

RULES – IMPLEMENTATION

JANUARY 19, 2024

COMMERCIAL MULTIPLE LINE

LI-ML-2024-001

## ARKANSAS COMMERCIAL PACKAGE POLICY REVISED PACKAGE MODIFICATION FACTOR REVISION TO BE IMPLEMENTED

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### KEY MESSAGE

Revised Commercial Package Policy package modification factors for an overall statewide change of 1.8% to be implemented.

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### BACKGROUND

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

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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.

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### 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.*

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### EFFECTIVE DATE

We do not establish an effective date for Commercial Package Policy rules revisions in this state. Each insurer that elects to utilize this revision is responsible for determining its own effective date.

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## COMPANY ACTION

ISO has not filed this revision on behalf of insurers.

You must independently determine what revision to make and when to make any revision effective. If you decide to use all or any part of our revision, you are NOT required to file anything with the Insurance Department.

You must document your files in case the Insurance Department wishes to review the information at a later date. In all internal correspondence on this revision, you should refer to ISO Filing Number [ML-2023-RLA1](#) and SERFF Tracking Number [ISOF-133947134](#), 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.

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## RATING SOFTWARE IMPACT

No new attributes are being introduced with this revision.

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## 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.

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## REVISION DISTRIBUTION

We will issue a Notice to Manualholders with an edition date of 6-24 (or the earliest possible subsequent date), along with any new and/or revised manual pages.

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## 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

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## [ATTACHMENT\(S\)](#)

Filing [ML-2023-RLA1](#)

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## 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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## 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.

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## 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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ARKANSAS

ADVISORY PACKAGE MODIFICATION FACTOR REVIEW

COMMERCIAL PACKAGE POLICY

ML-2023-RLA1

EXECUTIVE SUMMARY

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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. &amp; Liab. Total</u>
Motel/Hotel	0.0%	0.0%	0.0%
Apartment	0.0%	0.0%	0.0%
Office	5.7%	1.1%	4.1%
Mercantile	-2.1%	-1.1%	-1.8%
Institutional	6.4%	10.8%	6.8%
Services	0.0%	0.0%	0.0%
Indust./Proc.	-1.3%	3.4%	0.7%
Contractors	<u>1.0%</u>	<u>1.0%</u>	<u>1.0%</u>
Statewide	2.1%	1.1%	1.8%

ARKANSAS

ADVISORY PACKAGE MODIFICATION FACTOR REVIEW

COMMERCIAL PACKAGE POLICY

ML-2023-RLA1

EXECUTIVE SUMMARY

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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

The data used in this review is from ISO reporting companies for:

- 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 03/31/22.
  - Manufacturers and Contractors: five fiscal accident years ending 03/31/22.
  - Products: three calendar accident years ending 12/31/21.
  - Local Products and Completed Operations: three calendar accident years ending 12/31/21.
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PRIOR ISO  
REVISIONS

The latest revisions in this state are:

<u>Filing</u>	ML-20-RLA1	ML-19-RLA1	ML-17-RLA1
<u>Dates</u>			
Implemented	2/1/2021	10/1/2019	11/1/2017
<u>Changes</u>			
Indicated	3.2%	4.7%	-3.0%
Filed	3.3%	4.7%	-3.0%
Implemented	3.3%	4.7%	-3.0%

ARKANSAS

ADVISORY PACKAGE MODIFICATION FACTOR REVIEW

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ML-2023-RLA1

EXECUTIVE SUMMARY

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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.

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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. Travelers Indemnity Company
  2. Cincinnati Insurance Company
  3. Nationwide Mutual Insurance Company
  4. Tokio Marine Companies
  5. Insurance Company Of North America
  6. Columbia Insurance Group
  7. Continental Casualty Company
  8. State Auto Mutual Insurance Company
  9. Liberty Mutual Insurance Company
  10. Admiral Insurance Company
- 

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). 47.4%.

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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.

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ARKANSAS

ADVISORY PACKAGE MODIFICATION FACTOR REVIEW

COMMERCIAL PACKAGE POLICY

ML-2023-RLA1

EXECUTIVE SUMMARY

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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.

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# COMMERCIAL PACKAGE POLICY

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## COMMERCIAL PACKAGE POLICY

### SECTION A: SCOPE OF REVISION METHODOLOGY OVERVIEW

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#### 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 relative to that for monoline policies providing the same coverages.

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#### 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.

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#### 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.

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## 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                      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:

- (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.

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 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.

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:

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

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

SPECIAL CAUSES OF LOSS:

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

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

- $TOP_i$  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      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.

COLUMN (1)      AGGREGATE LOSS COSTS

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.

COLUMN (2)      5 - YEAR AGGREGATE LOSS COSTS

The combined five-year adjusted aggregate loss costs (adjusted as described above) are used to calculate the experience ratios in column (3).

COLUMN (3)      FIVE-YEAR EXPERIENCE RATIOS

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).

COLUMN (4)      RELATIVITIES

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.

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)

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	<p>The objectives of this procedure are to:</p> <ol style="list-style-type: none"><li>1) determine monoline loss cost level needs for the appropriate rating variables;</li><li>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.</li></ol>								
EXPERIENCE BASE	<p>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.</p>								
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	<p>For Premises/Operations and Products/Completed Operations, the rating variables used in the relativity analysis are as follows:</p> <table><tr><td>Owners, Landlords and Tenants -</td><td>Type of policy and Class group</td></tr><tr><td>Manufacturers and Contractors -</td><td>Type of policy and Class group</td></tr><tr><td>Products -</td><td>Type of policy and Class group</td></tr><tr><td>Local Products/Completed Operations-</td><td>Type of policy, State and Class group</td></tr></table>	Owners, Landlords and Tenants -	Type of policy and Class group	Manufacturers and Contractors -	Type of policy and Class group	Products -	Type of policy and Class group	Local Products/Completed Operations-	Type of policy, State and Class group
Owners, Landlords and Tenants -	Type of policy and Class group								
Manufacturers and Contractors -	Type of policy and Class group								
Products -	Type of policy and Class group								
Local Products/Completed Operations-	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  $i^{\text{th}}$  type of policy;

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

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

and  $j^{\text{th}}$  class group;

$r_{ij}$  is the relative change for the  $i^{\text{th}}$  type of policy and  $j^{\text{th}}$  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  $i^{\text{th}}$  type of policy;

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

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

$r_{ij}$  is the relative change for the  $i^{\text{th}}$  type of policy, and  $j^{\text{th}}$  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  $i^{\text{th}}$  type of policy;

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

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

$W_{ijk}$  is the aggregate loss costs at current level for the  $i^{\text{th}}$  type of policy,  
 $j^{\text{th}}$  class group, and  $k^{\text{th}}$  state;

$r_{ijk}$  is the relative change for the  $i^{\text{th}}$  type of policy,  $j^{\text{th}}$  class group, and  $k^{\text{th}}$  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.

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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.

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INDICATED  
CHANGES

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

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

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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.

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**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.

## ARKANSAS

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)	1.00	1.00	0.0%	1.00	1.00	0.0%	0.0%
OFFICE (33)	0.70	0.74	5.7%	0.92	0.93	1.1%	4.1%
MERCANTILE (34)	0.96	0.94	-2.1%	0.89	0.88	-1.1%	-1.8%
INSTITUTION(35)	0.94	1.00	6.4%	0.74	0.82	10.8%	6.8%
SERVICES (36)	1.00	1.00	0.0%	1.00	1.00	0.0%	0.0%
IND/PROC (37)	0.75	0.74	-1.3%	0.89	0.92	3.4%	0.7%
CONTRACTORS(38)	0.99	1.00	1.0%	0.97	0.98	1.0%	1.0%
STATEWIDE			2.1%			1.1%	1.8%

## INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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	328,504	0.724	3.1%	0.746	0.725
BASIC GRP II	516,362	1.434	4.6%	1.500	1.456
SP CAUSE/LOSS	191,640	0.860	-1.1%	0.851	0.826
* CRIME	218	0.910	0.0%	0.910	0.910
* INL. MAR.	3,892	0.910	0.0%	0.910	0.910
* FIDELITY	3,979	1.000	0.0%	1.000	1.000
TOTAL	1,044,595	1.000	3.0%	1.030	1.000
LIABILITY-					
OL&T	319,304	1.000	-3.7%	0.963	1.000
TOTAL	319,304	1.000	-3.7%	0.963	1.000
-----					
PROP. & LIAB. TOTAL	1,363,899		1.4%		0.0%

APARTMENT (32) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	3,621,607	0.812	6.0%	0.861	0.851
BASIC GRP II	4,142,674	1.177	1.0%	1.189	1.176
SP CAUSE/LOSS	1,148,575	1.071	-1.8%	1.052	1.040
* CRIME	108	0.910	0.0%	0.910	0.910
* INL. MAR.	835	0.910	0.0%	0.910	0.910
* FIDELITY	1,121	1.000	0.0%	1.000	1.000
TOTAL	8,914,920	1.000	1.1%	1.011	1.000
LIABILITY-					
OL&T	739,903	1.000	-5.8%	0.942	1.000
TOTAL	739,903	1.000	-5.8%	0.942	1.000
-----					
PROP. & LIAB. TOTAL	9,654,823		0.6%		0.0%

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

## INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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	898,088	0.702	3.9%	0.729	0.736
BASIC GRP II	1,050,048	0.659	7.5%	0.708	0.715
SP CAUSE/LOSS	402,671	0.817	-0.8%	0.810	0.818
* CRIME	2,358	0.910	0.0%	0.910	0.910
* INL. MAR.	54,283	0.910	0.0%	0.910	0.910
* FIDELITY	2,829	1.000	0.0%	1.000	1.000
TOTAL	2,410,277	0.700	5.0%	0.735	0.740
LIABILITY-					
OL&T	1,211,683	0.930	0.6%	0.936	0.935
M&C	91,248	0.801	3.7%	0.831	0.830
TOTAL	1,302,931	0.920	0.8%	0.927	0.930
-----					
PROP. & LIAB. TOTAL	3,713,208		3.5%		4.1%

MERCANTILE (34) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	4,239,234	0.919	-6.6%	0.858	0.866
BASIC GRP II	3,914,571	1.051	1.2%	1.064	1.074
SP CAUSE/LOSS	1,022,764	0.810	-0.4%	0.807	0.814
* CRIME	40,152	0.910	0.0%	0.910	0.910
* INL. MAR.	597,111	0.910	0.0%	0.910	0.910
* FIDELITY	180,653	1.000	0.0%	1.000	1.000
TOTAL	9,994,485	0.960	-3.0%	0.931	0.940
LIABILITY-					
OL&T	2,739,995	0.782	-0.9%	0.775	0.775
M&C	994,083	1.236	6.0%	1.310	1.310
LOCAL PRODUCT	169,497	0.877	0.0%	0.877	0.877
* MULTI PRODUCT	503,465	0.870	3.7%	0.902	0.902
TOTAL	4,407,040	0.890	-1.3%	0.878	0.880
-----					
PROP. & LIAB. TOTAL	14,401,525		-2.5%		-1.8%

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

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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	4,594,260	0.956	8.0%	1.032	1.018
BASIC GRP II	8,043,004	0.988	11.0%	1.097	1.081
SP CAUSE/LOSS	1,927,778	0.745	-2.8%	0.724	0.714
* CRIME	19,856	0.910	0.0%	0.910	0.910
* INL. MAR.	19,715	0.910	0.0%	0.910	0.910
* FIDELITY	45,922	1.000	0.0%	1.000	1.000
TOTAL	14,650,535	0.940	7.9%	1.014	1.000
LIABILITY-					
OL&T	1,180,624	0.827	-2.6%	0.805	0.922
M&C	411,513	0.532	2.8%	0.547	0.625
TOTAL	1,592,137	0.740	-3.4%	0.715	0.820
-----					
PROP. & LIAB. TOTAL	16,242,672		6.8%		6.8%

SERVICES (36) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	2,537,628	0.900	-0.5%	0.896	0.893
BASIC GRP II	3,210,577	1.111	2.1%	1.134	1.131
SP CAUSE/LOSS	883,360	0.928	-0.1%	0.927	0.924
* CRIME	3,973	0.910	0.0%	0.910	0.910
* INL. MAR.	17,819	0.910	0.0%	0.910	0.910
* FIDELITY	22,640	1.000	0.0%	1.000	1.000
TOTAL	6,675,997	1.000	0.3%	1.003	1.000
LIABILITY-					
OL&T	826,179	1.043	-2.5%	1.017	1.019
M&C	1,069,566	0.913	0.5%	0.918	0.919
LOCAL PRODUCT	252,460	1.500	-1.2%	1.482	1.485
* MULTI PRODUCT	81,036	0.950	2.6%	0.974	0.974
TOTAL	2,229,241	1.000	-0.2%	0.998	1.000
-----					
PROP. & LIAB. TOTAL	8,905,238		0.2%		0.0%

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

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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	1,344,522	0.607	1.7%	0.617	0.623
BASIC GRP II	1,319,740	0.946	-6.2%	0.887	0.896
SP CAUSE/LOSS	367,982	0.793	-1.1%	0.784	0.792
* CRIME	2,718	0.910	0.0%	0.910	0.910
* INL. MAR.	1,286	0.910	0.0%	0.910	0.910
* FIDELITY	33,117	1.000	0.0%	1.000	1.000
TOTAL	3,069,365	0.750	-2.5%	0.731	0.740
LIABILITY-					
M&C	1,816,863	0.882	5.0%	0.926	0.925
LOCAL PRODUCT	51,951	0.699	-2.2%	0.684	0.684
* MULTI PRODUCT	473,736	0.938	-1.9%	0.920	0.920
TOTAL	2,342,550	0.890	3.2%	0.918	0.920
-----					
PROP. & LIAB. TOTAL	5,411,915		-0.1%		0.7%

CONTRACTORS(38) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	617,101	0.844	3.8%	0.876	0.856
BASIC GRP II	896,947	1.052	4.7%	1.101	1.076
SP CAUSE/LOSS	364,960	1.148	0.7%	1.156	1.129
* CRIME	1,868	0.910	0.0%	0.910	0.910
* INL. MAR.	2,564	0.910	0.0%	0.910	0.910
* FIDELITY	22,972	1.000	0.0%	1.000	1.000
TOTAL	1,906,412	0.990	3.4%	1.023	1.000
LIABILITY-					
M&C	4,490,644	1.010	3.0%	1.040	1.046
LOCAL PRODUCT	2,402,956	0.879	-0.4%	0.875	0.881
TOTAL	6,893,600	0.970	0.8%	0.978	0.980
-----					
PROP. & LIAB. TOTAL	8,800,012		1.3%		1.0%

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

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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	18,180,944	0.850	2.1%	0.868	0.864
BASIC GRP II	23,093,923	1.027	4.8%	1.076	1.069
SP CAUSE/LOSS	6,309,730	0.856	-1.4%	0.844	0.839
* CRIME	71,251	0.910	0.0%	0.910	0.910
* INL. MAR.	697,505	0.910	0.0%	0.910	0.910
* FIDELITY	313,233	1.000	0.0%	1.000	1.000
TOTAL	48,666,586	0.931	2.7%	0.956	0.950
LIABILITY-					
OL&T	7,017,688	0.868	-1.8%	0.852	0.880
M&C	8,873,917	0.947	3.4%	0.979	0.989
LOCAL PRODUCT	2,876,864	0.908	-0.5%	0.903	0.908
* MULTI PRODUCT	1,058,237	0.905	1.1%	0.915	0.915
TOTAL	19,826,706	0.923	-0.5%	0.918	0.933
-----					
PROP. & LIAB.	68,493,292		1.7%		1.8%
TOTAL					

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

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
 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	1.014	1.000
APARTMENT (32)	1.000	1.006	1.000
OFFICE (33)	0.760	0.791	0.800
MERCANTILE (34)	0.940	0.914	0.920
INSTITUTION(35)	0.920	0.977	0.980
SERVICES (36)	1.000	1.002	1.000
IND/PROC (37)	0.810	0.804	0.810
CONTRACTORS(38)	0.980	0.987	0.990

NOTE: Combined PMFs are provided for informational purposes only.

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
BASIC GROUP I RELATIVITY ANALYSIS

TYPE OF POLICY	(1)	(2)	(3)	(4)	(5)
	LEAST SQUARES FORMULA RELATIVITY	CREDIBILITY CREDIBILITY	WEIGHTED RELATIVITY	BALANCED RELATIVITY	INDICATED CHANGE
10	0.807	0.122	0.974	0.982	
31	1.206	0.019	1.004	1.012	3.1%
32	1.263	0.139	1.033	1.041	6.0%
33	1.296	0.045	1.012	1.020	3.9%
34	0.585	0.175	0.910	0.917	-6.6%
35	1.346	0.174	1.053	1.061	8.0%
36	0.749	0.108	0.969	0.977	-0.5%
37	0.855	0.058	0.991	0.999	1.7%
38	1.465	0.028	1.011	1.019	3.8%

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	(5)
	LEAST SQUARES		CREDIBILITY		
TYPE OF POLICY	FORMULA RELATIVITY	CREDIBILITY	WEIGHTED RELATIVITY	BALANCED RELATIVITY	INDICATED CHANGE
10	1.063	0.125	1.008	1.011	
31	0.869	0.018	0.997	1.000	-1.1%
32	0.920	0.119	0.990	0.993	-1.8%
33	1.001	0.047	1.000	1.003	-0.8%
34	1.036	0.114	1.004	1.007	-0.4%
35	0.900	0.191	0.980	0.983	-2.8%
36	1.084	0.092	1.007	1.010	-0.1%
37	0.921	0.040	0.997	1.000	-1.1%
38	1.406	0.043	1.015	1.018	0.7%
CATEGORY					
1	1.037	0.634	1.023	1.008	
2	0.923	0.052	0.996	0.981	
3	0.916	0.046	0.996	0.981	
4	0.927	0.050	0.996	0.981	
5	0.980	0.030	0.999	0.984	
6	0.974	0.021	0.999	0.984	
7	0.981	0.018	1.000	0.985	
8	0.907	0.053	0.995	0.980	
9	0.925	0.150	0.988	0.974	
10	1.007	0.007	1.000	0.985	
11	0.928	0.039	0.997	0.982	
12	0.861	0.053	0.992	0.978	
13	0.956	0.032	0.999	0.984	
14	0.582	0.059	0.969	0.955	

INSURANCE SERVICES OFFICE, INC.

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

TYPE OF POLICY	(1) ACCIDENT YEAR ENDING 3/31/22 AGGREGATE LOSS COSTS	(2) 5 - YEAR AGGREGATE LOSS COSTS	(3) 5 - YEAR AGGREGATE EXPERIENCE RATIO	(4) RELATIVITY
-----				
ENTIRE STATE				
10 MONOLINE	2,951,301	13,872,070	0.698	0.807
31 MULTILINE MOTEL/HOTEL	328,504	1,966,842	1.044	1.207
32 MULTILINE APARTMENT	3,621,607	16,100,492	1.093	1.264
33 MULTILINE OFFICE	898,088	4,729,272	1.122	1.297
34 MULTILINE MERCANTILE	4,239,234	21,244,572	0.506	0.585
35 MULTILINE INSTITUTIONAL	4,594,260	21,083,568	1.165	1.347
36 MULTILINE SERVICES	2,537,628	12,141,842	0.648	0.749
37 MULTILINE INDUST/PROCESS	1,344,522	6,131,464	0.740	0.855
38 MULTILINE CONTRACTORS	<u>617,101</u>	<u>2,923,159</u>	<u>1.268</u>	<u>1.466</u>
TOTAL ALL TOPS*	21,132,245	100,193,281	0.865	1.001

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

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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	947,559	4,253,373	1.070	1.059	1.108
	02 RES. APTS. AND COND	6,941	49,017	3.275	1.570	1.642
	03 OFFICES	52,270	241,486	0.327	0.742	0.776
	04 MERCANTILE - HIGH	49,543	254,715	0.553	0.824	0.862
	05 MERCANTILE - MEDIUM	9,161	44,904	0.353	0.832	0.870
	06 MERCANTILE - LOW	10,673	43,378	2.629	1.399	1.463
	07 MOTELS AND HOTELS	14,349	103,023	1.210	1.055	1.104
	08 INSTITUTIONAL - HIGH	15,970	73,013	0.101	0.750	0.785
	09 INSTITUTIONAL - LOW	28,798	176,323	0.101	0.690	0.722
	10 INDUST-PROC - HIGH	5,539	7,964	0.000	0.772	0.808
	11 INDUST-PROC - LOW	45,713	130,546	0.003	0.685	0.717
	12 SERVICE - HIGH	21,789	113,814	2.151	1.338	1.400
	13 SERVICE - LOW	38,128	170,602	1.269	1.084	1.134
	14 CONTRACTORS	12,690	62,802	0.038	0.740	0.774
	TOTAL*	1,259,123	5,724,960	0.977	1.016	1.063
31 MULTILINE MOTEL/HOTEL	01 BUILDINGS	150,180	563,559	0.697	0.866	0.906
	07 MOTELS AND HOTELS	41,460	166,701	0.212	0.811	0.848
	TOTAL*	191,640	730,260	0.592	0.854	0.893
32 MULTILINE APARTMENT	01 BUILDINGS	1,007,824	4,599,316	0.920	0.916	0.958
	02 RES. APTS. AND COND	140,751	778,916	0.510	0.813	0.850
	TOTAL*	1,148,575	5,378,232	0.870	0.903	0.945
33 MULTILINE OFFICE	01 BUILDINGS	315,546	1,571,828	1.148	0.992	1.038
	03 OFFICES	86,125	410,534	1.117	0.949	0.993
	04 MERCANTILE - HIGH	327	969	0.000	0.809	0.846
	08 INSTITUTIONAL - HIGH	368	1,155	0.000	0.809	0.846
	12 SERVICE - HIGH	90	529	0.000	0.809	0.846
	14 CONTRACTORS	215	524	0.000	0.809	0.846
	TOTAL*	402,671	1,985,539	1.139	0.982	1.028

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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	
34 MULTILINE MERCANTILE	01 BUILDINGS	767,831	3,876,045	1.140	1.031	1.078	
	03 OFFICES	762	5,380	1.816	1.012	1.059	
	04 MERCANTILE - HIGH	107,616	518,619	1.087	0.947	0.991	
	05 MERCANTILE - MEDIUM	85,588	414,185	1.261	0.976	1.021	
	06 MERCANTILE - LOW	53,908	271,092	1.157	0.951	0.995	
	08 INSTITUTIONAL - HIG	-	61	0.000	0.810	0.847	
	11 INDUST-PROC - LOW	163	972	0.000	0.809	0.846	
	12 SERVICE - HIGH	4,686	24,345	1.701	1.002	1.048	
	13 SERVICE - LOW	1,062	4,939	0.000	0.809	0.846	
	14 CONTRACTORS	1,148	8,463	0.000	0.808	0.845	
	TOTAL*	1,022,764	5,124,101	1.146	1.013	1.059	
	35 MULTILINE INSTITUTIONAL	01 BUILDINGS	1,353,072	6,261,568	0.888	0.896	0.937
		03 OFFICES	1,042	3,602	0.000	0.809	0.846
		08 INSTITUTIONAL - HIG	105,151	733,061	0.403	0.790	0.826
09 INSTITUTIONAL - LOW		468,197	2,422,758	0.650	0.800	0.837	
12 SERVICE - HIGH		51	113	0.000	0.810	0.847	
13 SERVICE - LOW		66	277	0.000	0.810	0.847	
14 CONTRACTORS		199	748	0.000	0.809	0.846	
TOTAL*		1,927,778	9,422,127	0.803	0.867	0.907	
36 MULTILINE SERVICES	01 BUILDINGS	632,715	2,883,084	1.101	1.080	1.130	
	03 OFFICES	3,706	9,608	0.000	0.914	0.956	
	04 MERCANTILE - HIGH	2,126	9,560	2.279	1.158	1.211	
	05 MERCANTILE - MEDIUM	1,535	3,549	0.000	0.919	0.961	
	06 MERCANTILE - LOW	1,057	8,485	12.412	2.234	2.337	
	08 INSTITUTIONAL - HIG	18,036	32,759	0.000	0.897	0.938	
	09 INSTITUTIONAL - LOW	15,709	56,518	0.000	0.880	0.921	
	10 INDUST-PROC - HIGH	-	172	0.000	0.921	0.963	
	11 INDUST-PROC - LOW	394	826	0.000	0.921	0.963	
	12 SERVICE - HIGH	142,584	702,924	0.702	0.885	0.926	
	13 SERVICE - LOW	63,135	326,801	0.791	0.956	1.000	
	14 CONTRACTORS	2,363	20,481	0.000	0.906	0.948	
	TOTAL*	883,360	4,054,767	0.979	1.032	1.080	

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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	
37 MULTILINE INDUST/PROC	01 BUILDINGS	241,728	1,085,946	0.801	0.907	0.949	
	03 OFFICES	252	1,390	0.000	0.920	0.962	
	04 MERCANTILE - HIGH	387	1,453	0.000	0.920	0.962	
	05 MERCANTILE - MEDIUM	-	477	0.000	0.921	0.963	
	10 INDUST-PROC - HIGH	25,174	91,230	0.288	0.904	0.946	
	11 INDUST-PROC - LOW	99,455	481,909	0.632	0.884	0.925	
	12 SERVICE - HIGH	126	1,182	0.000	0.921	0.963	
	14 CONTRACTORS	860	4,505	0.000	0.918	0.960	
	TOTAL*	367,982	1,668,092	0.717	0.901	0.942	
	38 MULTILINE CONTRACTORS	01 BUILDINGS	179,643	895,529	1.801	1.399	1.463
03 OFFICES		11,382	53,640	4.360	1.485	1.553	
04 MERCANTILE - HIGH		819	3,076	53.420	6.383	6.677	
05 MERCANTILE - MEDIUM		133	247	0.000	0.921	0.963	
06 MERCANTILE - LOW		372	932	0.000	0.921	0.963	
08 INSTITUTIONAL - HIG		62	317	0.000	0.921	0.963	
11 INDUST-PROC - LOW		363	1,507	0.000	0.920	0.962	
12 SERVICE - HIGH		483	1,452	0.000	0.920	0.962	
13 SERVICE - LOW		-	46	0.000	0.921	0.963	
14 CONTRACTORS		171,703	836,423	0.514	0.785	0.821	
TOTAL*		364,960	1,793,169	1.384	1.122	1.174	
TOTAL ALL TOPS*		01 BUILDINGS	5,596,098	25,990,248	1.018	0.988	1.033
		02 RES. APTS. AND COND	147,692	827,933	0.640	0.849	0.887
		03 OFFICES	155,539	725,640	1.056	0.917	0.959
	04 MERCANTILE - HIGH	160,818	788,392	1.200	0.939	0.983	
	05 MERCANTILE - MEDIUM	96,417	463,362	1.153	0.961	1.006	
	06 MERCANTILE - LOW	66,010	323,887	1.569	1.044	1.092	
	07 MOTELS AND HOTELS	55,809	269,724	0.469	0.874	0.914	
	08 INSTITUTIONAL - HIG	139,587	840,366	0.315	0.799	0.836	
	09 INSTITUTIONAL - LOW	512,704	2,655,599	0.599	0.796	0.833	
	10 INDUST-PROC - HIGH	30,713	99,366	0.236	0.880	0.921	
	11 INDUST-PROC - LOW	146,088	615,760	0.431	0.822	0.860	
	12 SERVICE - HIGH	169,809	844,359	0.912	0.946	0.990	
	13 SERVICE - LOW	102,391	502,665	0.960	1.002	1.048	
	14 CONTRACTORS	189,178	933,946	0.469	0.784	0.820	
	TOTAL*	7,568,853	35,881,247	0.945	0.956	1.000	

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

INSURANCE SERVICES OFFICE, INC.

ARKANSAS

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)/ 1.168	CREDIBILITY C	CREDIBILITY WEIGHTED RELATIVITY D	BALANCED FORMULA RELATIVITY E	NORMALIZED FORMULA RELATIVITY F	INDICATED CHANGE
MONOLINE	4,236,961	1.0810	0.9260	0.4590	0.966	0.9660	0.9602	
MULTILINE	22,577,561	1.1840	1.0140	0.8270	1.012	1.0120	1.0061	
COVERAGE	26,814,522	1.1680	1.0000			1.0060	0.9988	
MULTILINE TOP								
31 MOTEL/HOTEL	516,362	0.000	0.000	0.000	0.000	1.010	1.004	4.6%
32 APARTMENT	4,142,674	1.113	0.953	0.447	0.979	0.976	0.970	1.0%
33 OFFICE	1,050,048	1.423	1.218	0.187	1.041	1.038	1.032	7.5%
34 MERCANTILE	3,914,571	1.123	0.961	0.491	0.981	0.978	0.972	1.2%
35 INSTITUTIONAL	8,043,004	1.310	1.122	0.611	1.075	1.072	1.066	11.0%
36 SERVICES	3,210,577	1.139	0.975	0.421	0.989	0.986	0.980	2.1%
37 INDUST/PROCESS	1,319,740	0.682	0.584	0.219	0.909	0.906	0.901	-6.2%
38 CONTRACTORS	896,947	1.270	1.087	0.159	1.014	1.011	1.005	4.7%
	23,093,923	1.184	1.014		1.015	1.012	1.006	

A - TOP 31 IMPLICIT PMF CAPPED AT 1.500.

FOR COLUMNS (2) THROUGH (5), MONOLINE INCLUDES TOPS 31  
AT THESE CAPPED LEVELS AND MULTILINE EXCLUDES TOPS 31

B - FOR COLUMNS (2) - (5), THE MULTILINE TOTAL IS THE AVERAGE WEIGHTED BY THE CAPPED ALCCL IN COLUMN.  
THE MULTILINE TOTAL IN COLUMNS (6) - (10) IS THE AVERAGE WEIGHTED BY THE UNCAPPED ALCCL.

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 - FOR UNCAPPED MULTILINE TOPS: (6) = (5) \* (1.012/1.015)

FOR CAPPED MULTILINE TOPS: (6) = (0.966) \* CAPPED IPMF / CURRENT IPMF

F - (7) = (6) / 1.006

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
OWNERS, LANDLORDS AND TENANTS  
BASIC LIMIT RELATIVE CHANGE ANALYSIS

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TYPE OF POLICY	(1) BAILEY FORMULA RELATIVITY	(2) CREDIBILITY CREDIBILITY	(3) CREDIBILITY WEIGHTED RELATIVITY	(4) BALANCED RELATIVITY	(5) INDICATED CHANGE
10	1.193	0.123	1.022	1.014	
31	0.766	0.061	0.984	0.976	-3.7%
32	0.434	0.046	0.962	0.955	-5.8%
33	1.316	0.099	1.028	1.020	0.6%
34	1.116	0.112	1.012	1.005	-0.9%
35	0.957	0.090	0.996	0.988	-2.6%
36	0.944	0.058	0.997	0.989	-2.5%
CLASS GROUP					
1	0.841	0.085	0.985	0.991	
2	0.594	0.075	0.962	0.968	
3	0.727	0.060	0.981	0.987	
4	2.306	0.022	1.019	1.025	
5	1.086	0.024	1.002	1.008	
6	0.771	0.025	0.994	1.000	
7	0.924	0.063	0.995	1.001	
8	0.794	0.018	0.996	1.002	
9	0.787	0.070	0.983	0.989	
10	0.673	0.089	0.965	0.971	
11	2.448	0.064	1.059	1.065	
12	1.071	0.120	1.008	1.014	
13	0.841	0.030	0.995	1.001	
16	0.000	0.007	0.000	1.000	

## INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
 MANUFACTURERS AND CONTRACTORS  
 BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	(1)	(2)	(3)	(4)	(5)
	BAILEY FORMULA RELATIVITY	CREDIBILITY CREDIBILITY	CREDIBILITY WEIGHTED RELATIVITY	BALANCED RELATIVITY	INDICATED CHANGE
10	0.859	0.175	0.974	0.980	
33	1.777	0.015	1.009	1.016	3.7%
34	1.471	0.082	1.032	1.039	6.0%
35	0.993	0.045	1.000	1.007	2.8%
36	0.748	0.076	0.978	0.985	0.5%
37	1.434	0.060	1.022	1.029	5.0%
38	1.013	0.172	1.002	1.009	3.0%
CLASS GROUP					
30	0.910	0.064	0.994	0.991	
31	1.559	0.123	1.056	1.053	
32	1.026	0.186	1.005	1.002	
33	1.118	0.083	1.009	1.006	
34	0.983	0.096	0.998	0.995	
35	0.150	0.011	0.979	0.977	
36	0.616	0.056	0.973	0.970	
37	0.622	0.027	0.987	0.984	
38	1.332	0.071	1.021	1.018	

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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. 3/31/22 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2018-2022 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
10 MONOLINE	01 FOOD&BEV.(RETAIL)	\$135,532	\$982,989	1.163		63	
	02 RESTAURANTS	\$70,834	\$1,036,465	0.375		18	
	03 STORES	\$166,792	\$644,099	0.870		21	
	04 VENDING & RENTAL	\$3,326	\$48,752	0.000		0	
	05 FOOD & BEV. DIST.	\$14,862	\$220,194	0.021		4	
	06 NON-FOOD&BEV.DIST	\$30,661	\$170,656	0.413		2	
	07 CLUBS,AMSMT&SPRTS	\$69,633	\$520,643	1.768		27	
	08 HEALTH CARE FACIL	\$6,170	\$52,847	0.000		0	
	09 HOTELS AND MOTELS	\$47,036	\$696,523	0.998		22	
	10 SCHLS & CHURCHES	\$116,377	\$520,237	0.855		14	
	11 APARTMENTS	\$142,282	\$729,656	3.055		39	
	12 BUILDINGS&OFFICES	\$285,740	\$1,723,946	0.963		47	
	13 MISC. PREMISES	\$16,032	\$120,001	1.697		14	
	16 GOVT SUBDIVISIONS						
	TOTAL *	\$1,105,277	\$7,467,008	1.220		271	
	31 MULT MOTEL/HOTEL	09 HOTELS AND MOTELS	\$182,773	\$1,748,085	0.579		67
TOTAL *		\$182,773	\$1,748,085	0.579		67	
32 MULT APARTMENT	11 APARTMENTS	\$384,188	\$1,533,365	0.928		35	
	12 BUILDINGS&OFFICES	\$39,340	\$190,534	1.347		3	
	TOTAL *	\$423,528	\$1,723,899	0.967		38	
33 MULT OFFICE	12 BUILDINGS&OFFICES	\$689,705	\$3,688,147	1.359		176	
	13 MISC. PREMISES	\$3,875	\$18,689	0.000		0	
	TOTAL *	\$693,579	\$3,706,836	1.352		176	
34 MULT MERCANTILE	01 FOOD&BEV.(RETAIL)	\$336,989	\$2,322,390	0.821		66	
	02 RESTAURANTS	\$535,720	\$2,381,767	0.677		82	
	03 STORES	\$368,470	\$1,750,035	0.642		38	
	04 VENDING & RENTAL	\$443	\$1,964	0.000		0	
	05 FOOD & BEV. DIST.	\$106,734	\$552,268	1.335		6	
	06 NON-FOOD&BEV.DIST	\$107,311	\$573,082	0.961		9	
	12 BUILDINGS&OFFICES	\$112,733	\$580,422	1.364		24	
	TOTAL *	\$1,568,400	\$8,161,928	0.813		225	
35 MULT INSTITUT.	07 CLUBS,AMSMT&SPRTS	\$9,963	\$62,445	0.580		5	
	08 HEALTH CARE FACIL	\$124,828	\$636,080	0.783		6	
	10 SCHLS & CHURCHES	\$536,691	\$2,609,049	0.615		128	
	12 BUILDINGS&OFFICES	\$4,319	\$30,967	0.380		5	
	13 MISC. PREMISES	\$0	\$18	0.000		0	
	16 GOVT SUBDIVISIONS	\$0	\$7	0.000		1	
TOTAL *	\$675,801	\$3,338,567	0.644		145		

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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. 3/31/22 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2018-2022 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
36 MULT SERVICES	03 STORES	\$51,949	\$320,749	1.517		5	
	04 VENDING & RENTAL	\$16,749	\$100,330	2.681		9	
	07 CLUBS,AMSMT&SPRTS	\$323,249	\$1,600,052	0.694		39	
	08 HEALTH CARE FACIL	\$1,690	\$12,242	0.000		0	
	09 HOTELS AND MOTELS	\$7,819	\$51,937	0.136		0	
	10 SCHLS & CHURCHES	\$14,399	\$27,121	0.000		0	
	12 BUILDINGS&OFFICES	\$35,815	\$195,091	1.374		6	
	13 MISC. PREMISES	\$21,242	\$108,945	0.403		2	
	TOTAL *	\$472,913	\$2,416,468	0.860		61	
TOTAL ALL TOP	01 FOOD&BEV.(RETAIL)	\$472,522	\$3,305,379	0.919		129	
	02 RESTAURANTS	\$606,554	\$3,418,231	0.642		100	
	03 STORES	\$587,211	\$2,714,883	0.784		64	
	04 VENDING & RENTAL	\$20,518	\$151,047	2.188		9	
	05 FOOD & BEV. DIST.	\$121,596	\$772,462	1.174		10	
	06 NON-FOOD&BEV.DIST	\$137,971	\$743,737	0.839		11	
	07 CLUBS,AMSMT&SPRTS	\$402,845	\$2,183,140	0.877		71	
	08 HEALTH CARE FACIL	\$132,688	\$701,170	0.737		6	
	09 HOTELS AND MOTELS	\$237,627	\$2,496,544	0.647		89	
	10 SCHLS & CHURCHES	\$667,468	\$3,156,408	0.644		142	
	11 APARTMENTS	\$526,470	\$2,263,021	1.503		74	
	12 BUILDINGS&OFFICES	\$1,167,652	\$6,409,109	1.259		261	
	13 MISC. PREMISES	\$41,149	\$247,652	0.869		16	
	16 GOVT SUBDIVISIONS	\$0	\$7	0.000		1	
TOTAL *	\$5,122,270	\$28,562,789	0.960		983		

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

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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. 3/31/22 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2018-2022 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
10 MONOLINE	30 SERVICE	\$229,946	\$967,626	0.617	0.771	17	0.971
	31 LIGHT CONTRACTING	\$183,232	\$972,449	0.745	0.931	135	1.032
	32 MEDIUM CONTRCTING	\$1,903,388	\$8,916,730	0.731	0.914	274	0.982
	33 HEAVY CONTRACTING	\$340,024	\$1,558,012	0.763	0.954	66	0.986
	34 DEALER OR DISTRIB	\$163,341	\$972,119	1.119	1.399	18	0.975
	35 LGT. MANUFACTURER	\$1,481	\$14,701	2.339	2.924	2	0.957
	36 MED. MANUFACTURER	\$329,860	\$1,862,773	0.239	0.299	20	0.951
	37 HVY. MANUFACTURER	\$143,916	\$893,309	0.219	0.274	1	0.964
	38 MISC. OPERATION	\$210,798	\$885,193	1.049	1.311	20	0.998
	TOTAL *	\$3,505,984	\$17,042,910	0.698		553	
33 MULT OFFICE	31 LIGHT CONTRACTING	\$3,857	\$26,477	0.595	0.744	1	1.070
	32 MEDIUM CONTRCTING	\$1,206	\$9,228	-	-	0	1.018
	33 HEAVY CONTRACTING	\$15,335	\$67,689	4.350	5.438	1	1.022
	38 MISC. OPERATION	\$31,833	\$136,544	0.814	1.018	2	1.034
	TOTAL *	\$52,231	\$239,938	1.817		4	
34 MULT MERCANTILE	30 SERVICE	\$19,656	\$183,795	2.589	3.236	4	1.030
	32 MEDIUM CONTRCTING	\$27,145	\$152,494	2.168	2.710	2	1.041
	34 DEALER OR DISTRIB	\$490,443	\$2,278,567	1.026	1.283	109	1.034
	36 MED. MANUFACTURER	\$5,070	\$15,770	-	-	0	1.008
	38 MISC. OPERATION	\$26,709	\$110,378	1.995	2.494	7	1.058
	TOTAL *	\$569,023	\$2,741,004	1.171		122	
35 MULT INSTITUT.	31 LIGHT CONTRACTING	\$4,573	\$17,392	8.457	10.571	3	1.060
	32 MEDIUM CONTRCTING	\$230,981	\$844,464	0.672	0.840	33	1.009
	TOTAL *	\$235,554	\$861,856	0.823		36	
36 MULT SERVICES	30 SERVICE	\$16,916	\$118,399	0.778	0.973	6	0.976
	31 LIGHT CONTRACTING	\$22,084	\$161,970	1.267	1.584	10	1.037
	32 MEDIUM CONTRCTING	\$41,889	\$241,514	0.009	0.011	2	0.987
	33 HEAVY CONTRACTING	\$15,323	\$80,282	-	-	0	0.991
	34 DEALER OR DISTRIB	\$270,307	\$1,471,808	0.592	0.740	35	0.980
	36 MED. MANUFACTURER	\$672	\$3,165	-	-	0	0.955
	38 MISC. OPERATION	\$245,038	\$1,244,020	0.893	1.116	51	1.003
	TOTAL *	\$612,230	\$3,321,160	0.687		104	

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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. 3/31/22 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2018-2022 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
37 MULT INDUST/PROC	31 LIGHT CONTRACTING	\$37	\$88	-	-	0	1.084
	32 MEDIUM CONTRCTING	\$100,217	\$456,777	0.504	0.630	12	1.031
	33 HEAVY CONTRACTING	\$7,768	\$41,720	0.142	0.178	1	1.035
	34 DEALER OR DISTRIB	\$12,282	\$215,840	0.329	0.411	3	1.024
	35 LGT. MANUFACTURER	\$19,204	\$101,146	-	-	0	1.005
	36 MED. MANUFACTURER	\$617,993	\$2,460,317	0.810	1.013	37	0.998
	37 HVY. MANUFACTURER	\$279,064	\$1,098,166	0.821	1.026	12	1.013
	38 MISC. OPERATION	\$3,427	\$18,916	-	-	0	1.048
	TOTAL *	\$1,039,990	\$4,392,969	0.755		65	
38 MULT CONTRACTORS	30 SERVICE	\$497,610	\$2,666,882	0.673	0.841	46	1.000
	31 LIGHT CONTRACTING	\$268,948	\$1,459,537	1.359	1.699	122	1.062
	32 MEDIUM CONTRCTING	\$1,309,007	\$6,957,734	0.871	1.089	297	1.011
	33 HEAVY CONTRACTING	\$416,087	\$2,350,570	0.854	1.068	55	1.015
	38 MISC. OPERATION	\$78,836	\$456,187	0.782	0.978	11	1.027
	TOTAL *	\$2,570,489	\$13,890,911	0.878		531	
TOTAL ALL TOP	30 SERVICE	\$764,128	\$3,936,703	0.708		73	
	31 LIGHT CONTRACTING	\$482,731	\$2,637,913	1.183		271	
	32 MEDIUM CONTRCTING	\$3,613,833	\$17,578,941	0.774		620	
	33 HEAVY CONTRACTING	\$794,537	\$4,098,273	0.859		123	
	34 DEALER OR DISTRIB	\$936,374	\$4,938,335	0.908		165	
	35 LGT. MANUFACTURER	\$20,684	\$115,847	0.167		2	
	36 MED. MANUFACTURER	\$953,595	\$4,342,024	0.608		57	
	37 HVY. MANUFACTURER	\$422,979	\$1,991,474	0.616		13	
	38 MISC. OPERATION	\$596,640	\$2,851,239	0.973		91	
TOTAL *	\$8,585,501	\$42,490,748	0.800		1,415		

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

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
PRODUCTS  
BASIC LIMIT RELATIVE CHANGE ANALYSIS

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TYPE OF POLICY	(1) BAILEY FORMULA RELATIVITY	(2) CREDIBILITY	(3) CREDIBILITY WEIGHTED RELATIVITY	(4) BALANCED RELATIVITY	(5) INDICATED CHANGE
10	0.928	0.322	0.976	0.976	
34	1.049	0.356	1.017	1.016	4.2%
36	1.049	0.178	1.008	1.008	3.3%
37	1.011	0.431	1.005	1.004	2.9%
CLASS GROUP					
3	0.930	0.423	0.970	0.970	
4	1.069	0.394	1.027	1.027	
5	1.116	0.105	1.012	1.012	
6	0.992	0.299	0.998	0.998	
7	0.865	0.118	0.983	0.983	

NOTE: THE INDICATED CHANGES BY TOP WERE FURTHER ADJUSTED BY THE FOLLOWING  
DIFFERENTIALS: TOP 34: 0.995  
TOP 36: 0.993  
TOP 37: 0.953

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	0.783	0.870	1,091	0.946
	04 DLR,DST-NOTFD/DRG	\$7,190,323	\$36,653,516	0.937	1.042	432	1.002
	05 MAN.NTFD/DRG(Low)	\$1,226,514	\$7,102,146	0.788	0.876	56	0.987
	06 MAN.NTFD/DRG(MED)	\$8,466,486	\$42,680,135	0.814	0.905	423	0.973
	07 MAN.NTFD/DRG(HGH)	\$2,036,214	\$10,951,431	0.681	0.757	70	0.959
	TOTAL *	\$30,738,634	\$161,045,845	0.821		2,072	
34 MULT MERCANTILE	03 MAN,DLR,DSTFD/DRG	\$5,085,663	\$25,340,297	0.947	1.053	506	0.986
	04 DLR,DST-NOTFD/DRG	\$27,891,818	\$137,888,579	0.997	1.108	2,035	1.044
	06 MAN.NTFD/DRG(MED)	\$2,648	\$13,111	0.000	0.000	-	1.014
	TOTAL *	\$32,980,129	\$163,241,987	0.989		2,541	
36 MULT SERVICES	04 DLR,DST-NOTFD/DRG	\$3,130,195	\$15,943,473	1.018	1.131	631	1.035
	06 MAN.NTFD/DRG(MED)	\$30,963	\$176,926	0.028	0.031	1	1.005
	TOTAL *	\$3,161,158	\$16,120,400	1.008		632	
37 MULT INDUST/PROC.	03 MAN,DLR,DSTFD/DRG	\$11,666,754	\$62,347,318	0.810	0.901	1,979	0.974
	05 MAN.NTFD/DRG(Low)	\$3,213,073	\$18,166,949	1.070	1.190	163	1.015
	06 MAN.NTFD/DRG(MED)	\$26,040,916	\$133,610,898	0.908	1.010	1,362	1.001
	07 MAN.NTFD/DRG(HGH)	\$6,218,877	\$29,699,655	0.800	0.890	210	0.987
	TOTAL *	\$47,139,619	\$243,824,820	0.881		3,714	
TOTAL ALL TOP	03 MAN,DLR,DSTFD/DRG	\$28,571,513	\$151,346,232	0.823		3,576	
	04 DLR,DST-NOTFD/DRG	\$38,212,336	\$190,485,568	0.987		3,098	
	05 MAN.NTFD/DRG(Low)	\$4,439,588	\$25,269,095	0.992		219	
	06 MAN.NTFD/DRG(MED)	\$34,541,014	\$176,481,070	0.884		1,786	
	07 MAN.NTFD/DRG(HGH)	\$8,255,091	\$40,651,087	0.771		280	
	TOTAL *	\$114,019,542	\$584,233,052	0.899		8,959	

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

INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
 LOCAL PRODUCTS/COMPLETED OPERATIONS  
 BASIC LIMIT RELATIVE CHANGE ANALYSIS

TYPE OF POLICY	(1)	(2)	(3)	(4)	(5)
	BAILEY FORMULA RELATIVITY	CREDIBILITY CREDIBILITY	CREDIBILITY WEIGHTED RELATIVITY	BALANCED RELATIVITY	INDICATED CHANGE
10	1.006	0.779	1.005	1.006	
34	1.009	0.487	1.004	1.005	0.0%
36	0.988	0.571	0.993	0.994	-1.2%
37	0.887	0.148	0.982	0.983	-2.2%
38	1.001	0.975	1.001	1.002	-0.4%
CLASS GROUP					
1	1.380	0.484	1.169	1.175	
2	1.005	0.553	1.003	1.008	
11	1.100	0.365	1.036	1.041	
12	0.983	1.000	0.983	0.988	
13	0.961	0.263	0.990	0.995	

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

	(1)	(2)	(3)	(4)
	BAILEY		CREDIBILITY	
	FORMULA		WEIGHTED	BALANCED
STATE	RELATIVITY	CREDIBILITY	RELATIVITY	RELATIVITY
	1.268	0.358	1.089	1.092
	1.365	0.259	1.084	1.087
	1.833	0.110	1.069	1.073
Arkansas	1.342	0.222	1.068	1.071
	1.300	0.230	1.062	1.066
	1.301	0.218	1.059	1.063
	1.251	0.252	1.058	1.062
	1.289	0.180	1.047	1.050
	1.156	0.306	1.045	1.049
	1.080	0.562	1.044	1.048
	1.169	0.254	1.040	1.044
	1.081	0.487	1.039	1.042
	1.077	0.410	1.031	1.034
	1.114	0.269	1.030	1.033
	1.085	0.323	1.027	1.030
	1.260	0.111	1.026	1.029
	1.080	0.333	1.026	1.029
	1.033	0.489	1.016	1.019
	1.027	0.466	1.013	1.016
	1.047	0.211	1.010	1.013
	1.037	0.226	1.008	1.012
	1.015	0.243	1.004	1.007
	1.010	0.354	1.004	1.007
	1.111	0.030	1.003	1.007
	0.995	0.171	0.999	1.003
	0.996	0.436	0.998	1.002
	0.995	0.688	0.997	1.000
	0.984	0.327	0.995	0.998
	0.965	0.163	0.994	0.998
	0.960	0.162	0.993	0.997
	0.984	0.436	0.993	0.996
	0.966	0.208	0.993	0.996
	0.968	0.232	0.992	0.996
	0.936	0.133	0.991	0.995
	0.960	0.249	0.990	0.993
	0.977	0.493	0.988	0.992
	0.973	0.635	0.982	0.986
	0.873	0.137	0.982	0.985
	0.947	0.374	0.980	0.983
	0.924	0.314	0.975	0.979
	0.930	0.371	0.973	0.977
	0.835	0.157	0.972	0.975
	0.913	0.357	0.968	0.971
	0.899	0.376	0.961	0.964
	0.340	0.043	0.955	0.958
	0.898	0.432	0.955	0.958
	0.896	0.507	0.946	0.949
	0.690	0.163	0.941	0.944
	0.825	0.328	0.939	0.942
	0.827	0.390	0.928	0.932
	0.811	0.363	0.927	0.930
	0.683	0.237	0.914	0.917

\* Sorted by balanced relative change

## INSURANCE SERVICES OFFICE, INC.

ARKANSAS  
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	\$4,934	\$54,757	2.021	2.098	3	1.266
	02 RET.STRS-NTFD/DRG	\$24,370	\$92,816	0.370	0.384	3	1.086
	11 COMP. OPS. (LOW)	\$45,596	\$303,931	0.644	0.668	3	1.122
	12 COMP. OPS. (MED)	\$878,960	\$4,831,641	1.062	1.103	74	1.065
	13 COMP. OPS. (HGH)	\$66,814	\$292,511	0.789	0.819	2	1.072
	TOTAL *	\$1,020,674	\$5,575,656	1.014		85	
34 MULT MERCANTILE	01 RET.STRS-FOOD/DRG	\$44,391	\$204,524	0.760	0.789	24	1.265
	02 RET.STRS-NTFD/DRG	\$46,889	\$216,507	5.508	5.717	14	1.086
	12 COMP. OPS. (MED)	\$8,483	\$47,679	0.000	0.000	0	1.064
	TOTAL *	\$99,763	\$468,710	2.927		38	
36 MULT SERVICES	01 RET.STRS-FOOD/DRG	\$3,385	\$28,376	0.000	0.000	0	1.251
	02 RET.STRS-NTFD/DRG	\$99,206	\$492,728	1.753	1.820	38	1.073
	11 COMP. OPS. (LOW)	\$8,687	\$55,968	0.000	0.000	0	1.108
	12 COMP. OPS. (MED)	\$7,841	\$165,716	1.105	1.147	7	1.052
	13 COMP. OPS. (HGH)	\$29,474	\$122,603	0.000	0.000	0	1.059
	TOTAL *	\$148,593	\$865,392	1.229		45	
37 MULT INDUST/PROC.	11 COMP. OPS. (LOW)	\$283	\$4,620	0.000	0.000	0	1.097
	12 COMP. OPS. (MED)	\$30,295	\$153,051	0.000	0.000	0	1.041
	TOTAL *	\$30,578	\$157,671	0.000		0	
38 MULT CONTRACTORS	11 COMP. OPS. (LOW)	\$77,923	\$391,370	0.492	0.511	3	1.118
	12 COMP. OPS. (MED)	\$1,204,427	\$6,096,483	1.341	1.392	91	1.061
	13 COMP. OPS. (HGH)	\$131,986	\$700,713	2.546	2.643	9	1.068
	TOTAL *	\$1,414,336	\$7,188,565	1.407		103	
TOTAL ALL TOP	01 RET.STRS-FOOD/DRG	\$52,710	\$287,657	0.829		27	
	02 RET.STRS-NTFD/DRG	\$170,465	\$802,051	2.588		55	
	11 COMP. OPS. (LOW)	\$132,488	\$755,889	0.511		6	
	12 COMP. OPS. (MED)	\$2,130,006	\$11,294,570	1.201		172	
	13 COMP. OPS. (HGH)	\$228,274	\$1,115,827	1.703		11	
	TOTAL *	\$2,713,943	\$14,255,994	1.289		271	

\* 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	1.231		621	
	02 RET.STRS-NTFD/DRG	\$3,644,206	\$17,449,172	1.109		492	
	11 COMP. OPS. (LOW)	\$5,499,261	\$29,100,438	1.217		689	
	12 COMP. OPS. (MED)	\$120,011,947	\$572,386,816	0.962		7,034	
	13 COMP. OPS. (HGH)	\$7,536,492	\$38,042,850	0.672		262	
	TOTAL *	\$138,440,739	\$670,273,579	0.964		9,098	
34 MULT MERCANTILE	01 RET.STRS-FOOD/DRG	\$8,156,117	\$43,997,404	1.362		2,733	
	02 RET.STRS-NTFD/DRG	\$7,639,610	\$36,671,723	0.951		693	
	12 COMP. OPS. (MED)	\$3,008,570	\$14,169,615	0.939		125	
	TOTAL *	\$18,804,297	\$94,838,741	1.127		3,551	
36 MULT SERVICES	01 RET.STRS-FOOD/DRG	\$643,620	\$4,295,009	1.241		162	
	02 RET.STRS-NTFD/DRG	\$15,583,411	\$76,045,252	0.943		3,398	
	11 COMP. OPS. (LOW)	\$3,267,900	\$16,818,142	1.161		488	
	12 COMP. OPS. (MED)	\$5,157,211	\$26,533,736	0.988		778	
	13 COMP. OPS. (HGH)	\$1,204,826	\$5,882,500	0.609		61	
	TOTAL *	\$25,856,969	\$129,574,639	0.971		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	0.539		14	
	12 COMP. OPS. (MED)	\$5,046,084	\$25,673,289	0.857		313	
	13 COMP. OPS. (HGH)	\$2,262	\$21,501	0.000		0	
	TOTAL *	\$5,189,458	\$26,460,901	0.846		327	
38 MULT CONTRACTORS	11 COMP. OPS. (LOW)	\$11,708,508	\$61,005,531	0.958		812	
	12 COMP. OPS. (MED)	\$192,727,882	\$985,553,302	0.941		12,745	
	13 COMP. OPS. (HGH)	\$15,769,275	\$78,710,767	1.070		712	
	TOTAL *	\$220,205,665	\$1,125,269,600	0.951		14,269	
TOTAL ALL TOP	01 RET.STRS-FOOD/DRG	\$10,571,554	\$61,714,586	1.330		3,516	
	02 RET.STRS-NTFD/DRG	\$26,867,226	\$130,166,147	0.968		4,583	
	11 COMP. OPS. (LOW)	\$20,593,798	\$107,562,352	1.057		2,003	
	12 COMP. OPS. (MED)	\$325,951,694	\$1,624,316,756	0.948		20,995	
	13 COMP. OPS. (HGH)	\$24,512,856	\$122,657,618	0.925		1,035	
	TOTAL *	\$408,497,128	\$2,046,417,459	0.963		32,132	

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

COMMERCIAL PACKAGE POLICY

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SECTION C - REVISED CLM DIVISION NINE

Commercial Package Policy Package Modification Factors (Revised MLCP-PMF-1) ..... C-2

**COMMERCIAL LINES MANUAL  
DIVISION NINE – MULTIPLE LINE  
COMMERCIAL PACKAGE POLICY  
PACKAGE MODIFICATION FACTORS**

**ARKANSAS (03)**

**PACKAGE MODIFICATION FACTORS**

<b>Package Modification Assignment (PMA)</b>	<b>Premium From CLM Division</b>			
	<b>Two</b>	<b>Three, Four, Five, Eight  Property</b>	<b>Four, Six  Liability</b>	<b>All Other Divisions</b>
Apartment House	.90	1.00	1.00	1.00
Contractors	.90	1.00	.98	1.00
Industrial & Processing	.90	.74	.92	1.00
Institutional	.90	1.00	.82	1.00
Mercantile	.90	.94	.88	1.00
Motel/Hotel	.90	1.00	1.00	1.00
Office	.90	.74	.93	1.00
Service	.90	1.00	1.00	1.00

**Table 1. Package Modification Factors**