331,047	\$1,509,063	0.746		46	
	31 LIGHT CONTRACTING	\$806,455	\$3,886,887	0.737		140	
	32 MEDIUM CONTRCTING	\$2,530,395	\$12,229,785	0.692		316	
	33 HEAVY CONTRACTING	\$646,319	\$3,221,706	0.643		44	
	34 DEALER OR DISTRIB	\$854,018	\$3,859,264	0.573		93	
	35 LGT. MANUFACTURER	\$35,940	\$187,506	0.546		5	
	36 MED. MANUFACTURER	\$276,279	\$1,226,648	0.094		11	
	37 HVY. MANUFACTURER	\$310,580	\$1,265,703	0.109		11	
	38 MISC. OPERATION	\$208,623	\$924,911	0.839		45	
	TOTAL *	\$5,999,656	\$28,311,473	0.625		711	

* TOTALS IN COLUMNS (3) ARE AVERAGES USING COLUMN (1) AS WEIGHTS.

INSURANCE SERVICES OFFICE, INC.

MONTANA
PRODUCTS
BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	(1) BAILEY FORMULA RELATIVITY	(2) CREDIBILITY	(3) CREDIBILITY WEIGHTED RELATIVITY	(4) BALANCED RELATIVITY	(5) INDICATED CHANGE
10	0.931	0.322	0.977	0.976	
34	1.050	0.356	1.017	1.016	4.1%
36	1.029	0.178	1.005	1.004	2.8%
37	1.010	0.431	1.004	1.003	2.8%
CLASS GROUP					
3	0.926	0.423	0.968	0.968	
4	1.072	0.394	1.028	1.028	
5	1.121	0.105	1.012	1.012	
6	0.995	0.299	0.998	0.998	
7	0.856	0.118	0.982	0.982	

NOTE: THE INDICATED CHANGES BY TOP WERE FURTHER ADJUSTED BY THE FOLLOWING
DIFFERENTIALS: TOP 34: 0.975
TOP 36: 0.978
TOP 37: 0.997

INSURANCE SERVICES OFFICE, INC.

MULTISTATE
PRODUCTS
SUMMARY OF EXPERIENCE USED IN BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	CLASS GROUP	(1)	(2)	(3)	(4)	(5)	(6)
		CALENDAR A.Y.E. 12/31/2021 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2017 - 2021 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
10 MONOLINE	03 MAN,DLR,DSTFD/DRG	\$11,819,097	\$63,658,617	0.754	0.871	1,091	0.945
	04 DLR,DST-NOTFD/DRG	\$7,190,323	\$36,653,516	0.904	1.044	432	1.004
	05 MAN.NTFD/DRG(LOW)	\$1,226,514	\$7,102,146	0.769	0.888	56	0.988
	06 MAN.NTFD/DRG(MED)	\$8,466,486	\$42,680,135	0.786	0.908	423	0.975
	07 MAN.NTFD/DRG(HGH)	\$2,036,214	\$10,951,431	0.655	0.756	70	0.959
	TOTAL *	\$30,738,634	\$161,045,845	0.792		2,072	
34 MULT MERCANTILE	03 MAN,DLR,DSTFD/DRG	\$5,085,663	\$25,340,297	0.903	1.043	506	0.984
	04 DLR,DST-NOTFD/DRG	\$27,891,818	\$137,888,579	0.963	1.113	2,035	1.045
	06 MAN.NTFD/DRG(MED)	\$2,648	\$13,111	0.000	0.000	-	1.015
	TOTAL *	\$32,980,129	\$163,241,987	0.954		2,541	
36 MULT SERVICES	04 DLR,DST-NOTFD/DRG	\$3,130,195	\$15,943,473	0.964	1.114	631	1.032
	06 MAN.NTFD/DRG(MED)	\$30,963	\$176,926	0.027	0.032	1	1.003
	TOTAL *	\$3,161,158	\$16,120,400	0.955		632	
37 MULT INDUST/PROC.	03 MAN,DLR,DSTFD/DRG	\$11,666,754	\$62,347,318	0.776	0.896	1,979	0.971
	05 MAN.NTFD/DRG(LOW)	\$3,213,073	\$18,166,949	1.032	1.191	163	1.015
	06 MAN.NTFD/DRG(MED)	\$26,040,916	\$133,610,898	0.876	1.012	1,362	1.002
	07 MAN.NTFD/DRG(HGH)	\$6,218,877	\$29,699,655	0.760	0.878	210	0.985
	TOTAL *	\$47,139,619	\$243,824,820	0.847		3,714	
TOTAL ALL TOP	03 MAN,DLR,DSTFD/DRG	\$28,571,513	\$151,346,232	0.789		3,576	
	04 DLR,DST-NOTFD/DRG	\$38,212,336	\$190,485,568	0.952		3,098	
	05 MAN.NTFD/DRG(LOW)	\$4,439,588	\$25,269,095	0.959		219	
	06 MAN.NTFD/DRG(MED)	\$34,541,014	\$176,481,070	0.853		1,786	
	07 MAN.NTFD/DRG(HGH)	\$8,255,091	\$40,651,087	0.734		280	
	TOTAL *	\$114,019,542	\$584,233,052	0.866		8,959	

* TOTALS IN COLUMN (3) ARE AVERAGES USING COLUMN (1) AS WEIGHTS.

INSURANCE SERVICES OFFICE, INC.

MONTANA

LOCAL PRODUCTS/COMPLETED OPERATIONS

BASIC LIMIT RELATIVE CHANGE ANALYSIS

	(1)	(2)	(3)	(4)	(5)
	BAILEY		CREDIBILITY		
TYPE OF	FORMULA		WEIGHTED	BALANCED	INDICATED
POLICY	RELATIVITY	CREDIBILITY	RELATIVITY	RELATIVITY	CHANGE
10	1.007	0.781	1.005	1.006	
34	1.006	0.502	1.003	1.004	-0.2%
36	0.982	0.535	0.990	0.991	-1.6%
37	0.897	0.143	0.985	0.985	-2.1%
38	1.002	0.991	1.002	1.003	-0.4%
CLASS					
GROUP					
1	1.405	0.484	1.179	1.187	
2	1.038	0.553	1.021	1.028	
11	1.100	0.365	1.036	1.043	
12	0.979	1.000	0.979	0.986	
13	0.962	0.263	0.990	0.997	

MULTISTATE
LOCAL PRODUCTS/COMPLETED OPERATIONS
BASIC LIMIT RELATIVE CHANGE ANALYSIS *

STATE	(1)	(2)	(3)	(4)
	BAILEY	CREDIBILITY	CREDIBILITY	
	FORMULA		WEIGHTED	BALANCED
	RELATIVITY	CREDIBILITY	RELATIVITY	RELATIVITY
MONTANA	1.267	0.358	1.088	1.093
	1.361	0.259	1.083	1.087
	1.844	0.110	1.070	1.074
	1.325	0.218	1.063	1.067
	1.300	0.230	1.062	1.066
	1.254	0.252	1.059	1.063
	1.279	0.222	1.056	1.060
	1.095	0.562	1.052	1.056
	1.165	0.306	1.048	1.052
	1.274	0.180	1.045	1.049
	1.088	0.487	1.042	1.046
	1.154	0.254	1.037	1.041
	1.085	0.410	1.034	1.038
	1.087	0.333	1.028	1.032
	1.086	0.323	1.027	1.031
	1.096	0.269	1.025	1.029
	1.234	0.111	1.024	1.028
	1.041	0.489	1.020	1.024
	1.039	0.466	1.018	1.022
	1.056	0.226	1.012	1.016
	1.043	0.211	1.009	1.013
	1.022	0.354	1.008	1.012
	1.018	0.243	1.004	1.008
	1.097	0.030	1.003	1.007
	1.005	0.436	1.002	1.006
	0.994	0.436	0.997	1.001
	0.978	0.171	0.996	1.000
	0.974	0.163	0.996	1.000
	0.980	0.232	0.995	0.999
	0.969	0.162	0.995	0.999
	0.962	0.208	0.992	0.996
	0.982	0.493	0.991	0.995
	0.968	0.327	0.990	0.993
	0.920	0.133	0.989	0.993
	0.946	0.314	0.983	0.987
	0.973	0.688	0.981	0.985
	0.950	0.374	0.981	0.985
	0.867	0.137	0.981	0.985
	0.921	0.249	0.980	0.984
	0.938	0.371	0.977	0.980
	0.828	0.157	0.971	0.975
	0.953	0.635	0.970	0.974
	0.914	0.376	0.967	0.970
	0.908	0.357	0.966	0.970
	0.914	0.507	0.955	0.959
	0.899	0.432	0.955	0.959
	0.329	0.043	0.954	0.957
	0.702	0.163	0.944	0.948
	0.835	0.328	0.943	0.946
	0.823	0.363	0.932	0.935
	0.830	0.390	0.930	0.934
	0.697	0.237	0.918	0.922

* Sorted by balanced relative change

INSURANCE SERVICES OFFICE, INC.

MONTANA
LOCAL PRODUCTS/COMPLETED OPERATIONS
SUMMARY OF EXPERIENCE USED IN BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	CLASS GROUP	(1)	(2)	(3)	(4)	(5)	(6)
		CALENDAR A.Y.E. 12/31/21 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2017-2021 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIV.	NUMBER OF OCCURRENCES	BAL CELL RELATIV.
10 MONOLINE	01 RET.STRS-FOOD/DRG	\$13,958	\$68,108	0.262	0.283	1	1.269
	02 RET.STRS-NTFD/DRG	\$19,251	\$93,855	5.167	5.576	13	1.099
	11 COMP. OPS. (LOW)	\$90,012	\$305,886	2.247	2.425	11	1.115
	12 COMP. OPS. (MED)	\$1,163,675	\$5,071,889	1.251	1.350	66	1.054
	13 COMP. OPS. (HGH)	\$75,340	\$369,260	0.417	0.450	4	1.066
	TOTAL *	\$1,362,236	\$5,908,998	1.316		95	
34 MULT MERCANTILE	01 RET.STRS-FOOD/DRG	\$72,332	\$358,265	0.249	0.269	15	1.266
	02 RET.STRS-NTFD/DRG	\$95,898	\$394,325	0.552	0.596	7	1.096
	12 COMP. OPS. (MED)	\$18,184	\$56,843	0.122	0.132	1	1.052
	TOTAL *	\$186,415	\$809,433	0.393		23	
36 MULT SERVICES	01 RET.STRS-FOOD/DRG	\$6,722	\$25,775	0.000	0.000	0	1.250
	02 RET.STRS-NTFD/DRG	\$213,744	\$998,383	0.475	0.513	34	1.082
	11 COMP. OPS. (LOW)	\$43,371	\$356,988	0.712	0.768	9	1.098
	12 COMP. OPS. (MED)	\$31,084	\$87,142	0.168	0.181	2	1.038
	13 COMP. OPS. (HGH)	\$26,901	\$142,012	0.625	0.675	2	1.049
	TOTAL *	\$321,822	\$1,610,300	0.480		47	
37 MULT INDUST/PROC.	01 RET.STRS-FOOD/DRG	\$115	\$547	0.000	0.000	0	1.243
	11 COMP. OPS. (LOW)	\$1,050	\$4,429	0.000	0.000	0	1.091
	12 COMP. OPS. (MED)	\$53,302	\$288,003	0.378	0.408	3	1.032
	13 COMP. OPS. (HGH)	\$10	\$50	0.000	0.000	0	1.043
	TOTAL *	\$54,477	\$293,029	0.370		3	
38 MULT CONTRACTORS	11 COMP. OPS. (LOW)	\$111,009	\$566,556	0.350	0.378	5	1.111
	12 COMP. OPS. (MED)	\$2,243,540	\$11,108,028	1.236	1.334	164	1.050
	13 COMP. OPS. (HGH)	\$135,914	\$672,464	2.000	2.159	11	1.062
	TOTAL *	\$2,490,463	\$12,347,048	1.238		180	
TOTAL ALL TOP	01 RET.STRS-FOOD/DRG	\$93,127	\$452,695	0.233		16	
	02 RET.STRS-NTFD/DRG	\$328,893	\$1,486,563	0.772		54	
	11 COMP. OPS. (LOW)	\$245,442	\$1,233,859	1.108		25	
	12 COMP. OPS. (MED)	\$3,509,786	\$16,611,906	1.213		236	
	13 COMP. OPS. (HGH)	\$238,165	\$1,183,786	1.344		17	
	TOTAL *	\$4,415,413	\$20,968,809	1.161		348	

* TOTALS IN COLUMNS (3) ARE AVERAGES USING COLUMN (1) AS WEIGHTS.

INSURANCE SERVICES OFFICE, INC.

MULTISTATE
LOCAL PRODUCTS/COMPLETED OPERATIONS
SUMMARY OF EXPERIENCE USED IN BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	CLASS GROUP	(1)	(2)	(3)	(4)	(5)	(6)
		CALENDAR A.Y.E. 12/31/2021 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2017 - 2021 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIV.	NUMBER OF OCCURRENCES	BAL CELL RELATIV.
10 MONOLINE	01 RET.STRS-FOOD/DRG	\$1,748,833	\$13,294,303	1.199		621	
	02 RET.STRS-NTFD/DRG	\$3,644,206	\$17,449,172	1.096		492	
	11 COMP. OPS. (LOW)	\$5,499,261	\$29,100,438	1.170		689	
	12 COMP. OPS. (MED)	\$120,011,947	\$572,386,816	0.921		7,034	
	13 COMP. OPS. (HGH)	\$7,536,492	\$38,042,850	0.641		262	
	TOTAL *	\$138,440,739	\$670,273,579	0.924		9,098	
34 MULT MERCANTILE	01 RET.STRS-FOOD/DRG	\$8,156,117	\$43,997,404	1.325		2,733	
	02 RET.STRS-NTFD/DRG	\$7,639,610	\$36,671,723	0.939		693	
	12 COMP. OPS. (MED)	\$3,008,570	\$14,169,615	0.904		125	
	TOTAL *	\$18,804,297	\$94,838,741	1.101		3,551	
36 MULT SERVICES	01 RET.STRS-FOOD/DRG	\$643,620	\$4,295,009	1.227		162	
	02 RET.STRS-NTFD/DRG	\$15,583,411	\$76,045,252	0.932		3,398	
	11 COMP. OPS. (LOW)	\$3,267,900	\$16,818,142	1.100		488	
	12 COMP. OPS. (MED)	\$5,157,211	\$26,533,736	0.947		778	
	13 COMP. OPS. (HGH)	\$1,204,826	\$5,882,500	0.592		61	
	TOTAL *	\$25,856,969	\$129,574,639	0.948		4,887	
37 MULT INDUST/PROC.	01 RET.STRS-FOOD/DRG	\$22,984	\$127,871	0.000		0	
	11 COMP. OPS. (LOW)	\$118,128	\$638,240	0.529		14	
	12 COMP. OPS. (MED)	\$5,046,084	\$25,673,289	0.830		313	
	13 COMP. OPS. (HGH)	\$2,262	\$21,501	0.000		0	
	TOTAL *	\$5,189,458	\$26,460,901	0.819		327	
38 MULT CONTRACTORS	11 COMP. OPS. (LOW)	\$11,708,508	\$61,005,531	0.926		812	
	12 COMP. OPS. (MED)	\$192,727,882	\$985,553,302	0.903		12,745	
	13 COMP. OPS. (HGH)	\$15,769,275	\$78,710,767	1.032		712	
	TOTAL *	\$220,205,665	\$1,125,269,600	0.913		14,269	
TOTAL ALL TOP	01 RET.STRS-FOOD/DRG	\$10,571,554	\$61,714,586	1.296		3,516	
	02 RET.STRS-NTFD/DRG	\$26,867,226	\$130,166,147	0.956		4,583	
	11 COMP. OPS. (LOW)	\$20,593,798	\$107,562,352	1.016		2,003	
	12 COMP. OPS. (MED)	\$325,951,694	\$1,624,316,756	0.909		20,995	
	13 COMP. OPS. (HGH)	\$24,512,856	\$122,657,618	0.890		1,035	
	TOTAL *	\$408,497,128	\$2,046,417,459	0.927		32,132	

* TOTALS IN COLUMN (3) ARE AVERAGES USING COLUMN (1) AS WEIGHTS.

COMMERCIAL PACKAGE POLICY

TABLE OF CONTENTS

SECTION C - REVISED CLM DIVISION NINE

Commercial Package Policy Package Modification Factors (Revised MLCP-PMF-1)	C-2
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**COMMERCIAL LINES MANUAL
DIVISION NINE – MULTIPLE LINE
COMMERCIAL PACKAGE POLICY
PACKAGE MODIFICATION FACTORS**

MONTANA (25)

PACKAGE MODIFICATION FACTORS

Package Modification Assignment (PMA)	Premium From CLM Division			
	Two	Three, Four, Five, Eight Property	Four, Six Liability	All Other Divisions
Apartment House	.90	.98	.94	1.00
Contractors	.90	.99	.99	1.00
Industrial & Processing	.90	.92	.82	1.00
Institutional	.90	.88	.93	1.00
Mercantile	.90	.93	.92	1.00
Motel/Hotel	.90	1.00	1.00	1.00
Office	.90	.92	1.00	1.00
Service	.90	1.00	1.00	1.00

Table 1. Package Modification Factors