

RULES – IMPLEMENTATION

SEPTEMBER 11, 2024

COMMERCIAL MULTIPLE LINE

LI-ML-2024-036

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

KEY MESSAGE

Revised Commercial Package Policy package modification factors for an overall statewide change of 2.3% to be implemented.

BACKGROUND

In circular [LI-ML-2024-021](#), we provided you with information about the Commercial Package Policy modification factor experience review.

CONSIDERATION OF COVID-19

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

ISO ACTION

We are implementing [ML-2024-RLA1](#), which presents a review of Commercial Package Policy modification factors experience.

Refer to the attachment(s) for complete details.

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

EFFECTIVE DATE

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

These changes are applicable to all policies written on or after March 1, 2025.

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.

WE WILL SUBMIT THIS REVISION TO THE INSURANCE DEPARTMENT ON FEBRUARY 19, 2025. IF STATE FILING REQUIREMENTS DICTATE THAT YOU MAKE A SUBMISSION WITH THE INSURANCE DEPARTMENT, DO NOT SUBMIT IT PRIOR TO THIS DATE.

In all correspondence with the Insurance Department on this revision, you should refer to ISO Filing Number [ML-2024-RLA1](#) and SERFF Tracking Number [ISOF-G134233952](#), NOT this circular number. Communications with the regulator concerning a filing affecting multiple lines of business (i.e., CL, PL, AL filing designation) should specify the line(s) of business that you are addressing.

RATING SOFTWARE IMPACT

No new attributes are being introduced with this revision.

POLICYHOLDER NOTIFICATION

If you decide to implement this revision, you should check all applicable laws for the state(s) to which this revision applies to determine whether or not a specific policyholder notice requirement may apply. Please note that circular [LI-CL-2024-016](#) contains the ISO Guide To Renewals With Changed Conditions For Commercial Lines, which is available only as a guide to assist participating companies in complying with various conditional renewal statutes or regulations, for the major commercial lines of insurance serviced by ISO. The information in the Guide does not necessarily reflect all requirements or exceptions that may apply, and it is not intended as a substitute for your review of all applicable statutes and regulations concerning policyholder notification.

REVISION DISTRIBUTION

We will issue a Notice to Manualholders with an edition date of 3-25 (or the earliest possible subsequent date), along with any new and/or revised manual pages.

REFERENCE(S)

- [LI-ML-2024-021](#) (07/16/2024) Commercial Package Policy Experience Reviewed By Staff
- [LI-CL-2024-016](#) (03/12/2024) Commercial Lines Revised Lead Time Requirements Listing

ATTACHMENT(S)

Filing [ML-2024-RLA1](#)

FILES AVAILABLE FOR DOWNLOAD

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

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

DATA QUALITY

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

ACKNOWLEDGMENT OF ACTUARIAL QUALIFICATIONS

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

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

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Now, as in the past, all of our products and services are advisory, and are made available for optional use by participating insurers as a matter of individual choice. Your company must decide for itself which, if any, ISO products or services are needed or useful to its operation and how those selected for use should be applied. We urge that you be guided by the advice of your attorneys on the legal requirements.

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Callers outside the United States, Canada, and the Caribbean may contact us using our global toll-free number (International Access Code + 800 48977489). For information on all ISO products, visit us at www.verisk.com/iso. To keep abreast of the latest Insurance Lines Services updates, view www.verisk.com/ils.

WISCONSIN
ADVISORY PACKAGE MODIFICATION FACTOR REVIEW
COMMERCIAL PACKAGE POLICY
ML-2024-RLA1
EXECUTIVE SUMMARY

PURPOSE

This document:

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

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

PMF CHANGES

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

<u>Type of Policy</u>	<u>Property</u>	<u>Liability</u>	<u>Prop. & Liab. Total</u>
Motel/Hotel	0.0%	4.2%	1.9%
Apartment	0.0%	0.0%	0.0%
Office	9.4%	2.1%	4.8%
Mercantile	5.4%	0.0%	3.3%
Institutional	1.2%	0.0%	1.1%
Services	1.0%	2.0%	1.4%
Indust./Proc.	12.0%	-1.0%	6.1%
Contractors	<u>2.0%</u>	<u>1.1%</u>	<u>1.2%</u>
Statewide	3.4%	0.6%	2.3%

WISCONSIN

ADVISORY PACKAGE MODIFICATION FACTOR REVIEW

COMMERCIAL PACKAGE POLICY

ML-2024-RLA1

EXECUTIVE SUMMARY

INDICATED
VS. CAPPED

Indicated PMF changes are based on standard ISO methodology. Differences between indicated and capped PMF changes are caused by rounding each indicated PMF to the nearest one percent and applying an upper cap of 1.00, where necessary.

HISTORICAL
SOURCE DATA

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

- Basic Group I: five fiscal accident years ending 9/30/22.
 - Basic Group II: ten fiscal accident years ending 9/30/22.
 - Special Causes of Loss: five fiscal accident years ending 9/30/22.
 - Crime: calendar year ending 06/30/22.
 - Inland Marine: calendar accident year ending 12/31/22.
 - Fidelity: policy year ending 12/31/21.
 - Owners, Landlords, and Tenants: five fiscal accident years ending 9/30/22.
 - Manufacturers and Contractors: five fiscal accident years ending 9/30/22.
 - Products: five calendar accident years ending 12/31/21.
 - Local Products and Completed Operations: five calendar accident years ending 12/31/21.
-

PRIOR ISO
REVISIONS

The latest revisions in this state are:

<u>Filing</u>	ML-2021-RLA1	ML-2017-RLA1	ML-2010-RLA1
<u>Dates</u>			
Implemented	11/1/2021	7/1/2018	1/1/2011
<u>Changes</u>			
Indicated	-2.2%	0.1%	-3.6%
Filed	-2.2%	0.1%	-3.6%
Implemented	-2.2%	0.1%	-3.6%

WISCONSIN
ADVISORY PACKAGE MODIFICATION FACTOR REVIEW
COMMERCIAL PACKAGE POLICY
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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.

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 12/31/22 for the Annual Statement Line of Business (ASLOB) indicated.

COMMERCIAL MULTI PERIL (ASLOB 51 & 52)

1. Travelers Indemnity Company
 2. Society Insurance Company
 3. Insurance Company Of North America
 4. Acuity A Mutual Insurance Company
 5. Cincinnati Insurance Company
 6. Continental Casualty Company
 7. Hanover Insurance Company
 8. QBE Insurance Corporation
 9. Tokio Marine Companies
 10. Frankenmuth Mutual 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 12/31/2022 is:

Commercial Multi Peril (ASLOB 51 & 52). 42.8%.

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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ADVISORY PACKAGE MODIFICATION FACTOR REVIEW
COMMERCIAL PACKAGE POLICY
ML-2024-RLA1
EXECUTIVE SUMMARY

COMPANY DECISION

We encourage each insurer to decide independently whether the judgments made and the procedures or data used by ISO in developing the PMFs contained herein are appropriate for your use. We have included within this document the information upon which ISO relied in order to enable companies to make such independent judgments. The data underlying the enclosed material comes from companies reporting to Insurance Services Office, Inc. Therefore, the ISO experience permits the establishment of a much broader statistical ratemaking base than could be employed by using any individual company's data. A broader data base enhances the validity of ratemaking analysis derived therefrom.

At the same time, however, an individual company may benefit from a comparison of its own experience to the aggregate ISO experience, and may reach valid conclusions with respect to the manner in which its own costs can be expected to differ from ISO's projection based on the aggregate data.

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

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

COMMERCIAL PACKAGE POLICY

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COMMERCIAL PACKAGE POLICY

SECTION A: SCOPE OF REVISION METHODOLOGY OVERVIEW

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

COMMERCIAL PACKAGE POLICY

SECTION A: SCOPE OF REVISION

CALCULATION OF REVISED PACKAGE MODIFICATION FACTORS (EXHIBIT A2)

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

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

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

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

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

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

COMMERCIAL PACKAGE POLICY

SECTION A: SCOPE OF REVISION

CALCULATION OF REVISED PACKAGE MODIFICATION FACTORS (EXHIBIT A2)

LINES OF INSURANCE (COVERAGES) INCLUDED

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

Property Coverages

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

Liability Coverages

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

COMMERCIAL PACKAGE POLICY

SECTION A: SCOPE OF REVISION

CALCULATION OF REVISED PACKAGE MODIFICATION FACTORS (EXHIBIT A2)

THE IMPLICIT PACKAGE MODIFICATION FACTOR

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

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

THE MULTILINE INDICATION

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

The development of these indications is detailed in Section B.

THE INDICATED PMF

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

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

THE CAPPED PMF

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

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

COMMERCIAL PACKAGE POLICY

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

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

OBJECTIVE	<p>The explanations which follow clarify Exhibits B1 and B2, the Basic Group I Relativity Analysis and the Special Causes of Loss Relativity Analysis, respectively. The purpose of these analyses is to:</p> <ol style="list-style-type: none">(1) determine monoline classification and territorial loss cost level needs for Basic Group I;(2) determine monoline category loss cost level need for Special Causes of Loss;(3) determine indicated changes to the eight property CPP Package Modification Factors based on Basic Group I/Special Causes of Loss experience.
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COLUMN (1)	<p><u>LEAST SQUARES FORMULA RELATIVITIES</u></p> <p>The Least Squares Formula Relativities are the marginal relativities which result from the application of the simultaneous review procedure to the raw experience (where marginal refers to the relativities for a given rating variable, e.g. type of policy, across all subsets of any other rating variables, i.e. territory for Basic Group I, and category for Special Causes of Loss).</p> <p>The purpose of such a simultaneous review procedure is to arrive at a set of type of policy relativities (which will serve to price CPP policies relative to monoline policies via the PMF); a set of territory relativities for Basic Group I; and a set of category relativities for Special Causes of Loss that best represent the experience. This procedure is in contrast to a review of each rating variable's experience separately. Such one-way types of review do not take into account differing percentages of monoline and multiline experience in each rating variable, or differing percentages of a particular rating variable's experience in the monoline and multiline types of policy. The simultaneous relativity procedure accounts for these different distributions in generating relativities for the various rating variables.</p>
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COMMERCIAL PACKAGE POLICY

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

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

COLUMN (1)
(Cont'd)

The procedure uses an iterative technique to determine a set of marginal relativities by rating variable that is a best fit to the individual cell relativities, with each cell being defined as the cross-section of specific values of each rating variable. The process uses the relativity of the five year experience ratios by rating cell to the overall statewide experience ratio and the latest year aggregate loss costs for each rating cell. (This experience is shown in Exhibit B3 for Basic Group I and Exhibit B4 for Special Causes of Loss). Specifically, the iteration procedure uses the following formulas:

BASIC GROUP I:

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

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

SPECIAL CAUSES OF LOSS:

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

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

- TOP_i is the relativity for the i th Type of Policy;
- CAT_j is the relativity for the j th Category;
- TER_k is the relativity for the k th Territory;

COMMERCIAL PACKAGE POLICY

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

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

COLUMN (1)
(Cont'd)

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

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

COLUMN (2)

CREDIBILITY

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

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

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

COMMERCIAL PACKAGE POLICY

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

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

COLUMN (3)

CREDIBILITY-WEIGHTED RELATIVITIES

Credibility-weighted relativities are calculated based on the formula

$$W = R^Z$$

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

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

COLUMN (4)

BALANCED RELATIVITIES

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

COLUMN (5)

INDICATED CHANGES

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

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

MULTILINE CONSIDERATIONS

The type of policy (TOP) relativities are used to generate multiline indications which apply to the current Implicit Package Modification Factors (IPMFs). The indicated IPMFs are calculated as follows:

$$\text{TOP y Indicated IPMF} = \frac{(\text{TOP y Current IPMF}) \times (\text{TOP y Relativity})}{\text{Monoline Relativity}}$$

For each CPP Type of Policy the indicated IPMF is subject to a minimum value of 0.50 and a maximum value of 1.50. If an indicated IPMF falls outside one of those limits, it is capped at that amount, the aggregate loss costs for that Type of Policy are adjusted to the capped IPMF level, and the entire relativity review as described above is re-performed to take this into account. If an IPMF has been capped it is so noted at the bottom of Exhibits B1 and B2.

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

COMMERCIAL PACKAGE POLICY

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

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

INTRODUCTION The experience used in the relativity analysis and displayed in Exhibits B3 is the latest five years of accident year data as reported under the Commercial Statistical Plan. As in the overall review, loss costs have been adjusted to current ISO loss cost and prospective amount of insurance levels (with multiline aggregate loss costs adjusted additionally by the current implicit package modification factors). Incurred losses are adjusted to prospective cost levels, and are further adjusted by the Basic Group I large loss procedure. Losses have also been developed to their ultimate settlement value by application of loss development factors.

COLUMN (1) AGGREGATE LOSS COSTS

The latest year adjusted aggregate loss costs (adjusted as described above) are used as weights both in the calculation of any totals shown in this table and in the iterative formulae used in the simultaneous review procedure.

COLUMN (2) 5 - YEAR AGGREGATE LOSS COSTS

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

COLUMN (3) FIVE-YEAR EXPERIENCE RATIOS

These are the ratio of the combined five-year adjusted incurred losses (adjusted as described above) to the combined five-year adjusted aggregate loss costs as shown in Column (2). Any totals which are shown are weighted averages using the adjusted aggregate loss costs in Column (1).

COLUMN (4) RELATIVITIES

The relativities are the ratios of the five-year experience ratios shown in column (3) to the average five-year experience ratio for all TOP's and territories (where applicable) combined. These relativities represent how much better or worse than average the experience for a given cell is. They are used along with the aggregate loss costs in column (1) as input for the simultaneous review procedure.

COMMERCIAL PACKAGE POLICY

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

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

INTRODUCTION

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.

COLUMN (1)

AGGREGATE LOSS COSTS

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.

COLUMN (2)

5 - YEAR AGGREGATE LOSS COSTS

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

COLUMN (3)

FIVE-YEAR EXPERIENCE RATIOS

These are the 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).

COLUMN (4)

CREDIBILITY (Z) WEIGHTED EXPERIENCE RATIO

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.

COMMERCIAL PACKAGE POLICY

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

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

COLUMN (4)
(cont'd)

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

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

COLUMN (5)

Z-WEIGHTED RELATIVITIES

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

COMMERCIAL PACKAGE POLICY

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

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

OBJECTIVE	<p>The explanations which follow clarify Exhibit B5, the Basic Group II (BG II) relativity analysis. The purpose of this analysis is to:</p> <ol style="list-style-type: none">(1) determine the monoline loss cost level need;(2) determine indicated changes to the eight property Commercial Package Policy (CPP) Package Modification Factors (PMFs) based on Basic Group II experience.
COLUMN (1)	<p><u>AGGREGATE LOSS COSTS</u></p> <p>The latest accident year adjusted aggregate loss costs (adjusted in the same manner as in the overall review, i.e. to current manual loss cost and prospective amount of insurance levels, with multiline aggregate loss costs further adjusted to current IPMF level) are used as weights in the calculation of any totals shown in this table.</p>
COLUMN (2)	<p><u>10 - YEAR EXPERIENCE RATIO</u></p> <p>These experience ratios are the ratio of the combined ten year CSP adjusted incurred losses (adjusted to current deductible and prospective cost levels including loss development, and also adjusted to reflect the BGII excess loss procedure) to the combined ten year CSP adjusted aggregate loss costs. Any totals which are shown are weighted averages using the aggregate loss costs in Column (1). When a dash is displayed in the column, it indicates that the indicated IPMF which resulted from this procedure was capped. The procedure which follows when capping occurs is described below.</p>
COLUMN (3)	<p><u>FORMULA RELATIVITY</u></p> <p>The formula relativities are the ratios of the ten year experience ratios for the type of policy (either monoline vs. multiline or individual multiline programs) to the average ten year experience ratio for monoline and multiline combined. These relativities represent how much better or worse than average the experience for a given type of policy is. Again, any totals which are shown are weighted averages and the display of a dash indicates that the resulting IPMF was capped.</p>

COMMERCIAL PACKAGE POLICY

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

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

COLUMN (3)
(Cont'd)

Unlike the BGI and SCL relativity analyses, the BGII analysis does not employ a simultaneous review procedure since a one way review is involved. That is, the overall loss cost change is only distributed across type of policy; no other rating variables are considered.

COLUMN (4)

CREDIBILITY

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

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

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

COLUMN (5)

Z - WEIGHTED RELATIVITY

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

COLUMN (6)

BALANCED FORMULA RELATIVITY

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

COMMERCIAL PACKAGE POLICY

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

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

COLUMN (7)

NORMALIZED FORMULA RELATIVITY

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

COLUMN (8)

INDICATED LOSS COST CHANGES

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

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

COMMERCIAL PACKAGE POLICY

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

Crime and Fidelity

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

Inland Marine

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

COMMERCIAL PACKAGE POLICY

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

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

OBJECTIVES	<p>The objectives of this procedure are to:</p> <ol style="list-style-type: none">1) determine monoline loss cost level needs for the appropriate rating variables;2) determine indicated changes to the eight liability Commercial Package Policy (CPP) Package Modification Factors (PMFs) based on Premises/Operations and Products/Completed Operations data.
EXPERIENCE BASE	<p>The experience used in this relativity analysis is the latest five (5) years of accident year data, as reported under the Commercial Statistical Plan with aggregate loss costs adjusted to current loss cost level (multiline aggregate loss costs adjusted additionally by the current Implicit Package Modification Factors). Losses have been trended and developed in the Relativity Analysis. ALCCL have been trended.</p>
SIMULTANEOUS DETERMINATION OF RATING VARIABLE RELATIVITIES	<p>Once the aggregate loss costs at current level and incurred losses used in the analysis have been appropriately adjusted, the 5-year experience ratios are calculated for each combination of the appropriate rating variables. From these ratios, relativities to the statewide 5-year experience ratio are calculated. These relativities are then used in a minimum bias iterative review procedure, which simultaneously determines the relativities for each rating variable.</p> <p>The purpose of a simultaneous review procedure is to arrive at a set of relativities for each rating variable that best represent the experience. For example, the type of policy relativities will serve to derive the relationship of CPP policies relative to monoline policies, via the PMF, while the class group 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.</p> <p>Such one-way types of review do not take into account differing percentages of experience of each rating variable within the other rating variables. The simultaneous review procedure accounts for these different distributions in generating relativities for each rating variable.</p>
RATING VARIABLES USED	<p>For Premises/Operations and Products/Completed Operations, the rating variables used in the relativity analysis are as follows:</p>

Manufacturers and Contractors -	Type of policy and Class group
Owners, Landlords and Tenants -	Type of policy, Territory and Class group
Products -	Type of policy and Class group
Local Products/Completed Operations-	Type of policy, State and Class group

COMMERCIAL PACKAGE POLICY

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

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

ITERATIVE PROCEDURE

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

For Owners, Landlords and Tenants:

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

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

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

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

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

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

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

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

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

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

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

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

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

n is the number of class groups in the analysis;

COMMERCIAL PACKAGE POLICY

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

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

For Local Products/Completed Operations:

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

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

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

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

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

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

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

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

n is the number of class groups in the analysis;

p is the number of states in the analysis;

COMMERCIAL PACKAGE POLICY

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

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

ITERATIVE
PROCEDURE
(Cont'd)

For example, for Owners, Landlords and Tenants, the procedure starts by inserting the actual relativities for type of policy 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.

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

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

$$\text{Manufacturers and Contractors and } Z = \sqrt{P/20,000} \text{ for Products, where P is the 5}$$

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.

INDICATED
CHANGES

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

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

COMMERCIAL PACKAGE POLICY

SECTION B: CALCULATION OF PROPOSED CHANGES

LIABILITY COVERAGES: GENERAL LIABILITY

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

MULTILINE
CONSIDERATIONS

The monoline relativities 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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COMMERCIAL PACKAGE POLICY
SUMMARY OF THIS REVIEW

Type of Policy	<u>PROPERTY PMFS</u>			<u>LIABILITY PMFS</u>			<u>PROP. & LIAB. TOTAL</u>
	Current	Capped	% Change	Current	Capped	% Change	% Change
Motel/Hotel (31)	1.00	1.00	0.0%	0.96	1.00	4.2%	1.9%
Apartment (32)	1.00	1.00	0.0%	1.00	1.00	0.0%	0.0%
Offices (33)	0.85	0.93	9.4%	0.94	0.96	2.1%	4.8%
Mercantile (34)	0.93	0.98	5.4%	1.00	1.00	0.0%	3.3%
Institutional (35)	0.82	0.83	1.2%	1.00	1.00	0.0%	1.1%
Services (36)	0.99	1.00	1.0%	0.98	1.00	2.0%	1.4%
Ind/Proc (37)	0.83	0.93	12.0%	0.98	0.97	-1.0%	6.1%
Contractors (38)	0.98	1.00	2.0%	0.94	0.95	1.1%	1.2%
			-----				-----
Statewide			3.4%			0.6%	2.3%

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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) Indicated PMF	(5) Capped PMF
<u>Coverage</u>					
Property-					
Basic Group I	545,593	0.980	3.2%	1.011	0.949
Basic Group II	314,955	0.991	12.6%	1.116	1.047
Special Causes of Loss	288,232	1.062	5.4%	1.119	1.051
* Crime	4,310	0.910	0.0%	0.910	0.910
* Inland Marine	966	0.910	0.0%	0.910	0.910
* Fidelity	4,446	1.000	0.0%	1.000	1.000
Total	1,158,502	1.000	6.5%	1.065	1.000
Liability -					
OL&T	952,985	0.957	-3.1%	0.927	1.000
Total	952,985	0.960	-3.4%	0.927	1.000
Property & Liability Total	2,111,487		2.0%		1.9%

Apartment (32) *****	(1) Aggregate Loss Costs	(2) Current Implicit PMF	(3) Net Indication	(4) Indicated PMF	(5) Capped PMF
<u>Coverage</u>					
Property-					
Basic Group I	4,578,125	0.830	5.8%	0.878	0.845
Basic Group II	3,350,657	1.230	4.7%	1.288	1.239
Special Causes of Loss	2,006,217	1.163	0.1%	1.164	1.120
* Crime	9,770	0.910	0.0%	0.910	0.910
* Inland Marine	378	0.910	0.0%	0.910	0.910
* Fidelity	3,036	1.000	0.0%	1.000	1.000
Total	9,948,183	1.000	3.9%	1.039	1.000
Liability -					
OL&T	3,087,158	1.000	2.5%	1.025	1.000
Total	3,087,158	1.000	2.5%	1.025	1.000
Property & Liability Total	13,035,341		3.6%		0.0%

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

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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) Indicated PMF	(5) Capped PMF
<u>Coverage</u>					
Property-					
Basic Group I	879,375	1.248	2.1%	1.274	1.294
Basic Group II	779,453	0.779	8.5%	0.845	0.859
Special Causes of Loss	439,837	0.622	4.1%	0.648	0.658
* Crime	6,287	0.910	0.0%	0.910	0.910
* Inland Marine	33,056	0.910	0.0%	0.910	0.910
* Fidelity	12,693	1.000	0.0%	1.000	1.000
Total	2,150,701	0.850	7.4%	0.913	0.930
Liability -					
OL&T	3,423,754	0.933	2.2%	0.954	0.957
M&C	342,416	1.007	-0.7%	1.000	1.003
Total	3,766,170	0.940	1.9%	0.957	0.960
Property & Liability Total	5,916,871		3.9%		4.8%

Mercantile (34) *****	(1) Aggregate Loss Costs	(2) Current Implicit PMF	(3) Net Indication	(4) Indicated PMF	(5) Capped PMF
<u>Coverage</u>					
Property-					
Basic Group I	4,361,238	1.004	5.6%	1.060	1.104
Basic Group II	3,279,429	1.032	-3.4%	0.997	1.038
Special Causes of Loss	1,748,884	0.675	2.7%	0.693	0.722
* Crime	53,134	0.910	0.0%	0.910	0.910
* Inland Marine	272,515	0.910	0.0%	0.910	0.910
* Fidelity	147,725	1.000	0.0%	1.000	1.000
Total	9,862,925	0.930	1.7%	0.946	0.980
Liability -					
OL&T	3,521,469	0.985	4.4%	1.028	0.982
M&C	1,222,449	1.143	0.9%	1.153	1.101
Local Product	428,028	1.386	0.0%	1.386	1.322
* Multi Product	1,241,568	0.870	3.7%	0.902	0.901
Total	6,413,514	1.000	3.8%	1.038	1.000
Property & Liability Total	16,276,439		2.5%		3.3%

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

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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) Indicated PMF	(5) Capped PMF
<u>Coverage</u>					
Property-					
Basic Group I	10,795,510	0.846	-13.8%	0.729	0.748
Basic Group II	8,570,678	0.810	12.9%	0.914	0.938
Special Causes of Loss	5,510,293	0.778	3.3%	0.804	0.824
* Crime	115,251	0.910	0.0%	0.910	0.910
* Inland Marine	17,224	0.910	0.0%	0.910	0.910
* Fidelity	223,290	1.000	0.0%	1.000	1.000
Total	25,232,246	0.820	-0.9%	0.813	0.830
Liability-					
OL&T	2,675,165	1.023	9.2%	1.117	1.032
M&C	221,054	0.778	-2.3%	0.760	0.702
Total	2,896,219	1.000	8.2%	1.082	1.000
Property & Liability Total	28,128,465		0.1%		1.1%

Services (36) *****	(1) Aggregate Loss Costs	(2) Current Implicit PMF	(3) Net Indication	(4) Indicated PMF	(5) Capped PMF
<u>Coverage</u>					
Property-					
Basic Group I	2,954,440	1.207	5.7%	1.276	1.186
Basic Group II	1,738,703	0.908	12.9%	1.025	0.953
Special Causes of Loss	1,167,495	0.748	11.0%	0.830	0.772
* Crime	48,890	0.910	0.0%	0.910	0.910
* Inland Marine	67,620	0.910	0.0%	0.910	0.910
* Fidelity	74,812	1.000	0.0%	1.000	1.000
Total	6,051,960	0.990	8.4%	1.073	1.000
Liability -					
OL&T	1,370,807	0.948	-4.7%	0.903	0.929
M&C	1,716,526	0.947	1.9%	0.965	0.992
Local Product	664,855	1.194	-1.2%	1.180	1.212
* Multi Product	10,203	0.951	2.5%	0.975	0.975
Total	3,762,391	0.980	-0.7%	0.973	1.000
Property & Liability Total	9,814,351		4.9%		1.4%

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

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

Industrial / Processing (37) *****	(1) Aggregate Loss Costs	(2) Current Implicit PMF	(3) Net Indication	(4) Indicated PMF	(5) Capped PMF
<u>Coverage</u>					
Property-					
Basic Group I	5,344,074	1.363	2.8%	1.401	1.423
Basic Group II	2,005,767	0.544	29.6%	0.705	0.716
Special Causes of Loss	1,758,323	0.520	11.2%	0.578	0.587
* Crime	44,271	0.910	0.0%	0.910	0.910
* Inland Marine	16,250	0.910	0.0%	0.910	0.910
* Fidelity	123,040	1.000	0.0%	1.000	1.000
Total	9,291,725	0.830	10.3%	0.915	0.930
Liability-					
M&C	4,511,639	0.994	-2.1%	0.973	0.976
Local Product	299,221	1.435	-2.2%	1.403	1.407
* Multi Product	2,865,928	0.938	-1.9%	0.920	0.920
Total	7,676,788	0.980	-1.7%	0.964	0.970
Property & Liability Total	16,968,513		4.9%		6.1%

Contractors (38) *****	(1) Aggregate Loss Costs	(2) Current Implicit PMF	(3) Net Indication	(4) Indicated PMF	(5) Capped PMF
<u>Coverage</u>					
Property-					
Basic Group I	687,116	1.059	4.2%	1.103	1.043
Basic Group II	551,559	1.064	16.0%	1.234	1.166
Special Causes of Loss	371,213	0.774	5.5%	0.817	0.772
* Crime	32,604	0.910	0.0%	0.910	0.910
* Inland Marine	14,375	0.910	0.0%	0.910	0.910
* Fidelity	69,866	1.000	0.0%	1.000	1.000
Total	1,726,733	0.980	7.6%	1.054	1.000
Liability-					
M&C	7,775,652	0.907	0.4%	0.911	0.920
Local Product	6,028,147	0.984	-0.4%	0.980	0.990
Total	13,803,799	0.940	0.0%	0.940	0.950
Property & Liability Total	15,530,532		0.8%		1.2%

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

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

Statewide *****	(1) Aggregate Loss Costs	(2) Current Implicit PMF	(3) Net Indication	(4) Indicated PMF	(5) Capped PMF
<u>Coverage</u>					
Property-					
Basic Group I	30,145,471	0.976	-2.0%	0.956	0.958
Basic Group II	20,591,201	0.861	10.5%	0.951	0.956
Special Causes of Loss	13,290,494	0.747	4.6%	0.781	0.784
* Crime	314,517	0.910	0.0%	0.910	0.910
* Inland Marine	422,384	0.910	0.0%	0.910	0.910
* Fidelity	658,908	1.000	0.0%	1.000	1.000
Total	65,422,975	0.885	3.1%	0.912	0.915
Liability -					
OL&T	15,031,338	0.977	3.1%	1.007	0.984
M&C	15,789,736	0.950	-0.2%	0.948	0.953
Local Product	7,420,252	1.031	-0.5%	1.026	1.034
* Multi Product	4,117,699	0.916	-0.2%	0.914	0.914
Total	42,359,025	0.967	1.1%	0.978	0.973
Property & Liability Total	107,782,000		2.3%		2.3%

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

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

Combined PMFs			
<u>Type of Policy</u>	<u>Current Combined</u>	<u>Indicated Combined</u>	<u>Capped Combined</u>
Motel/Hotel (31)	0.980	1.001	1.000
Apartment (32)	1.000	1.036	1.000
Office (33)	0.910	0.941	0.950
Mercantile (34)	0.960	0.981	0.990
Institution (35)	0.840	0.836	0.850
Services (36)	0.990	1.035	1.000
Ind/Proc (37)	0.900	0.935	0.940
Contractors (38)	0.940	0.952	0.950

NOTE: Combined PMFs are provided for informational purposes only.

WISCONSIN BASIC GROUP I RELATIVITY ANALYSIS					
	(1)	(2)	(3)	(4)	(5)
<u>TOP</u>	\$ Lst Sq Formula Relativity	Credibility Z	Credibility Weighted Relativity	Balanced Relativity	Indicated Change
10	0.897	0.153	0.984	1.018	
31	2.050	0.022	1.016	1.051	3.2%
32	1.221	0.199	1.041	1.077	5.8%
33	1.110	0.044	1.005	1.039	2.1%
34	1.222	0.192	1.039	1.075	5.6%
35	0.605	0.326	0.849	0.878	-13.8%
36	1.334	0.135	1.040	1.076	5.7%
37	1.060	0.194	1.011	1.046	2.8%
38	2.048	0.036	1.026	1.061	4.2%

	(1)	(2)	(3)	(4)
<u>Territory</u>	\$ Lst Sq Formula Relativity	Credibility Z	Credibility Weighted Relativity	Balanced Relativity
City Of Milwaukee	1.078	0.281	1.021	1.026
Balance Of State (Wisconsin)	0.989	0.724	0.992	0.996

WISCONSIN
SPECIAL CAUSES OF LOSS RELATIVITY ANALYSIS

	(1)	(2)	(3)	(4)	(5)
<u>TOP</u>	\$ Lst Sq Formula Relativity	Credibility <u>Z</u>	Credibility Weighted Relativity	Balanced Relativity	Indicated Change
10	0.780	0.200	0.952	0.962	
31	1.095	0.029	1.003	1.014	5.4%
32	0.815	0.234	0.953	0.963	0.1%
33	0.836	0.056	0.990	1.001	4.1%
34	0.885	0.192	0.977	0.988	2.7%
35	0.958	0.409	0.983	0.994	3.3%
36	1.517	0.134	1.057	1.068	11.0%
37	1.400	0.171	1.059	1.070	11.2%
38	1.075	0.050	1.004	1.015	5.5%

	(1)	(2)	(3)	(4)
<u>Category</u>	\$ Lst Sq Formula Relativity	Credibility <u>Z</u>	Credibility Weighted Relativity	Balanced Relativity
01	1.027	0.791	1.021	1.009
02	1.072	0.141	1.010	0.998
03	1.078	0.078	1.006	0.994
04	0.939	0.092	0.994	0.982
05	0.980	0.055	0.999	0.987
06	0.948	0.049	0.997	0.985
07	0.961	0.015	0.999	0.987
08	0.908	0.246	0.977	0.965
09	0.828	0.218	0.960	0.949
10	0.879	0.043	0.994	0.982
11	0.857	0.156	0.976	0.964
12	0.866	0.098	0.986	0.974
13	0.855	0.051	0.992	0.980
14	1.139	0.049	1.006	0.994

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

<u>Type Of Policy</u>	(1) Latest Year Aggregate Loss <u>Costs</u>	(2) 5 - Year Aggregate <u>Loss Costs</u>	(3) 5 - Year Experience <u>Ratio</u>	(4) 5 - Year Exp. Ratio <u>Relativity</u>
City Of Milwaukee				
10 Monoline	770,835	3,111,561	0.720	0.626
31 Multiline Motel/Hotel	40,481	183,250	0.267	0.232
32 Multiline Apartment	838,277	4,913,631	2.191	1.904
33 Multiline Office	125,268	561,306	8.595	7.467
34 Multiline Mercantile	585,841	2,946,590	0.258	0.224
35 Multiline Institutional	846,231	4,828,635	1.135	0.986
36 Multiline Services	352,315	1,878,744	0.060	0.052
37 Multiline Indust/Process	529,352	2,764,966	1.761	1.530
38 Multiline Contractors	49,813	285,490	0.088	0.076
Total All Tops*	4,138,413	21,474,173	1.341	1.165
Balance Of State (Wisconsin)				
10 Monoline	3,227,679	14,988,083	1.041	0.904
31 Multiline Motel/Hotel	505,112	2,072,854	2.339	2.032
32 Multiline Apartment	3,739,848	19,962,514	1.346	1.169
33 Multiline Office	754,107	4,006,178	1.041	0.904
34 Multiline Mercantile	3,775,397	20,767,891	1.417	1.231
35 Multiline Institutional	9,949,279	43,626,220	0.683	0.593
36 Multiline Services	2,602,125	13,768,518	1.543	1.341
37 Multiline Indust/Process	4,814,722	21,276,268	1.195	1.038
38 Multiline Contractors	637,303	3,465,869	2.336	2.030
Total All Tops*	30,005,572	143,934,395	1.125	0.977

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

<u>Type Of Policy</u>	(1) Latest Year Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) 5 - Year Exp. Ratio Relativity
Entire State				
10 Monoline	3,998,514	18,099,644	0.979	0.850
31 Multiline Motel/Hotel	545,593	2,256,104	2.185	1.898
32 Multiline Apartment	4,578,125	24,876,145	1.501	1.304
33 Multiline Office	879,375	4,567,484	2.117	1.839
34 Multiline Mercantile	4,361,238	23,714,481	1.261	1.096
35 Multiline Institutional	10,795,510	48,454,855	0.718	0.624
36 Multiline Services	2,954,440	15,647,262	1.366	1.187
37 Multiline Indust/Process	5,344,074	24,041,234	1.251	1.087
38 Multiline Contractors	687,116	3,751,359	2.173	1.888
Total All Tops*	34,143,985	165,408,568	1.151	1.000

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

			(1) Latest Year Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
Entire State	<u>Type Of Policy</u>	<u>Category</u>					
	10 Monoline	01 Buildings	1,544,314	6,828,997	1.029	0.980	0.804
		02 Res. Apts. And Cor	27,006	146,333	0.675	0.871	0.715
		03 Offices	108,488	586,878	1.021	0.951	0.780
		04 Mercantile - High	126,124	602,251	0.449	0.806	0.661
		05 Mercantile - Mediu	44,084	196,819	0.097	0.738	0.605
		06 Mercantile - Low	23,713	98,090	3.274	1.447	1.187
		07 Motels And Hotels	6,064	69,568	0.000	0.724	0.594
		08 Institutional - Hig	19,886	275,100	0.306	0.783	0.642
		09 Institutional - Low	14,245	73,962	0.000	0.724	0.594
		10 Indust-Proc - High	77,117	192,066	0.809	0.901	0.739
		11 Indust-Proc - Low	88,613	431,835	0.261	0.765	0.628
		12 Service - High	56,250	194,337	1.208	0.991	0.813
		13 Service - Low	50,403	246,351	1.292	1.012	0.830
		14 Contractors	18,586	51,157	0.568	0.849	0.696
		Total	2,204,893	9,993,744	0.949	0.952	0.781
	31 Multiline Motel/Hotel	01 Buildings	248,025	1,055,583	3.112	1.375	1.128
		07 Motels And Hotels	40,207	154,992	2.909	1.290	1.058
		Total	288,232	1,210,575	3.084	1.363	1.118
	32 Multiline Apartment	01 Buildings	1,694,103	9,879,504	0.888	1.023	0.839
		02 Res. Apts. And Cor	312,114	2,314,776	0.934	1.069	0.877
		Total	2,006,217	12,194,280	0.895	1.030	0.845

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

		(1)	(2)	(3)	(4)	(5)
		Latest	5 - Year	5 - Year	Credibility	Credibility
		Year	Aggregate	Experience	Weighted	Weighted
<u>Type Of Policy</u>	<u>Category</u>	<u>Aggregate Loss</u>	<u>Loss Costs</u>	<u>Ratio</u>	<u>Experience</u>	<u>Ratio</u>
33 Multiline Office	01 Buildings	329,370	1,788,522	0.740	1.041	0.854
	03 Offices	109,059	568,287	1.769	1.179	0.967
	04 Mercantile - High	107	1,049	13.145	2.304	1.890
	08 Institutional - Hig	965	3,461	0.000	0.989	0.811
	11 Indust-Proc - Low	7	13	0.000	0.989	0.811
	12 Service - High	320	2,827	0.000	0.989	0.811
	14 Contractors	9	239	0.000	0.989	0.811
	Total	439,837	2,364,398	0.996	1.075	0.882
34 Multiline Mercantile	01 Buildings	1,338,048	7,206,708	1.136	1.110	0.911
	03 Offices	1,585	14,900	0.000	0.988	0.811
	04 Mercantile - High	154,633	845,231	0.846	1.066	0.874
	05 Mercantile - Mediu	136,690	672,435	0.938	1.079	0.885
	06 Mercantile - Low	101,278	653,260	0.299	1.000	0.820
	08 Institutional - Hig	41	226	0.000	0.989	0.811
	10 Indust-Proc - High	238	1,167	0.000	0.989	0.811
	11 Indust-Proc - Low	2,010	6,070	0.000	0.989	0.811
	12 Service - High	4,751	31,964	0.000	0.988	0.811
	13 Service - Low	7,423	31,375	0.000	0.988	0.811
	14 Contractors	2,187	12,316	0.000	0.988	0.811
	Total	1,748,884	9,475,652	1.035	1.096	0.899

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

<u>Type Of Policy</u>	<u>Category</u>	(1) Latest Year Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
35 Multiline Institutional	01 Buildings	4,333,959	19,072,015	1.307	1.202	0.986
	03 Offices	7,447	26,439	1.180	1.107	0.908
	04 Mercantile - High	0	1,404	0.000	0.989	0.811
	08 Institutional - Hig	489,786	4,542,072	0.952	1.063	0.872
	09 Institutional - Low	677,473	4,081,123	0.534	0.969	0.795
	12 Service - High	215	1,029	0.000	0.989	0.811
	13 Service - Low	848	4,425	0.783	1.067	0.875
	14 Contractors	565	2,517	0.000	0.989	0.811
	Total	5,510,293	27,731,024	1.180	1.161	0.952
36 Multiline Services	01 Buildings	770,939	4,091,709	2.287	1.905	1.563
	03 Offices	7,867	39,365	0.480	1.524	1.250
	04 Mercantile - High	5,824	30,150	12.993	2.709	2.222
	05 Mercantile - Mediu	302	864	0.000	1.486	1.219
	06 Mercantile - Low	2,187	17,342	5.802	2.022	1.659
	08 Institutional - Hig	13,420	62,720	5.424	2.008	1.647
	09 Institutional - Low	6,702	34,733	0.000	1.479	1.213
	10 Indust-Proc - High	0	483	0.000	1.486	1.219
	11 Indust-Proc - Low	1,967	22,224	0.000	1.482	1.216
	12 Service - High	267,621	1,367,648	1.492	1.602	1.314
	13 Service - Low	87,385	495,759	1.076	1.552	1.273
	14 Contractors	3,281	11,639	0.000	1.484	1.217
	Total	1,167,495	6,174,636	2.074	1.808	1.483

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

<u>Type Of Policy</u>	<u>Category</u>	(1) Latest Year Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
37 Indust/Proc	01 Buildings	1,122,584	5,438,194	1.893	1.758	1.442
	03 Offices	1,582	6,015	0.000	1.485	1.218
	04 Mercantile - High	3,715	27,190	0.327	1.511	1.240
	05 Mercantile - Medium	362	1,679	0.000	1.486	1.219
	06 Mercantile - Low	24	189	0.000	1.486	1.219
	08 Institutional - High	25	179	0.000	1.486	1.219
	10 Indust-Proc - High	142,784	476,627	0.679	1.495	1.226
	11 Indust-Proc - Low	483,547	2,299,889	1.089	1.468	1.204
	12 Service - High	712	3,357	0.000	1.485	1.218
	13 Service - Low	2,618	19,424	0.000	1.482	1.216
	14 Contractors	370	1,076	8.625	2.271	1.863
	Total	1,758,323	8,273,819	1.566	1.656	1.358
38 Multiline Contractors	01 Buildings	232,159	1,296,553	0.362	1.347	1.105
	03 Offices	5,427	28,360	0.094	1.489	1.221
	04 Mercantile - High	4,586	18,554	3.155	1.776	1.457
	05 Mercantile - Medium	100	628	5.588	1.994	1.636
	06 Mercantile - Low	1,057	5,771	0.000	1.485	1.218
	08 Institutional - High	63	63	0.000	1.486	1.219
	11 Indust-Proc - Low	805	2,461	0.000	1.486	1.219
	12 Service - High	5,891	35,106	0.000	1.479	1.213
	13 Service - Low	3,456	15,241	0.045	1.487	1.220
	14 Contractors	117,669	697,000	0.850	1.502	1.232
	Total	371,213	2,099,737	0.538	1.408	1.155

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

<u>Type Of Policy</u>	<u>Category</u>	(1) Latest Year Aggregate Loss Costs	(2) 5 - Year Aggregate Loss Costs	(3) 5 - Year Experience Ratio	(4) Credibility Weighted Experience Ratio	(5) Credibility Weighted Relativity
Total All TOPs	01 Buildings	11,613,501	56,657,785	1.314	1.238	1.016
	02 Res. Apts. And Cor	339,120	2,461,109	0.913	1.053	0.864
	03 Offices	241,455	1,270,244	1.312	1.093	0.897
	04 Mercantile - High	294,989	1,525,829	0.950	1.004	0.824
	05 Mercantile - Mediu	181,538	872,425	0.733	0.998	0.819
	06 Mercantile - Low	128,259	774,652	0.940	1.104	0.906
	07 Motels And Hotels	46,271	224,560	2.528	1.216	0.997
	08 Institutional - Hig	524,186	4,883,821	1.040	1.077	0.883
	09 Institutional - Low	698,420	4,189,818	0.518	0.969	0.795
	10 Indust-Proc - High	220,139	670,343	0.724	1.286	1.055
	11 Indust-Proc - Low	576,949	2,762,492	0.953	1.358	1.114
	12 Service - High	335,760	1,636,268	1.392	1.488	1.220
	13 Service - Low	152,133	812,575	1.051	1.340	1.099
	14 Contractors	142,667	775,944	0.797	1.409	1.155
	Total	15,495,387	79,517,865	1.220	1.219	1.000

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Latest Year Loss Costs At Current <u>Implicit PMF</u>	10-Year Experience Ratio At Current <u>PMF</u>	Formula Relativity (2)/ 1.289	Credibility (C)	Credibility Weighted Relativity (D)	Balanced Formula Relativity (E)	Normalized Formula Relativity (F)	Indicated Change
Monoline	3,068,962	1.033	0.801	0.368	0.93	0.927	0.9161	
Multiline	20,591,201	1.327	1.029	0.818	1.02	1.025	1.0125	
Coverage	23,660,163	1.289	0.999			1.012	1.0000	
<u>Multiline Top</u>								
31 Motel/Hotel	314,955	1.711	1.327	0.061	1.02	1.044	1.0317	12.6%
32 Apartment	3,350,657	1.143	0.887	0.460	0.95	0.971	0.9596	4.7%
33 Office	779,453	1.139	0.884	0.153	0.98	1.006	0.9942	8.5%
34 Mercantile	3,279,429	0.922	0.715	0.441	0.87	0.895	0.8845	-3.4%
35 Institutional	8,570,678	1.336	1.036	0.623	1.02	1.047	1.0347	12.9%
36 Services	1,738,703	1.380	1.071	0.307	1.02	1.047	1.0347	12.9%
37 Indust/Process	2,005,767	2.086	1.618	0.280	1.17	1.201	1.1869	29.6%
38 Contractors	551,559	1.841	1.428	0.116	1.05	1.075	1.0624	16.0%
	20,591,201	1.327	1.029		1.00	1.025	1.0125	

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

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

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

E - $(6) = (5) * (1.024/1)$

F - $(7) = (6) / 1.0119$

WISCONSIN
OWNERS, LANDLORDS, AND TENANTS
BASIC LIMIT RELATIVE CHANGE ANALYSIS

	(1)	(2)	(3)	(4)	(5)
<u>TOP</u>	Bailey Formula Relativity	Credibility <u>Z</u>	Credibility Weighted Relativity	Balanced Relativity	Indicated Change
10	0.888	0.182	0.979	0.978	
31	0.540	0.086	0.948	0.948	-3.1%
32	1.020	0.139	1.003	1.002	2.5%
33	1.007	0.144	1.001	1.000	2.2%
34	1.157	0.147	1.022	1.021	4.4%
35	1.405	0.196	1.069	1.068	9.2%
36	0.528	0.110	0.932	0.932	-4.7%
Class Group					
1	0.522	0.066	0.958	0.961	
2	1.064	0.101	1.006	1.009	
3	0.913	0.092	0.992	0.995	
4	0.402	0.029	0.974	0.977	
5	0.839	0.032	0.994	0.997	
6	0.604	0.047	0.977	0.979	
7	1.609	0.082	1.040	1.043	
8	5.593	0.039	1.070	1.073	
9	1.355	0.104	1.032	1.035	
10	0.752	0.199	0.945	0.947	
11	1.100	0.150	1.014	1.017	
12	0.986	0.195	0.997	1.000	
13	1.461	0.068	1.026	1.029	
16	0.667	0.039	0.984	0.987	
Territory					
501	0.963	0.162	0.994	0.993	
502	0.979	0.154	0.997	0.996	
503	1.021	0.320	1.007	1.006	

WISCONSIN
MANUFACTURERS AND CONTRACTORS
BASIC LIMIT RELATIVE CHANGE ANALYSIS

	(1)	(2)	(3)	(4)	(5)
<u>TOP</u>	<u>Bailey Formula Relativity</u>	<u>Credibility Z</u>	<u>Credibility Weighted Relativity</u>	<u>Balanced Relativity</u>	<u>Indicated Change</u>
10	1.021	0.172	1.003	1.001	
33	0.912	0.032	0.997	0.994	-0.7%
34	1.200	0.068	1.013	1.010	0.9%
35	0.619	0.040	0.981	0.978	-2.3%
36	1.246	0.103	1.023	1.020	1.9%
37	0.848	0.105	0.983	0.980	-2.1%
38	1.036	0.229	1.008	1.005	0.4%
Class Group					
30	1.135	0.083	1.011	1.002	
31	1.080	0.119	1.009	1.001	
32	1.212	0.231	1.045	1.037	
33	0.935	0.098	0.993	0.985	
34	0.711	0.093	0.969	0.960	
35	0.568	0.029	0.984	0.975	
36	0.874	0.073	0.990	0.982	
37	0.632	0.068	0.969	0.961	
38	0.825	0.085	0.984	0.976	

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

Territory: All		(1)	(2)	(3)	(4)	(5)	(6)
		Calendar A.Y.E 9/30/2022	Calendar A.Y.E 2018-2022	Five Year Experience			
Type of Policy	Class Group	Aggregate Loss Costs at Current Level	Aggregate Loss Costs at Current Level	Ratio	Relativity	Number of Occurrences	Bal Cell Relativity
10 MONOLINE	1 FOOD&BEV.(RETAIL)	\$26,819	\$406,259	1.418		22	
	2 RESTAURANTS	\$161,481	\$614,531	0.530		26	
	3 STORES	\$284,817	\$1,151,463	1.088		54	
	4 VENDING & RENTAL	\$27,775	\$89,981	0.467		5	
	5 FOOD & BEV. DIST.	\$5,068	\$88,555	0.000		0	
	6 NON-FOOD&BEV.DIST	\$100,104	\$1,188,952	0.222		13	
	7 CLUBS,AMSMT&SPRTS	\$140,832	\$683,805	3.226		42	
	8 HEALTH CARE FACIL	\$2,646	\$20,506	0.000		0	
	9 HOTELS AND MOTELS	\$80,609	\$1,298,745	1.603		61	
	10 SCHLS & CHURCHES	\$432,478	\$1,961,197	0.767		82	
	11 APARTMENTS	\$232,330	\$1,839,081	1.223		80	
	12 BUILDINGS&OFFICES	\$806,508	\$6,041,496	0.834		162	
	13 MISC. PREMISES	\$138,709	\$760,382	1.274		40	
	16 GOVT SUBDIVISIONS	\$12,856	\$126,870	0.610		8	
	TOTAL *	\$2,453,031	\$16,271,823	1.029		595	
31 MULT MOTEL/HOTEL	9 HOTELS AND MOTELS	\$592,284	\$2,866,797	0.845		133	
	TOTAL *	\$592,284	\$2,866,797	0.845		133	
32 MULT APARTMENT	11 APARTMENTS	\$1,799,858	\$8,182,092	1.268		324	
	12 BUILDINGS&OFFICES	\$118,824	\$545,908	1.348		26	
	TOTAL *	\$1,918,681	\$8,728,000	1.273		350	
33 MULT OFFICE	12 BUILDINGS&OFFICES	\$2,106,577	\$10,093,311	1.162		371	
	13 MISC. PREMISES	\$21,300	\$104,329	0.034		1	
	TOTAL *	\$2,127,877	\$10,197,640	1.151		372	
34 MULT MERCANTILE	1 FOOD&BEV.(RETAIL)	\$318,119	\$1,392,765	0.626		57	
	2 RESTAURANTS	\$493,436	\$2,453,313	1.594		157	
	3 STORES	\$462,635	\$2,485,202	1.111		71	
	4 VENDING & RENTAL	\$56,735	\$214,938	0.428		2	
	5 FOOD & BEV. DIST.	\$183,939	\$907,760	1.148		18	
	6 NON-FOOD&BEV.DIST	\$339,005	\$1,726,666	0.926		27	
	12 BUILDINGS&OFFICES	\$334,738	\$1,715,916	1.167		56	
	TOTAL *	\$2,188,607	\$10,896,560	1.114		388	

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

Territory: All		(1)	(2)	(3)	(4)	(5)	(6)
		Calendar A.Y.E 9/30/2022	Calendar A.Y.E 2018-2022	Five Year Experience			
<u>Type of Policy</u>	<u>Class Group</u>	Aggregate Loss Costs at <u>Current Level</u>	Aggregate Loss Costs at <u>Current Level</u>	<u>Ratio</u>	<u>Relativity</u>	Number of <u>Occurrences</u>	Bal Cell <u>Relativity</u>
35 MULT INSTITUT.	7 CLUBS,AMSMT&SPRTS	\$37,039	\$120,347	1.814		10	
	8 HEALTH CARE FACIL	\$56,174	\$274,824	9.477		28	
	10 SCHLS & CHURCHES	\$1,438,430	\$7,444,107	1.234		634	
	12 BUILDINGS&OFFICES	\$17,555	\$95,427	1.878		2	
	13 MISC. PREMISES	\$786	\$4,019	0.000		0	
	16 GOVT SUBDIVISIONS	\$112,643	\$687,080	1.115		19	
	TOTAL *	\$1,662,626	\$8,625,806	1.523		693	
36 MULT SERVICES	3 STORES	\$79,646	\$308,695	0.712		27	
	4 VENDING & RENTAL	\$27,459	\$137,138	0.428		8	
	7 CLUBS,AMSMT&SPRTS	\$482,731	\$2,291,296	0.593		68	
	8 HEALTH CARE FACIL	\$833	\$7,897	0.000		0	
	9 HOTELS AND MOTELS	\$19,895	\$106,120	0.016		1	
	10 SCHLS & CHURCHES	\$18,489	\$29,682	0.083		0	
	12 BUILDINGS&OFFICES	\$114,015	\$694,277	1.707		70	
	13 MISC. PREMISES	\$108,894	\$706,894	1.529		43	
	TOTAL *	\$851,962	\$4,281,997	0.843		217	
TOTAL ALL TOP	1 FOOD&BEV.(RETAIL)	\$344,938	\$1,799,024	0.687		79	
	2 RESTAURANTS	\$654,918	\$3,067,844	1.331		183	
	3 STORES	\$827,099	\$3,945,360	1.065		152	
	4 VENDING & RENTAL	\$111,968	\$442,056	0.438		15	
	5 FOOD & BEV. DIST.	\$189,007	\$996,314	1.117		18	
	6 NON-FOOD&BEV.DIST	\$439,109	\$2,915,618	0.765		40	
	7 CLUBS,AMSMT&SPRTS	\$660,601	\$3,095,447	1.223		120	
	8 HEALTH CARE FACIL	\$59,653	\$303,226	8.924		28	
	9 HOTELS AND MOTELS	\$692,787	\$4,271,663	0.909		195	
	10 SCHLS & CHURCHES	\$1,889,397	\$9,434,986	1.116		716	
	11 APARTMENTS	\$2,032,188	\$10,021,173	1.263		404	
	12 BUILDINGS&OFFICES	\$3,498,216	\$19,186,335	1.115		687	
	13 MISC. PREMISES	\$269,689	\$1,575,624	1.275		84	
	16 GOVT SUBDIVISIONS	\$125,498	\$813,950	1.063		27	
	TOTAL *	\$11,795,067	\$61,868,623	1.154		2748	

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

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

Type of Policy	Class Group	(1) Calendar A.Y.E 9/30/2022 Aggregate Loss Costs at Current Level	(2) Calendar A.Y.E 2018-2022 Aggregate Loss Costs at Current Level	(3) Five Year Experience Ratio	(4) Relativity	(5) Number of Occurrences	(6) Bal Cell Relativity
10 MONOLINE	30 SERVICE	\$116,122	\$798,646	0.464	0.600	17	1.003
	31 LIGHT CONTRACTING	\$295,370	\$1,241,058	0.850	1.100	64	1.002
	32 MEDIUM CONTRACTING	\$2,084,178	\$10,358,419	0.870	1.125	286	1.038
	33 HEAVY CONTRACTING	\$607,407	\$3,007,033	0.904	1.169	55	0.986
	34 DEALER OR DISTRIB	\$357,925	\$1,706,935	0.668	0.864	19	0.961
	35 LGT. MANUFACTURER	\$99,292	\$471,767	0.137	0.177	3	0.976
	36 MED. MANUFACTURER	\$396,343	\$1,964,782	0.738	0.955	24	0.983
	37 HVY. MANUFACTURER	\$469,500	\$2,411,579	0.589	0.762	24	0.962
	38 MISC. OPERATION	\$320,292	\$1,501,067	0.843	1.091	39	0.977
	TOTAL *	\$4,746,430	\$23,461,284	0.792		531	
33 MULT OFFICE	31 LIGHT CONTRACTING	\$2,574	\$8,735	0.000	0.000	0	0.995
	32 MEDIUM CONTRACTING	\$27,445	\$141,227	0.540	0.699	3	1.031
	33 HEAVY CONTRACTING	\$61,470	\$336,054	0.398	0.515	4	0.979
	38 MISC. OPERATION	\$121,325	\$563,988	0.802	1.038	11	0.970
	TOTAL *	\$212,813	\$1,050,004	0.642		18	
34 MULT MERCANTILE	30 SERVICE	\$31,133	\$196,538	1.168	1.511	9	1.012
	32 MEDIUM CONTRACTING	\$86,197	\$468,872	1.486	1.922	4	1.047
	34 DEALER OR DISTRIB	\$581,896	\$2,710,603	0.433	0.560	49	0.970
	36 MED. MANUFACTURER	\$45	\$260	0.000	0.000	0	0.992
	38 MISC. OPERATION	\$60,487	\$313,529	2.373	3.070	22	0.986
	TOTAL *	\$759,757	\$3,689,802	0.737		84	
35 MULT INSTITUT.	31 LIGHT CONTRACTING	\$42,873	\$202,078	0.086	0.111	1	0.979
	32 MEDIUM CONTRACTING	\$94,514	\$566,863	0.776	1.004	28	1.014
	TOTAL *	\$137,386	\$768,941	0.561		29	
36 MULT SERVICES	30 SERVICE	\$30,228	\$182,467	0.211	0.273	7	1.022
	31 LIGHT CONTRACTING	\$50,354	\$222,896	0.849	1.098	20	1.021
	32 MEDIUM CONTRACTING	\$172,202	\$712,524	1.349	1.745	15	1.058
	33 HEAVY CONTRACTING	\$36,212	\$161,835	0.521	0.674	5	1.005
	34 DEALER OR DISTRIB	\$390,088	\$1,791,470	0.978	1.265	85	0.979
	36 MED. MANUFACTURER	\$5,609	\$22,194	9.944	12.864	4	1.002
	38 MISC. OPERATION	\$382,135	\$2,164,486	0.412	0.533	56	0.996
	TOTAL *	\$1,066,828	\$5,257,871	0.839		192	

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

		(1)	(2)	(3)	(4)	(5)	(6)
		Calendar A.Y.E 9/30/2022	Calendar A.Y.E 2018-2022	Five Year Experience			
Type of Policy	Class Group	Aggregate Loss Costs at Current Level	Aggregate Loss Costs at Current Level	Ratio	Relativity	Number of Occurrences	Bal Cell Relativity
37 MULT INDUST/PROC.	31 LIGHT CONTRACTING	\$233	\$1,528	0.942	1.219	1	0.981
	32 MEDIUM CONTRACTING	\$200,338	\$1,061,071	1.395	1.805	34	1.016
	33 HEAVY CONTRACTING	\$131,755	\$674,501	0.573	0.741	18	0.965
	34 DEALER OR DISTRIB	\$55,391	\$224,648	0.085	0.110	4	0.941
	35 LGT. MANUFACTURER	\$164,255	\$730,853	0.561	0.726	12	0.956
	36 MED. MANUFACTURER	\$1,048,921	\$5,065,839	0.506	0.655	68	0.962
	37 HVY. MANUFACTURER	\$1,182,307	\$5,388,938	0.378	0.489	59	0.942
	38 MISC. OPERATION	\$20,803	\$104,023	0.017	0.022	1	0.956
	TOTAL *	\$2,804,002	\$13,251,401	0.510		197	
38 MULT CONTRACTORS	30 SERVICE	\$633,393	\$2,944,699	1.026	1.327	92	1.007
	31 LIGHT CONTRACTING	\$669,580	\$3,467,795	0.912	1.180	167	1.006
	32 MEDIUM CONTRACTING	\$2,715,038	\$13,883,994	0.967	1.251	590	1.042
	33 HEAVY CONTRACTING	\$771,694	\$4,037,742	0.665	0.860	92	0.990
	38 MISC. OPERATION	\$42,894	\$165,552	0.014	0.018	0	0.981
	TOTAL *	\$4,832,599	\$24,499,782	0.910		941	
TOTAL ALL TOP	30 SERVICE	\$810,876	\$4,122,350	0.921		125	
	31 LIGHT CONTRACTING	\$1,060,983	\$5,144,088	0.856		253	
	32 MEDIUM CONTRACTING	\$5,379,911	\$27,192,971	0.960		960	
	33 HEAVY CONTRACTING	\$1,608,538	\$8,217,165	0.734		174	
	34 DEALER OR DISTRIB	\$1,385,300	\$6,433,656	0.633		157	
	35 LGT. MANUFACTURER	\$263,547	\$1,202,620	0.401		15	
	36 MED. MANUFACTURER	\$1,450,918	\$7,053,074	0.606		96	
	37 HVY. MANUFACTURER	\$1,651,807	\$7,800,517	0.438		83	
	38 MISC. OPERATION	\$947,936	\$4,812,644	0.706		129	
	TOTAL *	\$14,559,815	\$71,979,085	0.773		1992	

WISCONSIN
PRODUCTS
BASIC LIMIT RELATIVE CHANGE ANALYSIS

	(1)	(2)	(3)	(4)	(5)
<u>TOP</u>	<u>Bailey Formula Relativity</u>	<u>Credibility Z</u>	<u>Credibility Weighted Relativity</u>	<u>Balanced Relativity</u>	<u>Indicated Change</u>
10	0.928	0.322	0.976	0.976	
34	1.049	0.356	1.017	1.016	4.2%
36	1.049	0.178	1.008	1.008	3.3%
37	1.011	0.431	1.005	1.004	2.9%
Class Group					
3	0.930	0.423	0.970	0.970	
4	1.069	0.394	1.027	1.027	
5	1.116	0.105	1.012	1.012	
6	0.992	0.299	0.998	0.998	
7	0.865	0.118	0.983	0.983	

Note: The indicated changes by TOP were further adjusted by the following differentials

TOP 34: 0.995

TOP 36: 0.992

TOP 37: 0.953

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

		(1)	(2)	(3)	(4)	(5)	(6)
		Calendar A.Y.E 12/31/2021	Calendar A.Y.E 2017-2021	Five Year Experience			
<u>Type of Policy</u>	<u>Class Group</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Ratio</u>	<u>Relativity</u>	<u>Number of Occurrences</u>	<u>Bal Cell Relativity</u>
10 MONOLINE	3 MAN,DLR,DSTFD/DRG	11,819,097	63,658,617	0.783	0.870	1,091	0.946
	4 DLR,DST-NOTFD/DRG	7,190,323	36,653,516	0.937	1.042	432	1.002
	5 MAN.NTFD/DRG(LOW)	1,226,514	7,102,146	0.788	0.876	56	0.987
	6 MAN.NTFD/DRG(MED)	8,466,486	42,680,135	0.814	0.905	423	0.973
	7 MAN.NTFD/DRG(HGH)	2,036,214	10,951,431	0.681	0.757	70	0.959
	TOTAL *	30,738,634	161,045,845	0.821		2,072	
34 MULT MERCANTILE	3 MAN,DLR,DSTFD/DRG	5,085,663	25,340,297	0.947	1.053	506	0.986
	4 DLR,DST-NOTFD/DRG	27,891,818	137,888,579	0.997	1.108	2,035	1.044
	6 MAN.NTFD/DRG(MED)	2,648	13,111	0.000	0.000	-	1.014
	TOTAL *	32,980,129	163,241,987	0.989		2,541	
36 MULT SERVICES	4 DLR,DST-NOTFD/DRG	3,130,195	15,943,473	1.018	1.131	631	1.035
	6 MAN.NTFD/DRG(MED)	30,963	176,926	0.028	0.031	1	1.005
	TOTAL *	3,161,158	16,120,400	1.008		632	
37 MULT INDUST/PROC.	3 MAN,DLR,DSTFD/DRG	11,666,754	62,347,318	0.810	0.901	1,979	0.974
	5 MAN.NTFD/DRG(LOW)	3,213,073	18,166,949	1.070	1.190	163	1.015
	6 MAN.NTFD/DRG(MED)	26,040,916	133,610,898	0.908	1.010	1,362	1.001
	7 MAN.NTFD/DRG(HGH)	6,218,877	29,699,655	0.800	0.890	210	0.987
	TOTAL *	47,139,619	243,824,820	0.881		3,714	
TOTAL ALL TOP	3 MAN,DLR,DSTFD/DRG	28,571,513	151,346,232	0.823		3,576	
	4 DLR,DST-NOTFD/DRG	38,212,336	190,485,568	0.987		3,098	
	5 MAN.NTFD/DRG(LOW)	4,439,588	25,269,095	0.992		219	
	6 MAN.NTFD/DRG(MED)	34,541,014	176,481,070	0.884		1,786	
	7 MAN.NTFD/DRG(HGH)	8,255,091	40,651,087	0.771		280	
	TOTAL *	114,019,542	584,233,052	0.899		8,959	

WISCONSIN
LOCAL PRODUCTS/COMPLETED OPERATIONS
BASIC LIMIT RELATIVE CHANGE ANALYSIS

	(1)	(2)	(3)	(4)	(5)
<u>TOP</u>	Bailey Formula Relativity	Credibility <u>Z</u>	Credibility Weighted Relativity	Balanced Relativity	Indicated Change
10	1.006	0.779	1.005	1.006	
34	1.009	0.487	1.004	1.005	0.0%
36	0.988	0.571	0.993	0.994	-1.2%
37	0.887	0.148	0.982	0.983	-2.2%
38	1.001	0.975	1.001	1.002	-0.4%
Class Group					
1	1.380	0.484	1.169	1.175	
2	1.005	0.553	1.003	1.008	
11	1.100	0.365	1.036	1.041	
12	0.983	1.000	0.983	0.988	
13	0.961	0.263	0.990	0.995	

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

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

* Sorted by balanced relative change

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

		(1)	(2)	(3)	(4)	(5)	(6)
		Calendar A.Y.E 12/31/2021	Calendar A.Y.E 2017-2021	Five Year Experience			
<u>Type of Policy</u>	<u>Class Group</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Ratio</u>	<u>Relativity</u>	<u>Number of Occurrences</u>	<u>Bal Cell Relativity</u>
10 MONOLINE	1 RET.STRS-FOOD/DRG	\$10,742	\$64,657	0.168	0.175	3	1.221
	2 RET.STRS-NTFD/DRG	\$57,363	\$183,860	2.898	3.008	17	1.047
	11 COMP. OPS. (LOW)	\$77,954	\$352,251	0.324	0.336	6	1.082
	12 COMP. OPS. (MED)	\$919,759	\$4,588,086	1.424	1.478	49	1.027
	13 COMP. OPS. (HGH)	\$70,687	\$426,167	0.254	0.264	4	1.034
	TOTAL *	\$1,136,506	\$5,615,022	1.338		79	
34 MULT MERCANTILE	1 RET.STRS-FOOD/DRG	\$60,816	\$336,008	0.667	0.693	24	1.220
	2 RET.STRS-NTFD/DRG	\$135,652	\$605,764	1.682	1.746	10	1.047
	12 COMP. OPS. (MED)	\$39,750	\$211,607	0.431	0.448	1	1.026
	TOTAL *	\$236,219	\$1,153,380	1.210		35	
36 MULT SERVICES	1 RET.STRS-FOOD/DRG	\$6,461	\$52,250	7.854	8.152	8	1.207
	2 RET.STRS-NTFD/DRG	\$194,028	\$918,169	1.662	1.725	53	1.035
	11 COMP. OPS. (LOW)	\$66,390	\$247,964	0.478	0.497	6	1.069
	12 COMP. OPS. (MED)	\$64,018	\$337,114	0.628	0.652	14	1.014
	13 COMP. OPS. (HGH)	\$36,022	\$139,284	1.180	1.225	1	1.022
	TOTAL *	\$366,918	\$1,694,781	1.329		82	
37 MULT INDUST/PROC.	1 RET.STRS-FOOD/DRG	\$4,994	\$16,096	0.000	0.000	0	1.194
	11 COMP. OPS. (LOW)	\$3,821	\$17,834	0.000	0.000	0	1.058
	12 COMP. OPS. (MED)	\$156,318	\$689,134	0.685	0.711	5	1.004
	TOTAL *	\$165,133	\$723,064	0.649		5	

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

		(1)	(2)	(3)	(4)	(5)	(6)
		Calendar A.Y.E 12/31/2021	Calendar A.Y.E 2017-2021	Five Year Experience		Number of	Bal Cell
<u>Type of Policy</u>	<u>Class Group</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Ratio</u>	<u>Relativity</u>	<u>Occurrences</u>	<u>Relativity</u>
38 MULT CONTRACTORS	11 COMP. OPS. (LOW)	\$234,102	\$1,299,146	0.927	0.962	10	1.078
	12 COMP. OPS. (MED)	\$2,758,294	\$13,135,954	0.901	0.936	164	1.023
	13 COMP. OPS. (HGH)	\$334,396	\$1,611,684	1.456	1.511	23	1.030
	TOTAL *	\$3,326,792	\$16,046,785	0.959		197	
TOTAL ALL TOP	1 RET.STRS-FOOD/DRG	\$83,013	\$469,011	1.122		35	
	2 RET.STRS-NTFD/DRG	\$387,043	\$1,707,794	1.852		80	
	11 COMP. OPS. (LOW)	\$382,267	\$1,917,195	0.717		22	
	12 COMP. OPS. (MED)	\$3,938,139	\$18,961,896	1.006		233	
	13 COMP. OPS. (HGH)	\$441,105	\$2,177,135	1.241		28	
	TOTAL *	\$5,231,568	\$25,233,032	1.069		398	

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

		(1)	(2)	(3)	(4)	(5)	(6)
		Calendar A.Y.E 12/31/2021	Calendar A.Y.E 2017-2021	Five Year Experience			
<u>Type of Policy</u>	<u>Class Group</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Ratio</u>	<u>Relativity</u>	<u>Number of Occurrences</u>	<u>Bal Cell Relativity</u>
10 MONOLINE	1 RET.STRS-FOOD/DRG	1,748,833	13,294,303	1.231		621	
	2 RET.STRS-NTFD/DRG	3,644,206	17,449,172	1.109		492	
	11 COMP. OPS. (LOW)	5,499,261	29,100,438	1.217		689	
	12 COMP. OPS. (MED)	120,011,947	572,386,816	0.962		7,034	
	13 COMP. OPS. (HGH)	7,536,492	38,042,850	0.672		262	
	TOTAL *	138,440,739	670,273,579	0.964		9,098	
34 MULT MERCANTILE	1 RET.STRS-FOOD/DRG	8,156,117	43,997,404	1.362		2,733	
	2 RET.STRS-NTFD/DRG	7,639,610	36,671,723	0.951		693	
	12 COMP. OPS. (MED)	3,008,570	14,169,615	0.939		125	
	TOTAL *	18,804,297	94,838,741	1.127		3,551	
36 MULT SERVICES	1 RET.STRS-FOOD/DRG	643,620	4,295,009	1.241		162	
	2 RET.STRS-NTFD/DRG	15,583,411	76,045,252	0.943		3,398	
	11 COMP. OPS. (LOW)	3,267,900	16,818,142	1.161		488	
	12 COMP. OPS. (MED)	5,157,211	26,533,736	0.988		778	
	13 COMP. OPS. (HGH)	1,204,826	5,882,500	0.609		61	
	TOTAL *	25,856,969	129,574,639	0.971		4,887	
37 MULT INDUST/PROC.	1 RET.STRS-FOOD/DRG	22,984	127,871	0.000		-	
	11 COMP. OPS. (LOW)	118,128	638,240	0.539		14	
	12 COMP. OPS. (MED)	5,046,084	25,673,289	0.857		313	
	13 COMP. OPS. (HGH)	2,262	21,501	0.000		-	
	TOTAL *	5,189,458	26,460,901	0.846		327	

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

		(1)	(2)	(3)	(4)	(5)	(6)
		Calendar A.Y.E 12/31/2021	Calendar A.Y.E 2017-2021	Five Year Experience			
<u>Type of Policy</u>	<u>Class Group</u>	Aggregate Loss Costs at <u>Current Level</u>	Aggregate Loss Costs at <u>Current Level</u>	<u>Ratio</u>	<u>Relativity</u>	<u>Number of Occurrences</u>	<u>Bal Cell Relativity</u>
38 MULT CONTRACTORS	11 COMP. OPS. (LOW)	11,708,508	61,005,531	0.958		812	
	12 COMP. OPS. (MED)	192,727,882	985,553,302	0.941		12,745	
	13 COMP. OPS. (HGH)	15,769,275	78,710,767	1.070		712	
	TOTAL *	220,205,665	1,125,269,600	0.951		14,269	
TOTAL ALL TOP	1 RET.STRS-FOOD/DRG	10,571,554	61,714,586	1.330		3,516	
	2 RET.STRS-NTFD/DRG	26,867,226	130,166,147	0.968		4,583	
	11 COMP. OPS. (LOW)	20,593,798	107,562,352	1.057		2,003	
	12 COMP. OPS. (MED)	325,951,694	1,624,316,756	0.948		20,995	
	13 COMP. OPS. (HGH)	24,512,856	122,657,618	0.925		1,035	
	TOTAL *	408,497,128	2,046,417,459	0.963		32,132	

COMMERCIAL PACKAGE POLICY

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SECTION C - REVISED CLM DIVISION NINE

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

PACKAGE MODIFICATION FACTORS

Package Modification Assignment (PMA)	Premium From CLM Division			
	Two	Three, Four, Five, Eight Property	Four, Six Liability	All Other Divisions
Apartment House	.90	1.00	1.00	1.00
Contractors	.90	1.00	.95	1.00
Industrial & Processing	.90	.93	.97	1.00
Institutional	.90	.83	1.00	1.00
Mercantile	.90	.98	1.00	1.00
Motel/Hotel	.90	1.00	1.00	1.00
Office	.90	.93	.96	1.00
Service	.90	1.00	1.00	1.00

Table 1. Package Modification Factors