

RULES – IMPLEMENTATION

AUGUST 25, 2022

COMMERCIAL MULTIPLE LINE

LI-ML-2022-019

## OREGON COMMERCIAL PACKAGE POLICY REVISED PACKAGE MODIFICATION FACTOR REVISION TO BE IMPLEMENTED; EXHIBITS PRESENTED IN EXCEL

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### KEY MESSAGE

Revised Commercial Package Policy package modification factors for an overall statewide change of 1.6% to be implemented.

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### BACKGROUND

In circular [LI-ML-2022-015](#), 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-2022-RLA1, which presents a review of Commercial Package Policy modification factors experience. Refer to the attachment(s) for complete details.

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### IMPORTANT NOTE

#### Change in Format

This circular offers several enhancements for customers. In addition to the PDF version, exhibits and loss cost tables are now available in user-friendly Excel format rather than Word. Where possible, exhibits are linked together formulaically to clarify how calculations flow through the entire ratemaking process and to enable customers to test the effects of different assumptions on the results.

To facilitate this change, the filing has been restructured. All explanatory text, for all sections of the filing, appears first; all exhibits and tables are grouped together and appear thereafter. Exhibits have been relabeled (Exhibit A1, Exhibit A2, etc.).

We invite customers to share feedback on this revised format and suggestions for further enhancements by contacting the individuals listed in the Contact Information block.

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## EFFECTIVE DATE

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

These changes are applicable to all policies written on or after January 1, 2023.

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## 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-2022-RLA1](#) and SERFF Tracking Number [ISOF-133366415](#), 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-2022-006](#) 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 1-23 (or the earliest possible subsequent date), along with any new and/or revised manual pages.

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## REFERENCE(S)

- [LI-ML-2022-015](#) (06/30/2022) Commercial Package Policy Experience Reviewed By Staff
- [LI-CL-2022-006](#) (02/02/2022) Revised Lead Time Requirements Listing

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**ATTACHMENT(S)**Filing ML-2022-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, Nancy Narisi, am a Senior Actuarial Associate 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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## CONTACT INFORMATION

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OREGON  
ADVISORY PACKAGE MODIFICATION FACTOR REVIEW  
COMMERCIAL PACKAGE POLICY  
ML-2022-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	1.0%	0.0%	0.6%
Office	-3.3%	5.3%	3.9%
Mercantile	-5.8%	5.7%	1.1%
Institutional	-3.2%	0.0%	-2.2%
Services	3.1%	0.0%	1.1%
Indust./Proc.	-5.3%	3.4%	0.5%
Contractors	<u>-4.4%</u>	<u>4.2%</u>	<u>3.8%</u>
Statewide	-3.1%	3.5%	1.6%

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OREGON

ADVISORY PACKAGE MODIFICATION FACTOR REVIEW

COMMERCIAL PACKAGE POLICY

ML-2022-RLA1

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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 06/30/20.
  - Basic Group II: ten fiscal accident years ending 06/30/20.
  - Special Causes of Loss: five fiscal accident years ending 06/30/20.
  - Crime: calendar year ending 06/30/16.
  - Inland Marine: five calendar accident years ending 12/31/16.
  - Fidelity: policy year ending 12/31/15.
  - Owners, Landlords, and Tenants: five fiscal accident years ending 06/30/20.
  - Manufacturers and Contractors: five fiscal accident years ending 06/30/20.
  - Products: three calendar accident years ending 12/31/19.
  - Local Products and Completed Operations: three calendar accident years ending 12/31/19.
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PRIOR ISO  
REVISIONS

The latest revisions in this state are:

<u>Filing</u>	ML-19-RLA1	ML-18-RLA1	ML-15-RLA1
<u>Dates</u>			
Implemented	6/1/2020	5/1/2019	6/1/2016
<u>Changes</u>			
Indicated	0.7%	-0.1%	-0.1%
Filed	0.7%	-0.1%	-0.1%
Implemented	0.7%	-0.1%	-0.1%

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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 12/31/2020 for the Annual Statement Line of Business (ASLOB) indicated.

COMMERCIAL MULTI PERIL (ASLOB 51 & 52)

1. Liberty Mutual Insurance Company
  2. Travelers Indemnity Company
  3. Tokio Marine Companies
  4. Cincinnati Insurance Company
  5. Continental Casualty Company
  6. Hanover Insurance Company
  7. Insurance Company Of North America
  8. American Hallmark Insurance Company Of Texas
  9. Country Mutual Insurance Company
  10. California Capital 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 12/31/2020 is:

Commercial Multi Peril (ASLOB 51 & 52). 55%.

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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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OREGON  
ADVISORY PACKAGE MODIFICATION FACTOR REVIEW  
COMMERCIAL PACKAGE POLICY  
ML-2022-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	<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"><li>(1) determine the monoline loss cost level need;</li><li>(2) determine indicated changes to the eight property Commercial Package Policy (CPP) Package Modification Factors (PMFs) based on Basic Group II experience.</li></ol>
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 AND FIDELITY

The reviews for Burglary and Theft and for Fidelity are done on a multistate basis, combining both multiline and monoline experience. However, 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.



COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES  
PROPERTY COVERAGES: COMMERCIAL INLAND MARINE

EXHIBITS B6 AND B7

Exhibits B6 and B7 are not applicable this year. Commercial Inland Marine relativities are not being reviewed in 2021.

## 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:	
	<div><div>1) determine monoline loss cost level needs for the appropriate rating variables;</div><div>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.</div></div>	
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	<div><div>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.</div><div>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 and territory (if applicable) relativities will serve to derive the relationship of the various classification and territories 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.</div><div>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.</div></div>	
RATING VARIABLES USED	<div>For Premises/Operations and Products/Completed Operations, the rating variables used in the relativity analysis are as follows:</div> <div><div><div>Manufacturers and Contractors -</div><div>Owners, Landlords and Tenants -</div><div>Products -</div><div>Local Products/Completed Operations-</div></div><div><div>Type of policy and Class group</div><div>Type of policy, Territory and Class group</div><div>Type of policy and Class group</div><div>Type of policy, State and Class group</div></div></div>	

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:

$$TOP_i = \frac{\sum_j \sum_k W_{ijk} r_{ijk}}{\sum_j \sum_k W_{ijk} CG_j TER_k} \quad \text{where } 1 \leq i \leq m$$

$$CG_j = \frac{\sum_i \sum_k W_{ijk} r_{ijk}}{\sum_i \sum_k W_{ijk} TOP_i TER_k} \quad \text{where } 1 \leq j \leq n$$

$$TER_k = \frac{\sum_i \sum_j W_{ijk} r_{ijk}}{\sum_i \sum_j W_{ijk} TOP_i CG_j} \quad \text{where } 1 \leq k \leq p$$

$TOP_i$  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;

$TER_k$  is the relative change for the  $k^{\text{th}}$  territory;

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

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

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

$m$  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 territories 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 and class group into the third formula to get a territory relativity. This result is then used with the class group relativity in the first formula to get a new type of policy relativity, which in turn is substituted along with the territory relativity into the second formula to get a new class group relativity. 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

$$Z = \sqrt{P/18,000} \text{ for Owners, Landlords and Tenants, } Z = \sqrt{P/18,000} \text{ for}$$

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, territory, state or type of policy credibility;

R is the class group, territory, 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 and the class group, territory (if applicable) and state relativities which result from the aforementioned procedures are then used to generate indicated monoline classification loss cost changes. The multiline relativities are 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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INSURANCE SERVICES OFFICE, INC.

## OREGON

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)	0.99	1.00	1.0%	1.00	1.00	0.0%	0.6%
OFFICE (33)	0.92	0.89	-3.3%	0.95	1.00	5.3%	3.9%
MERCANTILE (34)	0.86	0.81	-5.8%	0.88	0.93	5.7%	1.1%
INSTITUTION(35)	0.94	0.91	-3.2%	1.00	1.00	0.0%	-2.2%
SERVICES (36)	0.97	1.00	3.1%	1.00	1.00	0.0%	1.1%
IND/PROC (37)	0.76	0.72	-5.3%	0.88	0.91	3.4%	0.5%
CONTRACTORS(38)	0.91	0.87	-4.4%	0.95	0.99	4.2%	3.8%
STATEWIDE			-3.1%			3.5%	1.6%



INSURANCE SERVICES OFFICE, INC.

## OREGON

## 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	332,809	0.850	-2.9%	0.825	0.834
BASIC GRP II	190,728	1.500	0.0%	1.500	1.500
SP CAUSE/LOSS	257,543	1.015	-1.9%	0.996	1.006
* CRIME	2,068	0.908	0.0%	0.908	0.908
* INL. MAR.	3,978	0.975	0.0%	0.975	0.975
* FIDELITY	5,170	1.000	0.0%	1.000	1.000
TOTAL	792,296	1.000	-0.8%	0.992	1.000
LIABILITY-					
OL&T	1,895,402	1.000	5.1%	1.051	1.000
TOTAL	1,895,402	1.000	5.1%	1.051	1.000
-----					
PROP. & LIAB. TOTAL	2,687,698		3.4%		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	1,142,468	1.051	-1.7%	1.033	1.070
BASIC GRP II	299,683	0.848	-3.8%	0.816	0.845
SP CAUSE/LOSS	691,731	0.965	-3.0%	0.936	0.970
* CRIME	2,808	0.908	0.0%	0.908	0.908
* INL. MAR.	635	0.975	0.0%	0.975	0.975
* FIDELITY	13,640	1.000	0.0%	1.000	1.000
TOTAL	2,150,965	0.990	-2.5%	0.965	1.000
LIABILITY-					
OL&T	1,411,824	1.000	6.1%	1.061	1.000
TOTAL	1,411,824	1.000	6.1%	1.061	1.000
-----					
PROP. & LIAB. TOTAL	3,562,789		0.9%		0.6%

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

## INSURANCE SERVICES OFFICE, INC.

## OREGON

## 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	314,183	0.959	-5.4%	0.907	0.911
BASIC GRP II	110,520	0.802	-3.9%	0.771	0.774
SP CAUSE/LOSS	285,186	0.922	-2.4%	0.900	0.904
* CRIME	4,613	0.908	0.0%	0.908	0.908
* INL. MAR.	9,673	0.975	0.0%	0.975	0.975
* FIDELITY	18,120	1.000	0.0%	1.000	1.000
TOTAL	742,295	0.920	-3.9%	0.884	0.890
LIABILITY-					
OL&T	3,573,634	0.969	4.5%	1.013	1.012
M&C	271,398	0.814	6.9%	0.870	0.869
TOTAL	3,845,032	0.950	5.3%	1.001	1.000
-----					
PROP. & LIAB.	4,587,327		3.8%		3.9%
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	2,865,018	0.962	-8.4%	0.881	0.881
BASIC GRP II	730,288	0.902	-0.8%	0.895	0.895
SP CAUSE/LOSS	1,437,809	0.666	-4.2%	0.638	0.638
* CRIME	19,036	0.908	0.0%	0.908	0.908
* INL. MAR.	272,498	0.975	0.0%	0.975	0.975
* FIDELITY	217,395	1.000	0.0%	1.000	1.000
TOTAL	5,542,044	0.860	-5.8%	0.810	0.810
LIABILITY-					
OL&T	5,765,268	0.832	5.5%	0.878	0.883
M&C	1,198,390	1.005	6.0%	1.065	1.071
LOCAL PRODUCT	731,151	1.272	1.9%	1.296	1.304
* MULTI PRODUCT	666,468	0.853	4.2%	0.889	0.889
TOTAL	8,361,277	0.880	5.4%	0.928	0.930
-----					
PROP. & LIAB.	13,903,321		0.9%		1.1%
TOTAL					

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

INSURANCE SERVICES OFFICE, INC.

## OREGON

## 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	1,665,755	1.158	-3.6%	1.116	1.118
BASIC GRP II	465,632	0.827	-6.3%	0.775	0.776
SP CAUSE/LOSS	817,833	0.689	1.4%	0.699	0.700
* CRIME	16,401	0.908	0.0%	0.908	0.908
* INL. MAR.	3,643	0.975	0.0%	0.975	0.975
* FIDELITY	136,794	1.000	0.0%	1.000	1.000
TOTAL	3,106,058	0.940	-3.8%	0.905	0.910
LIABILITY-					
OL&T	1,270,170	1.017	-0.2%	1.015	1.012
M&C	43,977	0.718	6.7%	0.766	0.764
TOTAL	1,314,147	1.000	0.3%	1.003	1.000
-----					
PROP. & LIAB. TOTAL	4,420,205		-2.5%		-2.2%
SERVICES (36) *****	(1) AGGREGATE LOSS COSTS	(2) CURRENT IMPLICIT PMF	(3) NET INDICATION	(4) INDIC. PMF	(5) CAPPED PMF
COVERAGE					
PROPERTY-					
BASIC GRP I	1,704,496	1.193	-1.1%	1.180	1.227
BASIC GRP II	456,925	1.049	-1.7%	1.031	1.072
SP CAUSE/LOSS	724,412	0.639	3.5%	0.661	0.688
* CRIME	7,990	0.908	0.0%	0.908	0.908
* INL. MAR.	25,091	0.975	0.0%	0.975	0.975
* FIDELITY	116,481	1.000	0.0%	1.000	1.000
TOTAL	3,035,395	0.970	-0.7%	0.964	1.000
LIABILITY-					
OL&T	2,718,643	0.912	6.8%	0.974	0.944
M&C	1,816,602	0.934	5.2%	0.983	0.952
LOCAL PRODUCT	1,121,731	1.470	-5.4%	1.391	1.347
* MULTI PRODUCT	83,074	0.916	5.2%	0.964	0.964
TOTAL	5,740,050	1.000	3.2%	1.032	1.000
-----					
PROP. & LIAB. TOTAL	8,775,445		1.8%		1.1%

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

INSURANCE SERVICES OFFICE, INC.

## OREGON

## 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	1,604,409	0.994	-3.6%	0.958	0.958
BASIC GRP II	272,840	0.544	1.6%	0.553	0.553
SP CAUSE/LOSS	759,200	0.516	-3.1%	0.500	0.500
* CRIME	5,758	0.908	0.0%	0.908	0.908
* INL. MAR.	3,833	0.975	0.0%	0.975	0.975
* FIDELITY	75,362	1.000	0.0%	1.000	1.000
TOTAL	2,721,402	0.760	-5.3%	0.720	0.720
LIABILITY-					
M&C	3,366,652	0.898	1.1%	0.908	0.913
LOCAL PRODUCT	173,194	0.836	-0.1%	0.835	0.840
* MULTI PRODUCT	1,744,744	0.863	4.0%	0.898	0.898
TOTAL	5,284,590	0.880	2.5%	0.902	0.910
-----					
PROP. & LIAB.	8,005,992		-0.1%		0.5%
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	373,126	0.839	-6.0%	0.789	0.789
BASIC GRP II	121,819	1.105	-2.1%	1.082	1.082
SP CAUSE/LOSS	344,141	0.919	-4.2%	0.880	0.880
* CRIME	1,442	0.908	0.0%	0.908	0.908
* INL. MAR.	2,756	0.975	0.0%	0.975	0.975
* FIDELITY	40,225	1.000	0.0%	1.000	1.000
TOTAL	883,509	0.910	-4.8%	0.867	0.870
LIABILITY-					
M&C	7,392,717	0.938	9.8%	1.030	1.036
LOCAL PRODUCT	10,267,140	0.957	-1.4%	0.944	0.949
TOTAL	17,659,857	0.950	3.2%	0.980	0.990
-----					
PROP. & LIAB.	18,543,366		2.8%		3.8%
TOTAL					

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

INSURANCE SERVICES OFFICE, INC.

## OREGON

## 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	10,002,264	1.030	-4.5%	0.984	0.996
BASIC GRP II	2,648,435	0.872	-2.1%	0.854	0.863
SP CAUSE/LOSS	5,317,855	0.699	-1.8%	0.686	0.695
* CRIME	60,116	0.908	0.0%	0.908	0.908
* INL. MAR.	322,107	0.975	0.0%	0.975	0.975
* FIDELITY	623,187	1.000	0.0%	1.000	1.000
TOTAL	18,973,964	0.897	-4.1%	0.860	0.869
LIABILITY-					
OL&T	16,634,941	0.916	5.1%	0.963	0.949
M&C	14,089,736	0.929	6.7%	0.991	0.993
LOCAL PRODUCT	12,293,216	1.002	-1.6%	0.986	0.988
* MULTI PRODUCT	2,494,286	0.862	4.1%	0.897	0.897
TOTAL	45,512,179	0.937	3.9%	0.974	0.970
-----					
PROP. & LIAB.	64,486,143		1.6%		1.6%
TOTAL					

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

INSURANCE SERVICES OFFICE, INC.

OREGON

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	1.034	1.000
APARTMENT (32)	1.000	1.003	1.000
OFFICE (33)	0.950	0.981	0.980
MERCANTILE (34)	0.870	0.880	0.880
INSTITUTION(35)	0.960	0.932	0.930
SERVICES (36)	0.990	1.008	1.000
IND/PROC (37)	0.840	0.833	0.830
CONTRACTORS(38)	0.950	0.975	0.980

NOTE: Combined PMFs are provided for informational purposes only.

INSURANCE SERVICES OFFICE, INC.

OREGON

## 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	1.705	0.059	1.032	1.041	
31	1.180	0.016	1.003	1.011	-2.9%
32	1.249	0.064	1.014	1.023	-1.7%
33	0.253	0.017	0.977	0.985	-5.4%
34	0.655	0.131	0.946	0.954	-8.4%
35	0.947	0.080	0.996	1.004	-3.6%
36	1.269	0.090	1.022	1.030	-1.1%
37	0.955	0.090	0.996	1.004	-3.6%
38	0.191	0.018	0.971	0.979	-6.0%
TERRITORY					
Portland	1.669	0.121	1.064	1.103	
Balance of State	0.903	0.497	0.951	0.985	

INSURANCE SERVICES OFFICE, INC.

## OREGON

## 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	1.054	0.188	1.010	1.015	
31	0.713	0.028	0.991	0.996	-1.9%
32	0.796	0.089	0.980	0.985	-3.0%
33	0.699	0.040	0.986	0.991	-2.4%
34	0.803	0.152	0.967	0.972	-4.2%
35	1.275	0.094	1.023	1.029	1.4%
36	1.612	0.093	1.045	1.051	3.5%
37	----	----	0.979	0.984	-3.1%
38	0.484	0.046	0.967	0.972	-4.2%
CATEGORY					
1	1.091	0.573	1.051	1.024	
2	0.641	0.067	0.971	0.945	
3	0.846	0.056	0.991	0.965	
4	0.788	0.087	0.979	0.954	
5	0.839	0.071	0.988	0.962	
6	0.945	0.042	0.998	0.972	
7	1.001	0.021	1.000	0.974	
8	0.763	0.060	0.984	0.958	
9	0.985	0.077	0.999	0.973	
10	0.726	0.054	0.983	0.958	
11	0.820	0.101	0.980	0.955	
12	0.436	0.063	0.949	0.924	
13	0.530	0.051	0.968	0.943	
14	1.675	0.077	1.041	1.014	



INSURANCE SERVICES OFFICE, INC.

OREGON

## BASIC GROUP I RELATIVITY ANALYSIS

## SUMMARY OF EXPERIENCE USED IN SIMULTANEOUS REVIEW

TYPE OF POLICY	(1)	(2)	(3)	(4)
	ACCIDENT YEAR			
	ENDING 12/31/19	5 - YEAR	5 - YEAR	RELATIVITY
	AGGREGATE LOSS COSTS	AGGREGATE LOSS COSTS	EXPERIENCE RATIO	
-----				
ENTIRE STATE				
10 MONOLINE	1,248,207	6,309,095	1.920	1.901
31 MULTILINE MOTEL/HOTEL	332,809	1,650,957	1.342	1.329
32 MULTILINE APARTMENT	1,142,468	6,786,078	1.398	1.384
33 MULTILINE OFFICE	314,183	1,762,539	0.246	0.244
34 MULTILINE MERCANTILE	2,865,018	15,011,153	0.640	0.634
35 MULTILINE INSTITUTIONAL	1,665,755	8,703,282	0.858	0.850
36 MULTILINE SERVICES	1,704,496	9,884,192	1.110	1.099
37 MULTILINE INDUST/PROCESS	1,604,409	9,882,786	1.010	1.000
38 MULTILINE CONTRACTORS	<u>373,126</u>	<u>1,842,553</u>	<u>0.173</u>	<u>0.171</u>
TOTAL ALL TOPS*	11,250,471	61,832,635	1.010	1.000

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

INSURANCE SERVICES OFFICE, INC.

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

TYPE OF POLICY	CATEGORY	(1) ACCIDENT YEAR ENDING 06/30/20 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	577,419	2,891,193	1.869	1.575	1.634
	02 RES. APTS. AND COND	15,758	58,932	0.949	1.308	1.357
	03 OFFICES	58,396	324,658	0.930	1.296	1.344
	04 MERCANTILE - HIGH	85,894	450,879	0.781	1.256	1.303
	05 MERCANTILE - MEDIUM	39,015	178,606	0.211	1.138	1.180
	06 MERCANTILE - LOW	12,910	94,617	0.496	1.207	1.252
	07 MOTELS AND HOTELS	10,326	52,376	0.148	1.133	1.175
	08 INSTITUTIONAL - HIG	23,645	117,336	0.034	1.103	1.144
	09 INSTITUTIONAL - LOW	27,807	117,133	0.322	1.167	1.211
	10 INDUST-PROC - HIGH	31,069	125,637	0.830	1.279	1.327
	11 INDUST-PROC - LOW	42,467	322,461	0.223	1.130	1.172
	12 SERVICE - HIGH	19,997	106,324	4.430	2.076	2.154
	13 SERVICE - LOW	36,245	200,632	0.982	1.311	1.360
	14 CONTRACTORS	17,975	83,996	1.428	1.412	1.465
	TOTAL*	998,923	5,124,780	1.428	1.448	1.502
31 MULTILINE	01 BUILDINGS	212,006	874,197	0.706	0.770	0.799
MOTEL/HOTEL	07 MOTELS AND HOTELS	45,537	272,493	0.468	0.726	0.753
	TOTAL*	257,543	1,146,690	0.664	0.762	0.791
32 MULTILINE	01 BUILDINGS	501,304	2,881,311	0.861	0.861	0.893
APARTMENT	02 RES. APTS. AND COND	190,427	1,022,619	0.289	0.503	0.522
	TOTAL*	691,731	3,903,930	0.704	0.763	0.791
33 MULTILINE	01 BUILDINGS	205,177	1,131,300	0.709	0.763	0.791
OFFICE	03 OFFICES	76,889	524,742	0.149	0.521	0.540
	04 MERCANTILE - HIGH	1,289	7,553	0.000	0.766	0.795
	08 INSTITUTIONAL - HIG	597	4,086	0.000	0.770	0.799
	11 INDUST-PROC - LOW	64	2,002	0.000	0.772	0.801
	12 SERVICE - HIGH	770	6,183	0.000	0.768	0.797
	14 CONTRACTORS	400	5,028	1.086	0.887	0.920
	TOTAL*	285,186	1,680,894	0.552	0.698	0.724

INSURANCE SERVICES OFFICE, INC.

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

TYPE OF POLICY	CATEGORY	(1) ACCIDENT YEAR ENDING 06/30/20 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	960,359	4,637,050	0.870	0.869	0.901
	03 OFFICES	1,365	5,054	0.000	0.769	0.798
	04 MERCANTILE - HIGH	147,151	910,048	0.392	0.580	0.602
	05 MERCANTILE - MEDIUM	203,440	968,906	0.551	0.671	0.696
	06 MERCANTILE - LOW	109,150	548,156	0.641	0.755	0.783
	08 INSTITUTIONAL - HIG	-	22	0.000	1.000	1.000
	11 INDUST-PROC - LOW	555	2,870	0.000	0.771	0.800
	12 SERVICE - HIGH	8,350	49,012	1.185	0.915	0.949
	13 SERVICE - LOW	5,451	43,524	0.622	0.826	0.857
	14 CONTRACTORS	1,988	21,285	0.197	0.777	0.806
	TOTAL*	1,437,809	7,185,927	0.757	0.803	0.833
35 MULTILINE INSTITUTIONAL	01 BUILDINGS	450,768	2,247,061	1.520	1.376	1.427
	03 OFFICES	12,566	16,494	0.347	0.800	0.830
	04 MERCANTILE - HIGH	2,893	14,756	0.000	0.759	0.787
	08 INSTITUTIONAL - HIG	136,748	747,144	1.063	0.975	1.011
	09 INSTITUTIONAL - LOW	205,765	1,067,134	1.471	1.250	1.297
	12 SERVICE - HIGH	1,686	10,121	0.000	0.763	0.791
	13 SERVICE - LOW	6,291	26,413	1.186	0.907	0.941
	14 CONTRACTORS	1,116	7,024	0.000	0.767	0.796
	TOTAL*	817,833	4,136,147	1.400	1.260	1.308
36 MULTILINE SERVICES	01 BUILDINGS	442,710	2,509,479	1.772	1.737	1.802
	03 OFFICES	1,012	4,882	0.000	0.721	0.748
	04 MERCANTILE - HIGH	4,948	38,161	0.000	0.559	0.580
	05 MERCANTILE - MEDIUM	424	880	0.000	0.747	0.775
	06 MERCANTILE - LOW	3,663	7,509	0.912	0.849	0.881
	08 INSTITUTIONAL - HIG	15,452	78,966	0.000	0.438	0.454
	09 INSTITUTIONAL - LOW	10,107	58,919	0.000	0.490	0.508
	10 INDUST-PROC - HIGH	7,405	19,384	3.765	1.525	1.582
	11 INDUST-PROC - LOW	449	2,325	0.000	0.737	0.765
	12 SERVICE - HIGH	149,219	827,633	0.625	0.647	0.671
	13 SERVICE - LOW	82,323	526,039	0.727	0.744	0.772
	14 CONTRACTORS	6,700	44,635	0.378	0.671	0.696
	TOTAL*	724,412	4,118,812	1.341	1.327	1.377

INSURANCE SERVICES OFFICE, INC.

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

TYPE OF POLICY	CATEGORY	(1) ACCIDENT YEAR ENDING 06/30/20 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	405,647	2,199,762	0.385	0.404	0.419
	03 OFFICES	7	615	0.000	0.749	0.777
	04 MERCANTILE - HIGH	339	2,036	0.000	0.739	0.767
	05 MERCANTILE - MEDIUM	7	7	0.000	0.753	0.781
	08 INSTITUTIONAL - HIG	70	91	0.000	0.752	0.780
	10 INDUST-PROC - HIGH	135,063	719,306	0.137	0.220	0.228
	11 INDUST-PROC - LOW	217,464	1,341,301	0.730	0.737	0.765
	12 SERVICE - HIGH	-	1,707	0.000	1.000	1.000
	14 CONTRACTORS	603	3,581	4.516	1.309	1.358
	TOTAL*	759,200	4,268,406	0.443	0.468	0.485
38 MULTILINE CONTRACTORS	01 BUILDINGS	155,798	788,044	0.391	0.440	0.456
	03 OFFICES	3,160	21,638	0.772	0.821	0.852
	04 MERCANTILE - HIGH	568	2,188	16.554	2.682	2.782
	05 MERCANTILE - MEDIUM	-	102	0.000	1.000	1.000
	08 INSTITUTIONAL - HIG	415	2,278	0.000	0.738	0.766
	11 INDUST-PROC - LOW	1,502	8,596	0.000	0.698	0.724
	12 SERVICE - HIGH	1,146	3,805	2.108	1.002	1.039
	13 SERVICE - LOW	347	1,933	0.000	0.740	0.768
	14 CONTRACTORS	181,205	1,081,496	0.799	0.802	0.832
	TOTAL*	344,141	1,910,080	0.639	0.642	0.665
TOTAL ALL TOPS*	01 BUILDINGS	3,911,188	20,159,397	1.107	1.053	1.092
	02 RES. APTS. AND COND	206,185	1,081,551	0.339	0.565	0.586
	03 OFFICES	153,395	898,083	0.473	0.848	0.880
	04 MERCANTILE - HIGH	243,082	1,425,621	0.552	0.827	0.858
	05 MERCANTILE - MEDIUM	242,886	1,148,501	0.495	0.746	0.774
	06 MERCANTILE - LOW	125,723	650,282	0.634	0.804	0.834
	07 MOTELS AND HOTELS	55,863	324,869	0.409	0.801	0.831
	08 INSTITUTIONAL - HIG	176,927	949,923	0.826	0.944	0.979
	09 INSTITUTIONAL - LOW	243,679	1,243,186	1.279	1.209	1.254
	10 INDUST-PROC - HIGH	173,537	864,327	0.416	0.466	0.483
	11 INDUST-PROC - LOW	262,501	1,679,555	0.641	0.801	0.830
	12 SERVICE - HIGH	181,168	1,004,785	1.072	0.821	0.852
	13 SERVICE - LOW	130,657	798,541	0.814	0.913	0.947
	14 CONTRACTORS	209,987	1,247,045	0.841	0.851	0.883
	TOTAL*	6,316,778	33,475,666	0.950	0.964	1.000

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

INSURANCE SERVICES OFFICE, INC.

## OREGON

## BASIC GROUP II RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ACCIDENT YEAR ENDING 06/30/20 AGGR. LOSS COSTS AT CURRENT IMPLICIT PMF	ACCIDENT YEARS 2011 - 2020 EXPER. RATIO AT CURRENT PMF	FORMULA RELATIVITY (2)/ 1.12	CREDIBILITY C	CREDIBILITY WEIGHTED RELATIVITY D	BALANCED FORMULA RELATIVITY E	NORMALIZED FORMULA RELATIVITY F	INDICATED CHANGE
	-----	-----	-----	-----	-----	-----	-----	-----
MONOLINE	435,953	1.2480	1.1140	0.1120	1.013	1.0130	1.0190	
MULTILINE	2,648,435	1.0870	0.9710	0.3580	0.990	0.9910	0.9971	
	-----	-----	-----	-----	-----	-----	-----	
COVERAGE	3,084,388	1.1200	1.0000			0.9941	1.0002	
MULTILINE TOP								
31 MOTEL/HOTEL	190,728	*****	*****	*****	*****	1.0130	1.0190	0.0%
32 APARTMENT	299,683	0.8540	0.7630	0.0750	0.982	0.9740	0.9798	-3.8%
33 OFFICE	110,520	0.3790	0.3380	0.0280	0.981	0.9730	0.9788	-3.9%
34 MERCANTILE	730,288	1.2390	1.1060	0.1270	1.013	1.0050	1.0110	-0.8%
35 INSTITUTIONAL	465,632	0.6100	0.5450	0.0940	0.957	0.9490	0.9546	-6.3%
36 SERVICES	456,925	1.1660	1.0410	0.1040	1.004	0.9960	1.0019	-1.7%
37 INDUST/PROCESS	272,840	1.8810	1.6790	0.0550	1.037	1.0290	1.0351	1.6%
38 CONTRACTORS	121,819	1.1400	1.0180	0.0250	1.000	0.9920	0.9979	-2.1%
	-----	-----	-----	-----	-----	-----	-----	
	2,648,435	1.0870	0.9710		0.9980	0.9910	0.9971	

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))

E - FOR UNCAPPED MULTILINE TOPS: (6) = (5) \* (0.990/0.998)

FOR CAPPED MULTILINE TOPS: (6) = 1.500 \* (1.013) / 1.500

F - (7) = (6) / 0.9941

## INSURANCE SERVICES OFFICE, INC.

OREGON  
OWNERS, LANDLORDS AND TENANTS  
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	0.810	0.191	0.961	0.962	
31	1.080	0.114	1.009	1.011	5.1%
32	1.249	0.086	1.019	1.021	6.1%
33	1.019	0.150	1.003	1.005	4.5%
34	1.067	0.197	1.013	1.015	5.5%
35	0.659	0.104	0.958	0.960	-0.2%
36	1.234	0.118	1.025	1.027	6.8%
CLASS GROUP					
1	0.679	0.076	0.971	0.972	
2	0.865	0.157	0.977	0.978	
3	0.723	0.088	0.972	0.972	
4	0.338	0.027	0.971	0.973	
5	1.065	0.039	1.002	1.003	
6	1.259	0.076	1.018	1.018	
7	0.996	0.103	1.000	1.000	
8	0.972	0.027	0.999	1.000	
9	1.138	0.146	1.019	1.020	
10	1.385	0.106	1.035	1.035	
11	1.100	0.095	1.009	1.010	
12	1.002	0.201	1.000	1.001	
13	0.960	0.058	0.998	0.998	
16	0.000	0.000	1.000	1.001	
TERRITORY					
501	0.901	0.194	0.980	0.978	
502	1.044	0.324	1.014	1.012	

## INSURANCE SERVICES OFFICE, INC.

## OREGON

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	0.798	0.179	0.960	0.959	
33	1.984	0.037	1.026	1.025	6.9%
34	1.276	0.074	1.018	1.017	6.0%
35	2.986	0.022	1.024	1.023	6.7%
36	1.086	0.122	1.010	1.009	5.2%
37	0.726	0.094	0.970	0.970	1.1%
38	1.276	0.215	1.054	1.053	9.8%
CLASS GROUP					
30		0.081	0.000		
31		0.160	0.000		
32		0.208	0.000		
33		0.069	0.000		
34		0.109	0.000		
35		0.038	0.000		
36		0.076	0.000		
37		0.039	0.000		
38		0.094	0.000		

## INSURANCE SERVICES OFFICE, INC.

OREGON  
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. 06/30/20 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2016-2020 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
10 MONOLINE	01 FOOD&BEV.(RETAIL)	\$109,201	\$426,438	0.981		26	
	02 RESTAURANTS	\$206,791	\$1,179,657	0.767		47	
	03 STORES	\$155,024	\$734,387	0.366		28	
	04 VENDING & RENTAL	\$18,553	\$99,353	0.582		7	
	05 FOOD & BEV. DIST.	\$95,882	\$357,362	0.205		5	
	06 NON-FOOD&BEV.DIST	\$115,520	\$581,890	1.852		66	
	07 CLUBS,AMSMT&SPRTS	\$381,524	\$1,790,184	0.784		86	
	08 HEALTH CARE FACIL	\$14,223	\$60,262	2.047		2	
	09 HOTELS AND MOTELS	\$316,015	\$2,213,109	1.358		96	
	10 SCHLS & CHURCHES	\$211,106	\$916,826	1.204		50	
	11 APARTMENTS	\$574,183	\$2,810,111	0.63		60	
	12 BUILDINGS&OFFICES	\$873,422	\$5,157,272	0.75		174	
	13 MISC. PREMISES	\$15,381	\$555,525	0.41		13	
	TOTAL *	\$3,086,825	\$16,882,376	0.843		660	
31 MULT MOTEL/HOTEL	09 HOTELS AND MOTELS	\$1,084,947	\$5,082,019	1.286		233	
	TOTAL *	\$1,084,947	\$5,082,019	1.286		233	
32 MULT APARTMENT	11 APARTMENTS	\$607,562	\$2,863,120	1.616		104	
	12 BUILDINGS&OFFICES	\$200,580	\$759,834	0.537		29	
	TOTAL *	\$808,142	\$3,622,954	1.348		133	
33 MULT OFFICE	12 BUILDINGS&OFFICES	\$2,029,081	\$10,366,204	1.041		406	
	13 MISC. PREMISES	\$16,502	\$95,571	0.103		1	
	TOTAL *	\$2,045,583	\$10,461,775	1.034		407	
34 MULT MERCANTILE	01 FOOD&BEV.(RETAIL)	\$493,042	\$2,144,040	0.654		77	
	02 RESTAURANTS	\$1,794,907	\$8,370,970	0.938		398	
	03 STORES	\$453,528	\$2,244,646	0.867		81	
	04 VENDING & RENTAL	\$4,346	\$37,275	0		0	
	05 FOOD & BEV. DIST.	\$63,626	\$316,221	2.137		23	
	06 NON-FOOD&BEV.DIST	\$210,465	\$1,188,530	0.919		39	
	12 BUILDINGS&OFFICES	\$280,130	\$1,718,761	1.304		79	
	13 MISC. PREMISES	\$52	\$315	0		0	
	TOTAL *	\$3,300,096	\$16,020,758	0.938		697	
35 MULT INSTITUT.	07 CLUBS,AMSMT&SPRTS	\$248,737	\$1,207,858	0.755		28	
	08 HEALTH CARE FACIL	\$79,972	\$495,786	0.457		11	
	10 SCHLS & CHURCHES	\$392,045	\$2,056,649	0.941		151	
	12 BUILDINGS&OFFICES	\$4,890	\$26,333	1.012		4	
	16 GOVT SUBDIVISIONS	\$1,414	\$164,006	0		0	
	TOTAL *	\$727,058	\$3,950,632	0.823		194	



## INSURANCE SERVICES OFFICE, INC.

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

TERRITORY ALL		(1) CALENDAR A.Y.E. 06/30/20 AGGREGATE LOSS COSTS AT CURRENT LEVEL	(2) CALENDAR A.Y.E. 2016-2020 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	\$153,265	\$606,502	0.961		31	
	04 VENDING & RENTAL	\$28,238	\$148,108	0.279		6	
	07 CLUBS,AMSMT&SPRTS	\$639,821	\$2,947,563	1.298		77	
	08 HEALTH CARE FACIL	\$1,005	\$4,155	0		0	
	09 HOTELS AND MOTELS	\$463,863	\$2,108,002	1.207		54	
	10 SCHLS & CHURCHES	\$9,179	\$41,935	0.07		0	
	12 BUILDINGS&OFFICES	\$99,649	\$522,098	2.424		36	
	13 MISC. PREMISES	\$161,158	\$849,846	1.345		47	
	TOTAL *	\$1,556,178	\$7,228,209	1.288		251	
TOTAL ALL TOP	01 FOOD&BEV.(RETAIL)	\$602,243	\$2,570,478	0.714		103	
	02 RESTAURANTS	\$2,001,698	\$9,550,627	0.92		445	
	03 STORES	\$761,817	\$3,585,535	0.784		140	
	04 VENDING & RENTAL	\$51,137	\$284,736	0.365		13	
	05 FOOD & BEV. DIST.	\$159,508	\$673,583	0.976		28	
	06 NON-FOOD&BEV.DIST	\$325,985	\$1,770,420	1.25		105	
	07 CLUBS,AMSMT&SPRTS	\$1,270,082	\$5,945,605	1.037		191	
	08 HEALTH CARE FACIL	\$95,200	\$560,203	0.69		13	
	09 HOTELS AND MOTELS	\$1,864,825	\$9,403,130	1.278		383	
	10 SCHLS & CHURCHES	\$612,330	\$3,015,410	1.018		201	
	11 APARTMENTS	\$1,181,745	\$5,673,231	1.137		164	
	12 BUILDINGS&OFFICES	\$3,487,752	\$18,550,502	1		728	
	13 MISC. PREMISES	\$193,093	\$1,501,257	1.164		61	
	16 GOVT SUBDIVISIONS	\$1,414	\$164,006	0		0	
	TOTAL *	\$12,608,829	\$63,248,723	1.023		2,575	

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

## INSURANCE SERVICES OFFICE, INC.

OREGON  
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. 06/30/20 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2016-2020 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
10 MONOLINE	30 SERVICE	\$277,306	\$1,196,602	0.647	0.602	15	0.954
	31 LIGHT CONTRACTING	\$297,140	\$1,319,105	2.356	2.192	120	1.02
	32 MEDIUM CONTRCTING	\$2,394,372	\$11,131,411	0.859	0.799	296	0.973
	33 HEAVY CONTRACTING	\$416,994	\$2,150,413	0.923	0.859	27	0.947
	34 DEALER OR DISTRIB	\$258,095	\$1,256,915	0.275	0.256	27	0.917
	35 LGT. MANUFACTURER	\$81,463	\$635,737	0.356	0.332	8	0.961
	36 MED. MANUFACTURER	\$340,186	\$1,310,275	0.706	0.657	35	0.929
	37 HVY. MANUFACTURER	\$284,817	\$1,518,403	0.099	0.092	4	0.924
	38 MISC. OPERATION	\$370,556	\$1,784,076	0.706	0.657	46	0.939
	TOTAL *	\$4,720,929	\$22,302,937	0.837		578	
33 MULT OFFICE	31 LIGHT CONTRACTING	\$4,472	\$76,836	0.356	0.331	4	1.089
	32 MEDIUM CONTRCTING	\$2,332	\$11,924	0	0	0	1.039
	33 HEAVY CONTRACTING	\$47,968	\$319,239	0.362	0.337	5	1.011
	38 MISC. OPERATION	\$100,579	\$583,201	2.639	2.455	16	1.002
	TOTAL *	\$155,351	\$991,200	1.83		25	
34 MULT MERCANTILE	30 SERVICE	\$48,657	\$186,851	0.862	0.802	7	1.012
	32 MEDIUM CONTRCTING	\$38,824	\$156,837	0.348	0.324	10	1.031
	34 DEALER OR DISTRIB	\$518,543	\$2,265,985	1.027	0.956	69	0.972
	36 MED. MANUFACTURER	\$14,027	\$80,119	0	0	0	0.985
	38 MISC. OPERATION	\$65,919	\$238,729	1.621	1.508	13	0.995
	TOTAL *	\$685,970	\$2,928,521	1.013		99	
35 MULT INSTITUT.	31 LIGHT CONTRACTING	\$477	\$4,396	4.293	3.994	1	1.088
	32 MEDIUM CONTRCTING	\$24,696	\$131,748	3.502	3.259	8	1.038
	TOTAL *	\$25,173	\$136,144	3.517		9	
36 MULT SERVICES	30 SERVICE	\$19,341	\$111,621	2.31	2.15	12	1.004
	31 LIGHT CONTRACTING	\$99,474	\$694,129	1.366	1.271	44	1.073
	32 MEDIUM CONTRCTING	\$90,877	\$390,465	1.647	1.532	14	1.023
	33 HEAVY CONTRACTING	\$9,075	\$54,419	4.748	4.418	3	0.995
	34 DEALER OR DISTRIB	\$525,107	\$2,210,888	0.852	0.793	112	0.964
	36 MED. MANUFACTURER	\$12,660	\$49,064	0.728	0.678	2	0.977
	38 MISC. OPERATION	\$283,307	\$1,204,001	0.673	0.626	81	0.987
	TOTAL *	\$1,039,841	\$4,714,587	0.982		268	

## INSURANCE SERVICES OFFICE, INC.

OREGON  
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. 06/30/20 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2016-2020 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
37 MULT INDUST/PROC	31 LIGHT CONTRACTING	\$574	\$2,736	0	0	0	1.031
	32 MEDIUM CONTRCTING	\$626,429	\$3,048,346	0.647	0.602	39	0.983
	33 HEAVY CONTRACTING	\$19,453	\$117,046	0.091	0.085	3	0.956
	34 DEALER OR DISTRIB	\$26,169	\$138,600	0.568	0.529	6	0.926
	35 LGT. MANUFACTURER	\$200,935	\$1,017,239	1.132	1.053	18	0.971
	36 MED. MANUFACTURER	\$594,985	\$2,976,986	0.486	0.452	66	0.939
	37 HVY. MANUFACTURER	\$447,169	\$1,930,201	0.476	0.443	23	0.934
	38 MISC. OPERATION	\$11,391	\$44,291	4.436	4.127	3	0.949
	TOTAL *	\$1,927,105	\$9,275,445	0.624		158	
38 MULT CONTRACTORS	30 SERVICE	\$555,159	\$2,760,272	1.441	1.341	85	1.047
	31 LIGHT CONTRACTING	\$801,932	\$3,792,346	1.733	1.613	291	1.119
	32 MEDIUM CONTRCTING	\$2,284,012	\$11,006,781	1.632	1.519	410	1.067
	33 HEAVY CONTRACTING	\$514,168	\$2,404,411	1.129	1.05	47	1.038
	38 MISC. OPERATION	\$76,393	\$287,174	0.028	0.026	1	1.03
	TOTAL *	\$4,231,664	\$20,250,984	1.536		834	
TOTAL ALL TOP	30 SERVICE	\$900,463	\$4,255,346	1.184		119	
	31 LIGHT CONTRACTING	\$1,204,069	\$5,889,548	1.851		460	
	32 MEDIUM CONTRCTING	\$5,461,542	\$25,877,512	1.179		777	
	33 HEAVY CONTRACTING	\$1,007,658	\$5,045,528	1.02		85	
	34 DEALER OR DISTRIB	\$1,327,914	\$5,872,388	0.803		214	
	35 LGT. MANUFACTURER	\$282,398	\$1,652,976	0.908		26	
	36 MED. MANUFACTURER	\$961,858	\$4,416,444	0.56		103	
	37 HVY. MANUFACTURER	\$731,986	\$3,448,604	0.329		27	
	38 MISC. OPERATION	\$908,145	\$4,141,472	0.966		160	
	TOTAL *	\$12,786,033	\$60,599,818	1.075		1,971	

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

INSURANCE SERVICES OFFICE, INC.

OREGON  
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	0.343	0.975	0.975	
34	1.065	0.358	1.023	1.023	4.9%
36	1.147	0.179	1.025	1.025	5.1%
37	1.002	0.474	1.001	1.001	2.7%
CLASS GROUP					
3	1.020	0.457	1.009	1.013	
4	0.934	0.390	0.974	0.977	
5	1.299	0.127	1.034	1.037	
6	1.020	0.312	1.006	1.010	
7	0.986	0.168	0.998	1.001	

NOTE: THE INDICATED CHANGES BY TOP WERE FURTHER ADJUSTED BY THE FOLLOWING  
DIFFERENTIALS: TOP 34: 0.993  
TOP 36: 1.001  
TOP 37: 1.013

## 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. 12/31/2019 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2015 - 2019 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIVITY	NUMBER OF OCCURRENCES	BAL CELL RELATIVITY
10 MONOLINE	03 MAN,DLR,DSTFD/DRG	13,750,935	66,100,554	0.988	0.977	1,263	0.987
	04 DLR,DST-NOTFD/DRG	8,477,615	41,310,448	0.911	0.900	460	0.952
	05 MAN.NTFD/DRG(LOW)	1,472,878	6,420,923	1.025	1.013	73	1.011
	06 MAN.NTFD/DRG(MED)	9,010,398	41,539,850	0.977	0.966	500	0.984
	07 MAN.NTFD/DRG(HGH)	2,241,335	11,290,085	0.650	0.643	59	0.976
	TOTAL *	34,953,161	166,661,860	0.947		2,355	
34 MULT MERCANTILE	03 MAN,DLR,DSTFD/DRG	4,329,151	22,382,753	1.183	1.169	619	1.036
	04 DLR,DST-NOTFD/DRG	27,418,064	130,792,947	0.993	0.982	1,940	1.000
	06 MAN.NTFD/DRG(MED)	8,530	45,329	0.000	0.000	-	1.033
	TOTAL *	31,755,745	153,221,029	1.019		2,559	
36 MULT SERVICES	04 DLR,DST-NOTFD/DRG	3,121,637	14,216,143	1.102	1.090	644	1.002
	06 MAN.NTFD/DRG(MED)	48,702	226,631	0.000	0.000	-	1.035
	TOTAL *	3,170,339	14,442,774	1.085		644	
37 MULT INDUST/PROC.	03 MAN,DLR,DSTFD/DRG	12,807,039	61,610,215	0.973	0.962	2,291	1.014
	05 MAN.NTFD/DRG(LOW)	3,340,860	17,802,968	1.402	1.386	250	1.039
	06 MAN.NTFD/DRG(MED)	26,492,844	125,759,189	1.030	1.018	1,448	1.011
	07 MAN.NTFD/DRG(HGH)	6,306,324	31,298,086	1.098	1.085	508	1.002
	TOTAL *	48,947,067	236,470,458	1.049		4,497	
TOTAL ALL TOP	03 MAN,DLR,DSTFD/DRG	30,887,125	150,093,522	1.009		4,173	
	04 DLR,DST-NOTFD/DRG	39,017,316	186,319,538	0.984		3,044	
	05 MAN.NTFD/DRG(LOW)	4,813,738	24,223,891	1.287		323	
	06 MAN.NTFD/DRG(MED)	35,560,474	167,570,999	1.015		1,948	
	07 MAN.NTFD/DRG(HGH)	8,547,659	42,588,171	0.980		567	
	TOTAL *	118,826,312	570,796,121	1.012		10,055	

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

## INSURANCE SERVICES OFFICE, INC.

## OREGON

## LOCAL PRODUCTS/COMPLETED OPERATIONS

## BASIC LIMIT RELATIVE CHANGE ANALYSIS

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	(1)	(2)	(3)	(4)	(5)
	BAILEY		CREDIBILITY		
TYPE OF	FORMULA		WEIGHTED	BALANCED	INDICATED
POLICY	RELATIVITY	CREDIBILITY	RELATIVITY	RELATIVITY	CHANGE
10	1.013	0.781	1.010	1.009	
34	1.059	0.502	1.029	1.028	1.9%
36	0.919	0.535	0.956	0.955	-5.4%
37	1.063	0.143	1.009	1.008	-0.1%
38	0.996	0.991	0.996	0.995	-1.4%
CLASS					
GROUP					
1	0.808	0.501	0.899	0.894	
2	0.989	0.512	0.994	0.989	
11	1.091	0.353	1.031	1.026	
12	1.018	1.000	1.018	1.012	
13	0.822	0.264	0.950	0.945	

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

STATE	(1)	(2)	(3)	(4)
	BAILEY	CREDIBILITY	CREDIBILITY	
	FORMULA		WEIGHTED	BALANCED
	RELATIVITY	RELATIVITY	RELATIVITY	RELATIVITY
Oregon	1.280	0.407	1.106	1.105
	1.227	0.480	1.103	1.103
	1.218	0.458	1.094	1.094
	1.437	0.240	1.091	1.091
	1.303	0.278	1.076	1.076
	1.118	0.581	1.067	1.067
	1.360	0.161	1.051	1.050
	1.190	0.265	1.047	1.047
	1.208	0.202	1.039	1.039
	1.077	0.482	1.036	1.036
	1.362	0.116	1.036	1.036
	1.171	0.145	1.023	1.023
	1.102	0.196	1.019	1.019
	1.048	0.380	1.018	1.018
	1.052	0.299	1.015	1.015
	1.047	0.330	1.015	1.015
	1.077	0.174	1.013	1.013
	1.035	0.362	1.012	1.012
	1.048	0.250	1.012	1.011
	1.031	0.324	1.010	1.009
	1.049	0.135	1.006	1.006
	1.010	0.415	1.004	1.004
	1.020	0.177	1.004	1.003
	1.007	0.567	1.004	1.003
	1.020	0.155	1.003	1.003
	1.025	0.098	1.002	1.002
	0.992	0.454	0.997	0.996
	0.990	0.469	0.995	0.995
	0.975	0.380	0.990	0.990
	0.935	0.230	0.985	0.984
	0.888	0.133	0.984	0.984
	0.926	0.238	0.982	0.982
	0.971	0.595	0.983	0.982
	0.895	0.190	0.979	0.979
	0.684	0.055	0.979	0.979
	0.931	0.383	0.973	0.972
	0.812	0.165	0.966	0.966
	0.867	0.237	0.967	0.966
	0.734	0.160	0.952	0.951
	0.859	0.336	0.950	0.950
	0.896	0.470	0.950	0.949
	0.876	0.406	0.948	0.947
	0.918	0.645	0.946	0.946
	0.887	0.489	0.943	0.943
	0.776	0.230	0.943	0.943
	0.822	0.300	0.943	0.943
	0.796	0.267	0.941	0.941
	0.088	0.035	0.919	0.918
	0.800	0.387	0.917	0.917
	0.644	0.196	0.917	0.917
	0.757	0.314	0.916	0.916
	0.619	0.293	0.869	0.869

\* Sorted by balanced relative change

## INSURANCE SERVICES OFFICE, INC.

OREGON  
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. 06/30/20 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2016-2020 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIV.	NUMBER OF OCCURRENCES	BAL CELL RELATIV.
10 MONOLINE	01 RET.STRS-FOOD/DRG	\$18,365	\$73,051	2.072	1.907	7	0.918
	02 RET.STRS-NTFD/DRG	\$18,203	\$94,098	3.496	3.218	13	1.016
	11 COMP. OPS. (LOW)	\$113,582	\$584,387	0.43	0.396	14	1.054
	12 COMP. OPS. (MED)	\$2,693,277	\$12,330,544	0.938	0.863	155	1.04
	13 COMP. OPS. (HGH)	\$155,587	\$665,387	0.842	0.775	2	0.97
	TOTAL *	\$2,999,014	\$13,747,467	0.936		191	
34 MULT MERCANTILE	01 RET.STRS-FOOD/DRG	\$227,264	\$871,135	0.766	0.705	40	0.935
	02 RET.STRS-NTFD/DRG	\$132,177	\$570,891	1.453	1.338	21	1.035
	12 COMP. OPS. (MED)	\$70,901	\$264,150	0.682	0.627	4	1.059
	TOTAL *	\$430,342	\$1,706,176	0.963		65	
36 MULT SERVICES	01 RET.STRS-FOOD/DRG	\$15,758	\$87,557	0.297	0.273	5	0.869
	02 RET.STRS-NTFD/DRG	\$430,576	\$1,750,944	0.828	0.762	66	0.961
	11 COMP. OPS. (LOW)	\$41,886	\$194,897	0.372	0.342	1	0.997
	12 COMP. OPS. (MED)	\$145,941	\$773,937	0.724	0.666	14	0.984
	13 COMP. OPS. (HGH)	\$26,069	\$140,352	0.155	0.143	1	0.918
	TOTAL *	\$660,230	\$2,947,687	0.737		87	
37 MULT INDUST/PROC.	01 RET.STRS-FOOD/DRG	\$450	\$3,819	0	0	0	0.917
	11 COMP. OPS. (LOW)	\$1,687	\$8,183	13.434	12.366	1	1.052
	12 COMP. OPS. (MED)	\$99,802	\$472,689	0.268	0.246	5	1.038
	TOTAL *	\$101,939	\$484,691	0.484		6	
38 MULT CONTRACTORS	11 COMP. OPS. (LOW)	\$332,003	\$1,403,316	2.065	1.9	27	1.039
	12 COMP. OPS. (MED)	\$5,462,681	\$25,590,318	1.287	1.185	406	1.025
	13 COMP. OPS. (HGH)	\$248,365	\$1,299,144	0.985	0.907	16	0.957
	TOTAL *	\$6,043,049	\$28,292,778	1.317		449	
TOTAL ALL TOP	01 RET.STRS-FOOD/DRG	\$261,837	\$1,035,562	0.828		52	
	02 RET.STRS-NTFD/DRG	\$580,956	\$2,415,933	1.054		100	
	11 COMP. OPS. (LOW)	\$489,158	\$2,190,783	1.579		43	
	12 COMP. OPS. (MED)	\$8,472,602	\$39,431,638	1.149		584	
	13 COMP. OPS. (HGH)	\$430,021	\$2,104,883	0.883		19	
	TOTAL *	\$10,234,574	\$47,178,799	1.145		798	

\* 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. 12/31/2019 AGGREGATE LOSS COSTS AT CURRENT LEVEL	CALENDAR A.Y.E. 2015 - 2019 AGG LOSS COST CURRENT LEVEL	FIVE YEAR EXPERIENCE RATIO	RELATIV.	NUMBER OF OCCURRENCES	BAL CELL RELATIV.
10 MONOLINE	01 RET.STRS-FOOD/DRG	2,438,315	11,481,124	0.912		601	
	02 RET.STRS-NTFD/DRG	2,987,973	14,421,548	1.083		495	
	11 COMP. OPS. (LOW)	5,121,852	24,832,256	1.466		645	
	12 COMP. OPS. (MED)	99,545,324	453,611,463	1.119		7,145	
	13 COMP. OPS. (HGH)	7,985,186	36,362,548	0.800		270	
	TOTAL *	118,078,650	540,708,939	1.107		9,156	
34 MULT MERCANTILE	01 RET.STRS-FOOD/DRG	8,420,906	39,991,609	0.851		2,982	
	02 RET.STRS-NTFD/DRG	5,561,155	26,343,265	1.248		672	
	12 COMP. OPS. (MED)	2,449,900	11,651,099	1.126		132	
	TOTAL *	16,431,961	77,985,973	1.026		3,786	
36 MULT SERVICES	01 RET.STRS-FOOD/DRG	850,649	4,343,160	1.305		191	
	02 RET.STRS-NTFD/DRG	14,223,267	58,971,026	0.948		2,767	
	11 COMP. OPS. (LOW)	3,234,837	15,453,155	1.070		482	
	12 COMP. OPS. (MED)	4,907,590	24,453,606	1.095		800	
	13 COMP. OPS. (HGH)	1,071,672	5,500,146	0.778		63	
	TOTAL *	24,288,015	108,721,093	0.999		4,303	
37 MULT INDUST/PROC.	01 RET.STRS-FOOD/DRG	18,708	99,534	0.356		1	
	11 COMP. OPS. (LOW)	112,124	572,337	1.066		19	
	12 COMP. OPS. (MED)	3,755,205	19,337,637	1.171		289	
	13 COMP. OPS. (HGH)	42,569	250,290	0.000		0	
	TOTAL *	3,928,606	20,259,798	1.151		309	
38 MULT CONTRACTORS	11 COMP. OPS. (LOW)	10,088,973	48,995,253	1.071		731	
	12 COMP. OPS. (MED)	164,618,861	819,998,075	1.102		13,301	
	13 COMP. OPS. (HGH)	14,387,568	69,459,681	0.947		720	
	TOTAL *	189,095,402	938,453,009	1.089		14,752	
TOTAL ALL TOP	01 RET.STRS-FOOD/DRG	117,285,578	559,154,272	0.896		3,775	
	02 RET.STRS-NTFD/DRG	22,772,395	99,735,839	1.039		3,934	
	11 COMP. OPS. (LOW)	18,557,786	89,853,001	1.180		1,877	
	12 COMP. OPS. (MED)	275,276,880	1,329,051,880	1.109		21,667	
	13 COMP. OPS. (HGH)	23,486,995	111,572,665	0.887		1,053	
	TOTAL *	351,822,634	1,686,128,812	1.086		32,306	

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

COMMERCIAL PACKAGE POLICY

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SECTION C - REVISED CLM DIVISION NINE

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

**OREGON (36)**

**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	.87	.99	1.00
Industrial & Processing	.90	.72	.91	1.00
Institutional	.90	.91	1.00	1.00
Mercantile	.90	.81	.93	1.00
Motel/Hotel	.90	1.00	1.00	1.00
Office	.90	.89	1.00	1.00
Service	.90	1.00	1.00	1.00

**Table 1. Package Modification Factors**