

Compliance

Circular notification

Publication Date: February 27, 2019

Businessowners Lost Cost Revision



CIRCULAR NUMBER
BP-2019-01



**WSRB FILING
DESIGNATION NUMBER**
BP-2019-RLA1



EFFECTIVE DATE
These changes are applicable to all
policies effective on or after
November 1, 2019



QUESTIONS

Compliance Department
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CHANGES

We have revised loss costs in Washington for the major Businessowners coverages. These loss costs represent a combined +5.5% statewide change from the current loss costs for all classes.

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.

In all correspondence with the Insurance Department regarding this revision, include the WSRB Filing Designation Number, not this Circular number.

MANUAL DISTRIBUTION

Insurance Service Office, Inc. will print and distribute revised manual pages prior to the effective date. A complete copy of the filing is available at the WSRB web site using the Compliance Filings Library. Circular notification is available by e-mail only. Register to receive electronic notification at the Compliance Filings Library page inside the Members section at wsrb.com

State: Washington **Filing Company:** Washington Surveying and Rating Bureau
TOI/Sub-TOI: 05.0 CMP Liability and Non-Liability/05.0002 Businessowners
Product Name: Loss Cost Revision
Project Name/Number: BP-2019-RLA1/BP-2019-RLA1

Filing at a Glance

Company: Washington Surveying and Rating Bureau
Product Name: Loss Cost Revision
State: Washington
TOI: 05.0 CMP Liability and Non-Liability
Sub-TOI: 05.0002 Businessowners
Filing Type: Rate/Rule
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Effective Date: 11/01/2019
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Author(s): Jim Antush
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State: Washington **Filing Company:** Washington Surveying and Rating Bureau
TOI/Sub-TOI: 05.0 CMP Liability and Non-Liability/05.0002 Businessowners
Product Name: Loss Cost Revision
Project Name/Number: BP-2019-RLA1/BP-2019-RLA1

General Information

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Corresponding Filing Tracking Number:

Filing Description:

This filing revises prospective loss costs for the major Businessowners coverages. These loss costs represent a combined +5.5% statewide change from the current loss costs for all classes.

Company and Contact

Filing Contact Information

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Filing Company Information

Washington Surveying and Rating Bureau	CoCode:	State of Domicile: Washington
2101 4th Avenue, Suite 300	Group Code:	Company Type: Rating
Seattle, WA 98121	Group Name:	Organization - Property
(206) 217-9772 ext. [Phone]	FEIN Number: 74-3049163	State ID Number: 1425

Filing Fees

Fee Required? No

Retaliatory? No

Fee Explanation:

State Specific

Is the Co Tracking # field populated on the General Information Tab? (yes/no): Yes

Form Tab Only - Are the Form # and Form Description fields populated corresponding to the attached form? (yes/no): N/A

LOSS COSTS

Territory	BASE LOSS COSTS					
	PROPERTY		LIABILITY			
	Building Per \$100 Of Limit Of Ins.	Business Personal Property Per \$100 Of Limit Of Ins.	Occupant Liability Per \$100 Of Limit Of Ins.	Occupant Liability Per \$1,000 Of Annual Gross Sales	Occupant Liability Per \$1,000 Of Annual Payroll	Lessors Liability Per \$100 Of Limit Of Ins.
701	0.178	0.204	0.036	0.744	13.993	0.011
702	0.182	0.240	0.040	0.721	14.494	0.013

Table #1(LC) Base Loss Costs – Property And Liability

**SECTION III
RATING AND ELIGIBILITY RULES**

**RULE 23.
PREMIUM DEVELOPMENT – MANDATORY
COVERAGES**

- C. Premium Determination
 - 6. Premium Determination
 - c. Additional Rating Considerations
 - (3) Permanent Yards – Maintenance Or
Storage

Territory	Loss Cost Per \$100		
	Public Protection (Fire) Classification		
	01–04	05–08	09–10
701, 702	0.238	0.287	0.335

Table 23.C.6.c.(3)(LC) Permanent Yards – Maintenance Or Storage Premium Determination

**RULE 29.
ENDORSEMENTS**

A. Property Endorsements**39. Windstorm Or Hail Exclusion****d. Rate Modification**

Territory	Coverage (Code)	Credit
701	Buildings (1)	0.018
	Business Personal Property (2)	0.010
702	Buildings (1)	0.018
	Business Personal Property (2)	0.012

Table 29.A.39.d.(LC) Windstorm Or Hail Exclusion Credits

B. Liability Endorsements**7. Employment-Related Practices Liability****b. Employment-Related Practices Liability Coverage Endorsement****(5) Premium Determination**

Number Of Employees	Loss Cost Per Employee		
	Mercantile Restaurant	Wholesale	All Other
1-25	\$ 4.920	\$ 7.330	\$ 5.860
Each Additional Employee	3.440	5.130	4.100

Table 29.B.7.b.(5)(LC) Employment-Related Practices Liability Premium Determination

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ADVISORY LOSS COST LEVEL REVIEW - BUSINESSOWNERS

FILING BP-2019-RLA1

EXECUTIVE SUMMARY

PURPOSE

This document:

- revises advisory prospective loss costs for the major Businessowners coverages. These loss costs represent a combined +5.5% statewide change from the current loss costs for all classes.
- provides the analyses used to derive these advisory loss costs.

DEFINITION OF THE ISO ADVISORY PROSPECTIVE LOSS COST

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

LOSS COST LEVEL CHANGES

The statewide indicated and filed loss cost level changes are:

	<u>Indicated</u>	<u>Filed</u>
Lessors/Occupants	+2.7%	+1.1%
Sales	+5.2%	+5.2%
Payroll	-5.7%	-5.7%
Liability Sub-Total	+2.5%	+1.2%
Property Sub-Total	+6.6%	+6.5%
TOTAL	+5.9%	+5.5%

Indicated and filed loss cost level changes are changes from the current loss costs.

INDICATED VS FILED

Indicated and filed statewide changes may differ due to the rounding of the filed territory loss costs and the territory weights used to calculate the statewide loss cost level changes.

HISTORICAL SOURCE DATA

The data used in this review is based on accident year experience through 9/30/2017 (evaluated as of 12/31/2017) of ISO reporting companies.

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ADVISORY LOSS COST LEVEL REVIEW - BUSINESSOWNERS

FILING BP-2019-RLA1

EXECUTIVE SUMMARY

WINDSTORM OR HAIL EXCLUSION CREDITS

The windstorm or hail exclusion credits shown on Table 29.A.39.d.(LC) in Section D are calculated by taking a percentage of the base loss cost. This percentage is based on the ratio of adjusted wind and hail losses to adjusted total property losses.

PRIOR ISO REVISIONS

The latest loss cost revisions in this state are:

<u>Filing</u>	BP-2018-RLA1	BP-2017-RLA1	BP-2016-RLA1
<u>Dates</u>			
Effective	11/1/2018	11/1/2017	11/1/2016
<u>Changes</u>			
Indicated	-6.3%	+3.1%	-3.9%
Filed	-6.4%	+2.9%	-4.0%
Implemented	-6.4%	+2.9%	-4.0%

ADJUSTMENTS TO REPORTED EXPERIENCE

To adjust the loss and exposure data to levels expected to prevail during the period when the revised loss costs will be in effect, historical losses and exposures have been multiplied by trend factors. These trend factors are based on the changes in claim cost, claim frequency and inflation sensitive exposure base that are expected to arise between the historical experience period and prospective period during which the revised loss costs will be in effect.

Standard actuarial procedures have been used in calculating the loss costs including adjusting the liability losses to ultimate settlement level and for all coverages, reflecting all loss adjustment expenses. In addition, smoothing procedures have been applied to recognize the potential for large or excess losses.

To trend losses and exposures to a future level, a prospective effective date must be assumed. In this review, the assumed effective date is November 1, 2019.

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ADVISORY LOSS COST LEVEL REVIEW - BUSINESSOWNERS

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EXECUTIVE SUMMARY

TEN LARGEST GROUPS IN ISO DATABASE

Insurers are listed in descending order based on the percent of statewide Businessowners written premium volume from ISO's 2016 Premium Reporting Form. The Premium Reporting Form is submitted by all companies affiliated to report statistics to ISO. This list does not necessarily correspond to the ten largest groups included in the calculation of the statewide advisory loss cost level changes shown on Tables B1-1 and B1-2.

1. Travelers Insurance
2. The Hartford
3. Liberty Mutual (CSP)
4. Capital Insurance Group
5. Oregon Mutual Insurance Group
6. The Allied Group
7. CNA Insurance Companies
8. Safeco Insurance Companies
9. Holyoke Mutual Insurance Company
10. Federated Mutual Insurance Company

SIZE OF ISO DATABASE

The market share of ISO participating insurers cannot be measured by Annual Statement Page 15 written premium because Businessowners data is combined with Commercial Package Policy data. The market share of ISO participating insurers as measured by the Premium Reporting Form written premium for the year ending 12/31/2016 is:

Businessowners: 40.5%

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ADVISORY LOSS COST LEVEL REVIEW - BUSINESSOWNERS

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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 loss costs contained herein are appropriate for its use. We have included within this document the information upon which ISO relied in order to enable companies to make such independent judgments.

The data underlying the enclosed material comes from companies reporting to Insurance Services Office, Inc. Therefore, the ISO experience permits the establishment of a much broader statistical ratemaking base than could be employed by using any individual company's data. A broader data base enhances the validity of ratemaking analysis derived therefrom. At the same time, however, an individual company may benefit from 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 projections based on the aggregate data.

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

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

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SECTION A – SCOPE OF REVISION

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TABLE A1

LOSS COST LEVEL CHANGE SUMMARY

	Statewide Aggregate Loss Costs <u>at Current Level</u>	<u>Loss Cost Level Change</u>	
		Ind.	Filed
<u>Property Total</u>	\$ 36,419,665	+6.6%	+6.5%
Lessors/Occupants	\$ 6,758,533	+2.7%	+1.1%
Sales	880,674	+5.2%	+5.2%
Payroll	459,866	-5.7%	-5.7%
<u>Liability Total</u>	\$ 8,099,073	+2.5%	+1.2%
GRAND TOTAL	\$ 44,518,738	+5.9%	+5.5%

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TABLE A2-1

LOSS COST LEVEL CHANGES

PROPERTY

Buildings

<u>Territory</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Loss Cost Level Changes</u>
701	\$ 5,954,654	+10.6%
702	20,381,777	+4.6%
Statewide Total	\$ 26,336,431	+6.0%

Business Pers. Prop.

<u>Territory</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Loss Cost Level Changes</u>
701	\$ 1,490,715	+13.3%
702	8,592,519	+7.1%
Statewide Total	\$ 10,083,234	+8.0%

All Property

<u>Territory</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Loss Cost Level Changes</u>
701	\$ 7,445,369	+11.1%
702	28,974,296	+5.3%
Statewide Total	\$ 36,419,665	+6.5% #

Due to rounding of the loss costs to three decimal places, this change varies from the overall statewide change on Table B1-1.

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TABLE A2-2

LOSS COST LEVEL CHANGES

LIABILITY

Lessors

<u>Territory</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Loss Cost Level Changes</u>
701	\$ 908,426	+22.2% *
702	1,379,404	+18.2%
Statewide Total	\$ 2,287,830	+19.8%

Occupants

<u>Territory</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Loss Cost Level Changes</u>
701	\$ 496,097	-2.7%
702	3,974,606	-9.1%
Statewide Total	\$ 4,470,703	-8.4%

Lessors/Occupants

<u>Territory</u>	<u>Aggregate Loss Costs at Current Level</u>	<u>Loss Cost Level Changes</u>
701	\$ 1,404,523	+13.4%
702	5,354,010	-2.1%
Statewide Total	\$ 6,758,533	+1.1% #

Due to rounding of the loss costs to three decimal places, this change varies from the overall statewide change on Table B1-2.

* To mitigate loss cost swings, caps of +27.7%/-20.0% were applied to the loss costs.

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TABLE A2-3

LOSS COST LEVEL CHANGES

LIABILITY-SALES

	Statewide Aggregate Loss Costs <u>at Current Level</u>	Loss Cost <u>Level Changes</u>
Statewide Total	\$ 880,674	+5.2%

LIABILITY-PAYROLL

	Statewide Aggregate Loss Costs <u>at Current Level</u>	Loss Cost <u>Level Changes</u>
Statewide Total	\$ 459,866	-5.7%

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TABLE A3

PRESENT AND REVISED LOSS COSTS

<u>PRESENT LOSS COSTS</u>			<u>REVISED LOSS COSTS</u>		
PROPERTY			PROPERTY		
<u>Territory</u>	<u>Buildings</u>	Business Personal <u>Property</u>	<u>Territory</u>	<u>Buildings</u>	Business Personal <u>Property</u>
701	0.161	0.180	701	0.178	0.204
702	0.174	0.224	702	0.182	0.240
LIABILITY			LIABILITY		
<u>Territory</u>	<u>Lessors</u>	<u>Occupants</u>	<u>Territory</u>	<u>Lessors</u>	<u>Occupants</u>
701	0.009	0.037	701	0.011	0.036
702	0.011	0.044	702	0.013	0.040
<u>Territory</u>	<u>Sales</u>	<u>Payroll</u>	<u>Territory</u>	<u>Sales</u>	<u>Payroll</u>
701	0.707	14.839	701	0.744	13.993
702	0.685	15.370	702	0.721	14.494

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OVERVIEW OF ISO ACTUARIAL PROCEDURES

INTRODUCTION

Businessowners advisory prospective loss costs are determined by evaluating the adequacy of the current loss costs to pay for our best estimate of losses and all loss adjustment expenses that will be incurred in the prospective (or future) period.

STEP 1: CALCULATION OF STATEWIDE LOSS COST INDICATION

The first step in this process is the calculation of the statewide loss cost indication. In other words, what percentage change on average must be made to the current loss costs in order to achieve adequacy for the prospective conditions? The percentage change is presented on the table labeled "Calculation of Statewide Advisory Loss Cost Level Change." For Liability, separate calculations are done for classes with amount of insurance, sales, and payroll exposure bases. For sales and payroll classes, the loss cost indication is based on multistate data due to the paucity of data on a statewide basis.

STEP 2: RELATIVE CHANGE ANALYSIS OF STATEWIDE LOSS COST INDICATION

For Property, ISO calculates relative changes by territory and coverage using a minimum bias iterative technique. For Liability, an equivalent technique is used to calculate relative changes by territory and by lessors vs. occupants. For further explanation of this minimum bias technique, refer to the "Explanatory Notes To Relative Change Analysis" in Section B.

STEP 3: APPLICATION OF PERCENTAGE CHANGES

The last step is the calculation of the advisory prospective loss costs. For Liability sales and payroll, this is achieved by simply applying the indicated changes to the current loss costs. For Property and Liability lessors/occupants, this is achieved by applying the product of the indicated changes and the combined relativity changes to the current loss costs. Percent changes for individual loss costs may be capped to mitigate loss cost swings. (See footnotes for Table A2 for a description of the capping, if any, for individual loss costs.) If capping is applied, a "build-back" factor is utilized to ensure that the selected overall changes for property and liability are achieved. After the build-back procedure is completed, the resulting loss costs are displayed in Section D.

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BUSINESSOWNERS

OVERVIEW OF ACTUARIAL PROCEDURES

STEP 1 - CALCULATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGES

OBJECTIVE	The objective of this procedure is to determine the indicated statewide advisory loss cost level change. This procedure answers the question: what percentage change must be made on average to the current loss costs, in order for them to be adequate to cover indemnity losses and all associated loss adjustment expenses incurred in the prospective period in which the revised loss costs will be used?
DESCRIPTION	This procedure compares the developed (for liability) and trended incurred losses and loss adjustment expenses with the aggregate loss costs at current loss cost level, which is the aggregate amount that would have been collected if the current loss costs were used during the experience period. This experience ratio (losses and all loss adjustment expenses divided by aggregate loss costs) is calculated for five years and a weighted average is calculated. The average experience ratio is then credibility-weighted with an expected experience ratio in order to minimize the impact of random variation in the observed losses. This credibility-weighted experience ratio is the indicated statewide advisory loss cost level change in decimal form.
EXPERIENCE INCLUDED	The review of the statewide loss cost level is based on the latest available experience on Businessowners policies reported to ISO under the Commercial Statistical Plan (CSP) and the Commercial Minimum Statistical Plan (CMSP). In this review we have used accident year data through September 30, 2017 evaluated as of December 31, 2017.
EXPERIENCE EXCLUDED	Experience reported on miscellaneous coverages such as Employee Dishonesty, Outdoor Signs, Glass, Money and Securities and Hired and Non-Owned Auto Liability is not part of this review. Liability indemnity loss experience in excess of the \$300,000 basic coverage has also been excluded from the review.

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BUSINESSOWNERS - PROPERTY

TABLE B1-1

CALCULATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGE

Fiscal Year <u>Ending</u>	(1) Aggregate Loss Costs at <u>Current Level</u>		(2) Incurred Losses and Loss Adjustment <u>Expenses</u>		(3) Experience <u>Ratio</u>	(3a) <u>Fire</u>	(3b) <u>EC</u>	(3c) <u>Burg</u>	(3d) <u>AOP</u>
						<u>Partial Experience Ratios</u>			
9/30/2013	\$	38,267,955	\$	36,005,788	0.941	0.484	0.129	0.042	0.287
9/30/2014		37,291,902		41,519,126	1.113	0.469	0.106	0.046	0.492
9/30/2015		37,806,709		38,222,802	1.011	0.479	0.090	0.048	0.394
9/30/2016		36,694,112		36,108,159	0.984	0.483	0.112	0.047	0.342
9/30/2017		36,419,669		43,354,995	1.190	0.543	0.067	0.052	0.528
(4) Weighted Experience Ratio						=	1.066		
(5) Credibility						=	1.000		
(6) Expected Experience Ratio						=	1.003		
(7) Credibility-Wtd. Experience Ratio						=	1.066		
(8) Indicated Loss Cost Level Change						=	1.066	or	+6.6%
(9) Selected Loss Cost Level Change						=	+6.6%		

NOTE: The assumed effective date for trending is 11/1/2019.

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BUSINESSOWNERS - LIABILITY LESSORS & OCCUPANTS

TABLE B1-2

CALCULATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGE

Fiscal Year <u>Ending</u>	(1) Aggregate Loss Costs at <u>Current Level</u>	(2) Incurred Losses and Loss Adjustment <u>Expenses</u>	(3) Experience <u>Ratio</u>
9/30/2013	\$ 5,380,863	\$ 6,239,265	1.160
9/30/2014	6,849,906	5,830,839	0.851
9/30/2015	7,258,462	6,381,787	0.879
9/30/2016	7,035,216	6,410,612	0.911
9/30/2017	6,758,533	8,709,547	1.289
(4) Weighted Experience Ratio		= 1.034	
(5) Credibility		= 0.717	
(6) Expected Experience Ratio		= 1.010	
(7) Credibility-Wtd. Experience Ratio		= 1.027	
(8) Indicated Loss Cost Level Change		= 1.027	or +2.7%
(9) Selected Loss Cost Level Change		= +2.7%	

NOTE: The assumed effective date for trending is 11/1/2019.

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BUSINESSOWNERS - LIABILITY SALES

TABLE B1-3

CALCULATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGE

	(1)	(2)	(3)
Fiscal Year <u>Ending</u>	Multistate Aggregate Loss Costs at <u>Current Level</u>	Multistate Incurred Losses and Loss Adjustment <u>Expenses</u>	Experience <u>Ratio</u>
9/30/2013	\$ 36,410,570	\$ 43,651,331	1.199
9/30/2014	58,207,492	60,939,913	1.047
9/30/2015	74,237,242	79,585,694	1.072
9/30/2016	87,831,818	88,680,847	1.010
9/30/2017	101,911,294	104,515,621	1.026
(4) Weighted Experience Ratio		= 1.052	
(5) Credibility		= 1.000	
(6) Expected Experience Ratio		= 1.040	
(7) Credibility-Wtd. Experience Ratio		= 1.052	
(8) Indicated Loss Cost Level Change		= 1.052	or +5.2%
(9) Selected Loss Cost Level Change		= +5.2%	

NOTE: The assumed effective date for trending is 11/1/2019.

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BUSINESSOWNERS - LIABILITY PAYROLL

TABLE B1-4

CALCULATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGE

Fiscal Year <u>Ending</u>	(1) Multistate Aggregate Loss Costs at <u>Current Level</u>	(2) Multistate Incurred Losses and Loss Adjustment <u>Expenses</u>	(3) Experience <u>Ratio</u>
9/30/2013	\$ 58,600,420	\$ 59,603,354	1.017
9/30/2014	59,009,641	58,879,953	0.998
9/30/2015	60,050,850	60,796,275	1.012
9/30/2016	63,944,055	58,476,302	0.914
9/30/2017	65,803,646	57,152,875	0.869
(4) Weighted Experience Ratio		= 0.943	
(5) Credibility		= 1.000	
(6) Expected Experience Ratio		= 1.025	
(7) Credibility-Wtd. Experience Ratio		= 0.943	
(8) Indicated Loss Cost Level Change		= 0.943	or -5.7%
(9) Selected Loss Cost Level Change		= -5.7%	

NOTE: The assumed effective date for trending is 11/1/2019.

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BUSINESSOWNERS

EXPLANATORY NOTES TO TABLE B1

COLUMN (1)

AGGREGATE LOSS COSTS AT CURRENT LEVEL

In this analysis, aggregate loss costs at current level are calculated by re-rating each policy premium transaction using the current manual loss costs and applicable rating variables such as territory, occupancy and building construction, and the number of exposures (buildings or contents amount of insurance in hundreds of dollars, sales and payroll in thousands of dollars). Where appropriate, certain reported data elements have been adjusted prior to being used in the calculations. In addition, exposures are trended using exposure trend factors developed from Commercial Property and General Liability data as shown in Section C.

COLUMN (2)

INCURRED LOSSES AND LOSS ADJUSTMENT EXPENSES

The incurred losses displayed are losses including all loss adjustment expenses and trend, and for liability are developed to an ultimate settlement basis. Where appropriate, certain reported data elements have been adjusted prior to being used in the calculations. In this review, the assumed effective date for trending purposes is November 1, 2019.

Businessowners losses are adjusted separately by type of loss. Each Businessowners loss is assigned to one of the following type of loss groups: fire, extended coverage (wind, hail, explosion, vandalism and malicious mischief, and riot), all other property, burglary and theft, or liability. Adjustment procedures by type of loss group are summarized below and detailed in Section C.

Adjustment of Fire Losses

Fire losses are trended and loaded for all loss adjustment expenses. Large fire losses have been smoothed by calculating the normal portion of each loss and replacing the actual excess portion with an expected excess amount.

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EXPLANATORY NOTES TO TABLE B1 (Cont'd)

COLUMN (2)
(Cont'd)

Adjustment of Extended Coverage Losses

Extended coverage losses are trended and loaded for all loss adjustment expenses. Abnormal extended coverage losses have been smoothed by calculating normal losses and accounting for excess losses by applying a state excess multiplier to the normal losses.

Adjustment of All Other Property Losses

All other property losses are trended and loaded for all loss adjustment expenses. Large all other property losses have been smoothed by calculating normal losses and accounting for excess losses by applying a state excess multiplier to the normal losses.

Adjustment of Burglary and Theft Losses

Burglary and theft losses are trended and loaded for all loss adjustment expenses. Large burglary and theft losses have been smoothed by calculating the normal portion of each loss and replacing the actual excess portion with an expected excess amount.

Adjustment of Liability Losses

Liability losses are trended and loaded for unallocated loss adjustment expenses. Liability losses are also adjusted to their ultimate settlement value by application of loss development factors.

Businessowners basic limits coverage includes \$300,000 for liability. Therefore, liability losses greater than \$300,000 are excluded from this analysis. Losses between \$50,000 and \$300,000 are smoothed by replacing actual excess losses with expected excess losses.

COLUMN (3)

EXPERIENCE RATIO

The experience ratios in this column are calculated by dividing the incurred losses and loss adjustment expenses in column (2) by the aggregate loss costs at current level in column (1).

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EXPLANATORY NOTES TO TABLE B1 (Cont'd)

COLUMNS (3a)-(3d)

PARTIAL EXPERIENCE RATIOS

Partial experience ratios are displayed for each of the four Property type of loss groups. These partial experience ratios are calculated by taking the ratio of the incurred losses and loss adjustment expenses in each of the groups to the indivisible aggregate loss costs at current level in column (1). Because all these ratios are rounded, the sum of the partial experience ratios in columns (3a) to (3d) may not exactly equal the total experience ratio in column (3).

Line (4)

WEIGHTED EXPERIENCE RATIO

The experience ratios shown in column (3) are weighted using weights of .10, .15, .20, .25 and .30 from earliest to most recent accident year.

Line (5)

CREDIBILITY

Credibility is based on the five-year number of earned risks. See "Explanatory Notes to Relative Change Analysis" in Section B.

Line (6)

EXPECTED EXPERIENCE RATIO

The expected experience ratio is our best prediction of the experience ratio if the most recent data was not available. For this review we have assumed that the current loss costs were adequate when implemented and will be inadequate for the prospective period to the extent of the net trend. The net trend is calculated as the combined trend factor (loss trend/premium trend) projected for the number of years between the last revision (or review) and this revision. See Table B3.

Line (7)

CREDIBILITY WEIGHTED EXPERIENCE RATIO

The credibility weighted experience ratio is calculated using the formula:

$$(WER) (Z) + (EER) (1 - Z)$$

where WER = Weighted Experience Ratio
Z = Credibility Factor
EER = Expected Experience Ratio

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BUSINESSOWNERS

EXPLANATORY NOTES TO TABLE B1 (Cont'd)

Line (8)

INDICATED LOSS COST LEVEL CHANGE

The indicated statewide loss cost level change is equal to the credibility weighted experience ratio. The indication is converted to a percentage by subtracting one, and multiplying by 100.

Line (9)

SELECTED LOSS COST LEVEL CHANGE

The selected loss cost level change is equal to the indicated loss cost level change.

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BUSINESSOWNERS

OVERVIEW OF ACTUARIAL PROCEDURES

STEP 2 - EXPLANATORY NOTES TO RELATIVE CHANGE ANALYSIS

OBJECTIVE	The objective of this procedure is to determine the indicated changes to the Businessowners' territory and coverage relativities for property as well as the indicated changes to the territory and lessors/occupant relativities for liability.
EXPERIENCE BASE	The review is based on Businessowners state data for five policy years ending 9/30/2017. Losses were trended and developed to an ultimate settlement basis.
SIMULTANEOUS DETERMINATION OF RATING VARIABLE RELATIVE CHANGES	Once the aggregate loss costs at current level and incurred losses used in the analysis have been appropriately adjusted, experience ratios are calculated by dividing the trended and developed losses by the aggregate loss costs at current level for each rating variable. A Bailey's minimum bias iterative procedure, the two-dimensional balance principle multiplicative model, is used to calculate the relative changes for each rating variable. The purpose of the simultaneous review procedure is to arrive at a set of relative changes for each rating variable that best represent the experience by minimizing the errors between actual and estimated relativity changes.
RATING VARIABLES USED	<p>The rating variables used in the relative change analysis are as follows:</p> <p>Property - territory and coverage Liability - territory and lessors/occupant</p>
ITERATIVE PROCEDURE	The iterative technique referred to in the previous paragraph solves for a set of relative changes for each rating variable based on the experience for the cells. This experience 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 or rating variables combined. Specifically, the iterative procedure uses the following formulas:

For Property:

$$TERR_i = \frac{\sum_j W_{ij} R_{ij}}{\sum_j W_{ij} COV_j}$$

$$COV_j = \frac{\sum_i W_{ij} R_{ij}}{\sum_i W_{ij} TERR_i}$$

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OVERVIEW OF ACTUARIAL PROCEDURES

STEP 2 - EXPLANATORY NOTES TO RELATIVE CHANGE ANALYSIS (Cont'd)

ITERATIVE PROCEDURE (Cont'd)

Where:

$$1 \leq i \leq m \quad \text{And} \quad 1 \leq j \leq 2.$$

$TERR_i$ = the relative change for the i^{th} territory,

COV_j = the relative change for the j^{th} coverage,
where $j=1$ is buildings and $j=2$ is contents.

W_{ij} = the aggregate loss cost at current level (ALCCL),

R_{ij} = the loss ratio relativities for the i^{th} territory and
 j^{th} coverage,
 m = the number of territories in the analysis.

For Liability:

$$TERR_i = \frac{\sum_j W_{ij} R_{ij}}{\sum_j W_{ij} EIND_j}$$

$$EIND_j = \frac{\sum_i W_{ij} R_{ij}}{\sum_i W_{ij} TERR_i}$$

Where:

$$1 \leq i \leq m \quad \text{And} \quad 1 \leq j \leq 2.$$

$TERR_i$ = the relative change for the i^{th} territory,

$EIND_j$ = the relative change for the j^{th} exposure indicator,
where $j=1$ is lessors and $j=2$ is occupant.

W_{ij} = the aggregate loss cost at current level (ALCCL),

R_{ij} = the loss ratio relativities for the i^{th} territory and j^{th}
exposure indicator,
 m = the number of territories in the analysis.

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OVERVIEW OF ACTUARIAL PROCEDURES

STEP 2 - EXPLANATORY NOTES TO RELATIVE CHANGE ANALYSIS (Cont'd)

ITERATIVE PROCEDURE (Cont'd)

For example, for property the procedure starts by inserting the actual relative changes for territory into the second formula to get a coverage relative change. This result is then entered into the first formula to get a new territory relative change. The process continues on until there is no appreciable difference from one iteration to the next. After completion of all iterations, the relative changes are balanced to assure that the average relativity change across all rating variables remains at unity.

APPLICATION OF CREDIBILITY

Consideration is then given to the credibility of experience for each rating variable using the following classic credibility formula:

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

Where:

P is the five-year aggregate earned risks;

K is the full standard credibility.

The partial credibility standards for property and liability respectively are:

$$Z = \sqrt{P/312,080} \quad \& \quad Z = \sqrt{P/447,720}$$

Credibility-weighted relative changes are then calculated as follows:

$$W = R^Z \text{ where:}$$

Z is the credibility,

R is the minimum bias relative change,

W is the credibility-weighted relative change for a given rating variable

CALCULATION OF FINAL RELATIVE CHANGES

Once again rebalancing is used to assure the credibility-weighted relativity changes remain at unity across all rating variables. This process results in the indicated relative changes for both territory and coverage within property, and for both territory and lessors/occupant within liability.

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BUSINESSOWNERS - PROPERTY

TABLE B2-1

CALCULATION OF RELATIVE CHANGES

<u>TERRITORY</u>	(1) 5-YEAR AGGREGATE LOSS COST AT CURRENT LEVEL	(2) 5-YEAR ADJUSTED LOSSES	(3) 5-YEAR EXPERIENCE RATIO (2) / (1)	(4) EXPERIENCE RELATIVITY (3) / ToT(3)	(5) BALANCED MINIMUM BIAS RELATIVE CHANGE	(6) EARNED RISKS	(7) CREDI- BILITY	(8) CREDI- BILITY WEIGHTED CHANGE	(9) BALANCED CHANGE	(10) FINAL BALANCED INDICATED CHANGE
701	\$26,451,734	\$30,293,539	1.145	1.094	1.094	65,422	0.458	1.042	1.050	1.050
702	160,028,613	164,917,331	1.031	0.985	0.984	362,952	1.000	0.984	0.992	0.992
TOTAL	186,480,347	195,210,870	1.047	1.000		428,374			1.000	1.000
Buildings	\$138,445,908	\$143,806,366	1.039	0.992	0.993	164,448	0.726	0.995	0.994	0.994
Bus. Pers. Prop.	48,034,439	51,404,504	1.070	1.022	1.022	263,926	0.920	1.020	1.019	1.019
TOTAL	186,480,347	195,210,870	1.047	1.000		428,374			1.000	1.000

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BUSINESSOWNERS - LIABILITY

TABLE B2-2

CALCULATION OF RELATIVE CHANGES

<u>TERRITORY</u>	(1) 5-YEAR AGGREGATE LOSS COST AT CURRENT <u>LEVEL</u>	(2) 5-YEAR ADJUSTED <u>LOSSES</u>	(3) 5-YEAR EXPERIENCE RATIO <u>(2) / (1)</u>	(4) EXPERIENCE RELATIVITY <u>(3) / ToT(3)</u>	(5) BALANCED MINIMUM BIAS RELATIVE <u>CHANGE</u>	(6) EARNED <u>RISKS</u>	(7) CREDI- BILITY <u>BILITY</u>	(8) CREDI- BILITY WEIGHTED <u>CHANGE</u>	(9) BALANCED <u>CHANGE</u>	(10) FINAL BALANCED INDICATED <u>CHANGE</u>
701	\$5,289,017	\$7,012,240	1.326	1.314	1.213	40,660	0.301	1.060	1.073	1.073
702	27,993,963	26,559,810	0.949	0.941	0.960	189,540	0.651	0.974	0.986	0.986
TOTAL	33,282,980	33,572,050	1.009	1.000		230,200			1.000	1.000
Lessors	\$13,090,327	\$18,877,869	1.442	1.429	1.416	82,622	0.430	1.161	1.205	1.205
Occupants	20,192,653	14,694,181	0.728	0.722	0.730	147,578	0.574	0.835	0.867	0.867
TOTAL	33,282,980	33,572,050	1.009	1.000		230,200			1.000	1.000

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BUSINESSOWNERS

EXPLANATORY NOTES TO TABLE B2

COLUMN (1)

AGGREGATE LOSS COSTS AT CURRENT LEVEL

In this analysis, aggregate loss costs at current level are calculated by re-rating each policy premium transaction using the current manual loss costs and applicable rating variables such as territory, occupancy and building construction, and the number of exposures (buildings or contents amount of insurance in hundreds of dollars). Where appropriate, certain reported data elements have been adjusted prior to being used in the calculations. In addition, exposures are trended using exposure trend factors developed from Commercial Property data as shown in Section C.

COLUMN (2)

INCURRED LOSSES AND LOSS ADJUSTMENT EXPENSES

The incurred losses displayed are losses including all loss adjustment expenses and trend, and for liability are developed to an ultimate settlement basis. Where appropriate, certain reported data elements have been adjusted prior to being used in the calculations. In this review, the assumed effective date for trending purposes is November 1, 2019.

Businessowners losses are adjusted separately by type of loss. Each Businessowners loss is assigned to one of the following type of loss groups: fire, extended coverage (wind, hail, explosion, vandalism and malicious mischief, and riot), all other property, burglary and theft, or liability. Adjustment procedures by type of loss group are summarized below and detailed in Section C.

Adjustment of Fire Losses

Fire losses are trended and loaded for all loss adjustment expenses. Large fire losses have been smoothed by calculating the normal portion of each loss and replacing the actual excess portion with an expected excess amount.

Adjustment of Extended Coverage Losses

Extended coverage losses are trended and loaded for all loss adjustment expenses. Abnormal extended coverage losses have been smoothed by calculating normal losses and accounting for excess losses by applying a state excess multiplier to the normal losses.

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EXPLANATORY NOTES TO TABLE B2 (Cont'd)

COLUMN (2)
(Cont'd)

Adjustment of All Other Property Losses

All other property losses are trended and loaded for all loss adjustment expenses. Large all other property losses have been smoothed by calculating normal losses and accounting for excess losses by applying a state excess multiplier to the normal losses.

Adjustment of Burglary and Theft Losses

Burglary and theft losses are trended and loaded for all loss adjustment expenses. Large burglary and theft losses have been smoothed by calculating the normal portion of each loss and replacing the actual excess portion with an expected excess amount.

Adjustment of Liability Losses

Liability losses are trended and loaded for unallocated loss adjustment expenses. Liability losses are also adjusted to their ultimate settlement value by application of loss development factors.

Businessowners basic limits coverage includes \$300,000 for liability. Therefore, liability losses greater than \$300,000 are excluded from this analysis. Losses between \$50,000 and \$300,000 are smoothed by replacing actual excess losses with expected excess losses.

COLUMN (3)

EXPERIENCE RATIO

The experience ratios in this column are calculated by dividing the incurred losses and loss adjustment expenses in column (2) by the aggregate loss costs at current level in column (1).

COLUMNS (4)

EXPERIENCE RELATIVITY

The experience relativities in this column are calculated by dividing each experience ratio in column (3) by the total experience ratio in column (3).

COLUMNS (5)

MINIMUM BIAS RELATIVE CHANGE

The relative changes in this column are the final balanced results of the relative change iterative process as described in the "Explanatory Notes to Relative Change Analysis" in Section B.

COLUMNS (6)

EARNED RISKS

This is the number of earned risks in the state for the five-year period ending September 30, 2017.

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BUSINESSOWNERS

EXPLANATORY NOTES TO TABLE B2 (Cont'd)

COLUMNS (7)

CREDIBILITY

Credibility is based on the five-year number of earned risks. See "Explanatory Notes to Relative Change Analysis" in Section B.

COLUMNS (8)

CREDIBILITY WEIGHTED CHANGE

The credibility change is calculated using the formula:

$$W = R^Z$$

Where:

Z is the credibility,

R is the minimum bias relative change,

W is the credibility-weighted relative change for a given rating variable.

COLUMNS (9)

BALANCED CHANGE

The balanced change is the rebalancing of the credibility weighted changes to assure that the average relative change for each rating variable remains at unity.

COLUMNS (10)

FINAL BALANCED INDICATED CHANGES

The final balanced indicated changes are the result of multiple rebalancing iterations.

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BUSINESSOWNERS

TABLE B3

CALCULATION OF EXPECTED EXPERIENCE RATIOS

LOSS TREND

PROPERTY	Buildings <u>Adjusted Losses</u>	Trend <u>Factor</u>	Business Pers. Prop. <u>Adjusted Losses</u>	Trend <u>Factor</u>	
Fire	70,151,599	1.007	21,507,542	1.018	
EC	16,115,910	1.052	2,740,034	1.024	
AOP	56,599,235	1.035	19,369,685	1.034	All Property
Burglary			8,726,865	0.998	<u>Trend Factor</u>
	142,866,744	1.023	52,344,126	1.021	1.022
LIABILITY		Trend <u>Factor</u>			
AOI Lessors & Occupants		1.027			
Sales		1.058			
Payroll		1.054			

PREMIUM TREND

PROPERTY	Buildings <u>Adjusted Losses</u>	Trend <u>Factor</u>	Business Pers. Prop. <u>Adjusted Losses</u>	Trend <u>Factor</u>	All Property <u>Trend Factor</u>
	142,866,744	1.020	52,344,126	1.017	1.019
LIABILITY		Trend <u>Factor</u>			
AOI Lessors & Occupants		1.017			
Sales		1.017			
Payroll		1.028			

ANNUAL NET TRENDS (LOSS TREND/PREMIUM TREND)

	Annual Net <u>Trend Factor</u>	Expected Experience <u>Ratio (a)</u>
ALL PROPERTY	1.003	1.003
LIABILITY - AOI LESSORS AND OCCUPANTS	1.010	1.010
LIABILITY - SALES	1.040	1.040
LIABILITY - PAYROLL	1.025	1.025

(a) The projection period is from the date of the last approval, 11/1/2018, to the assumed effective trend date of 11/1/2019. For ALL PROPERTY, $1.003 = 1.003^{(12/12)}$.

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SECTION C - SUPPORTING MATERIAL

Calculation of Adjusted Fire Losses	C-2-8
Calculation of Adjusted Extended Coverage Losses	C-9-15
Calculation of Adjusted All Other Property Losses	C-16-22
Current Cost Factors and Loss Projection Factors	C-23-24
Loss Trend Adjustments	C-25-28
Calculation of Adjusted Burglary and Theft Losses	C-29-30
Calculation of Adjusted Liability Losses	C-31-39
Exposure Trend	C-40-42
Credibility	C-43-45
Loss Adjustment Expenses	C-46-49

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CALCULATION OF ADJUSTED FIRE LOSSES

DEFINITION OF FIRE TYPE OF LOSS GROUP

Fire losses are defined as losses due to fire, lightning and removal that cause property damage to buildings, property damage to contents and time element losses.

CALCULATION OF LOSS TREND FACTORS

For fire, the loss trend factors are referred to as Current Cost Factors (CCFs) and Loss Projection Factors (LPFs). Both of these factors are based on the following external economic indices:

1. Xactware Commercial Index (XCI) for buildings loss projection factors and current cost factors beginning 1/1/08
2. Producer Price Index (PPI) published by the US Department of Labor (Finished Goods Less Energy, Not Seasonally Adjusted) for contents factors

The CCFs adjust losses for inflationary changes, as measured by the external indices, which have taken place between the actual accident date and the midpoint of the latest period of external trend information. The LPF adjusts losses for projected inflationary changes from the midpoint of the latest period of external trend information to the anticipated average accident date for policies written under the proposed loss costs (assumed to be 12.0 months after the assumed revision date). For external trend purposes, the CCF's and LPF's in Table C5 are calculated annually to correspond with other components of the external trend that are calculated annually.

Since the CCFs and LPFs are calculated separately for buildings and contents coverages and the losses reported under CSP and CMSP are adjusted on an individual occurrence basis, the building trend factors are applied to building losses and the contents trend factors to business personal property losses.

The most recent CCFs and LPFs are calculated in Table C4. Due to the historical volatility of the PPI index, the CCFs for contents were calculated as ratios of weighted average of the latest two PPI points to the average annual indexes. The weights assigned to the latest PPI points for the purpose of this calculation are 67% to the latest point and 33% to the earliest point. This procedure should enhance stability of the contents CCFs.

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CALCULATION OF ADJUSTED FIRE LOSSES (Cont'd)

CALCULATION OF LOSS TREND ADJUSTMENTS

An evaluation of the latest Businessowners insurance data shows that the cost and frequency levels inherent in these coverages are changing at a different rate than those measured by the external indices. Therefore, to insure adequate loss cost levels during the period for which loss costs are to be determined, Loss Trend Adjustments (LTAs) have been applied. These factors were developed by comparing the annual rates of change in the internal and external indices. (Refer to Table C5 for the underlying data and calculations). The LTAs vary by coverage (building vs. contents) and type of loss.

The method of internal trend determination utilized in this review makes use of the Least Squares Method fitted to the reported time series data; specifically, an exponential curve represented by the equation $Y = Ae^{Bx}$ is fitted to the occurrence cost and occurrence frequency data. The parameters A and B are calculated constants; x is the unit of time; e is the natural logarithm base with a numerical value of 2.7182818...; and Y is the fitted value on the curve. The occurrence cost and occurrence frequency curves are determined from the latest 10 year-ended experience periods. The historical data and the selected internal annual rates of change are shown in Tables C1-2 and C1-3.

We must emphasize that there are several important considerations when making trend selections. Aside from analyzing the observed annual rates of change and associated R-Squared fits, we also consider the stability of our selections in order to temper any undue swings from one review to the next, which would not enhance loss cost accuracy. This is especially important for both frequency and severity trend, whose historical values are often volatile in nature. Our severity trend selections were made primarily by looking at total loss trend results but also weighing the normal loss results as well.

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CALCULATION OF ADJUSTED FIRE LOSSES (Cont'd)

CALCULATION OF TRENDED INCURRED LOSSES

Building and contents losses are trended separately using the Current Cost Factors, Loss Projection Factors and Loss Trend Adjustments. These factors are summarized in Table C1-1. Since cost changes affect the whole loss (loss to the insured) and not just the loss net of the deductible, the deductible must be included in the trend calculation. Since this review tests aggregate loss costs and incurred losses at the standard \$500 deductible level, this calculation varies based on the reported deductible amount.

FIRE LARGE LOSS PROCEDURE

If left untreated, the presence or absence of large fire losses during the review period can produce significant fluctuations in loss cost levels. Consequently, in order to develop a more stable body of experience, the fire loss experience has been smoothed. This smoothing is accomplished by removing the excess portion of every loss occurrence from the unadjusted experience and applying multistate excess loss factors to the resultant aggregate state normal losses. The adjusted incurred losses developed in this manner replace the unadjusted incurred losses in the loss cost level evaluation.

The first step in the smoothing procedure is the extraction of the large fire loss experience from the trended loss experience. Individual occurrence amounts that result from the same occurrence are grouped together, and when the sum of these occurrences exceeds \$50,000 at average 1985 cost levels, the total loss is identified as a large loss. Each large loss is then split into its normal and excess portions based on a variable normal loss cutoff; that is, the procedure employs a minimum normal breakpoint of \$50,000, which increases, with the size of loss (for losses greater than \$50,000) up to a maximum normal amount (approached asymptotically) of \$250,000.

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CALCULATION OF ADJUSTED FIRE LOSSES (Cont'd)

FIRE LARGE LOSS PROCEDURE (Cont'd)

Specifically, the formula used to calculate the normal losses is:

$$y = b[1 - [(b-c)^2/b]/[x - (2c-b)]]$$

where: b = the maximum normal amount = \$250,000
 c = the normal break point = \$50,000
 y = normal loss
 x = total loss

As noted above, the excess loss procedure is performed on trended loss experience (i.e., loss experience adjusted to prospective cost levels by the CCFs, LPFs and severity LTAs). Since the normal breakpoint of \$50,000 and the other parameters in the normal loss formula are at 2008 cost levels, they have been similarly adjusted to prospective cost levels.

For each adjusted large loss, the portion exceeding the cutoff is considered excess and the portion up to the cutoff is considered normal.

Each individual normal loss is adjusted by a multistate excess loss factor, which is equal to the ratio of multistate 5-year trended incurred losses to multistate 5-year trended normal losses. Multiplying the normal losses by the excess loss factor yields smoothed incurred losses (actual normal losses plus expected excess losses). The formula for trended incurred losses adjusted for large losses is thus:

$$SL = (TL - E) \times F$$

where: SL = trended incurred losses smoothed for
excess occurrences
 TL = trended incurred losses
 E = trended excess losses
 F = multistate excess loss factor

In this analysis, F is calculated to be 1.425.

$$F = \frac{\sum_{\text{year}} \text{Trended Incurred Losses}}{\sum_{\text{year}} \text{Normal Losses}} = \frac{\$5,051,131,399}{\$3,544,322,994} = 1.425$$

LOSS ADJUSTMENT EXPENSE

Trended and smoothed losses are loaded for all loss adjustment expenses using the factor selected based on the data displayed in Table C11-1.

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BUSINESSOWNERS

TABLE C1-1

SUMMARY OF FIRE LOSS TREND

<u>Year</u>	<u>Buildings Current Cost Factors*</u>	<u>Contents Current Cost Factors*</u>
9/30/2013	1.148	1.077
9/30/2014	1.134	1.055
9/30/2015	1.084	1.036
9/30/2016	1.062	1.032
9/30/2017	1.036	1.019
Loss Projection Factor**	1.067	1.035
Annual Loss Trend Adjustments	-1.9%	+0.5%

* Adjusts losses for inflationary changes which have taken place between the actual accident date and the midpoint of the latest period of external trend information.

** Adjusts losses for the projected inflationary changes from the midpoint of the latest period of external trend information to the anticipated average accident date for policies written under the proposed loss costs.

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BUSINESSOWNERS

TABLE C1-2
FIRE
BUILDINGS
MULTISTATE
SEVERITY AND FREQUENCY TREND

Accident <u>Year</u>	Trended <u>Exposures</u>	Total <u>Losses</u>	Normal <u>Losses</u>	Incurred <u>Occurrences</u>	Average Occurrence <u>Cost (Total)</u>	Average Occurrence <u>Cost (Normal)</u>	Average Occurrence <u>Frequency*</u>
2008	6,282,651,462	227,421,785	186,029,781	3,390	67,086	54,876	0.0540
2009	6,276,401,933	258,366,894	197,378,505	3,360	76,895	58,744	0.0535
2010	6,659,354,673	243,068,185	189,201,080	3,394	71,617	55,746	0.0510
2011	6,727,564,157	214,735,914	176,398,701	3,545	60,574	49,760	0.0527
2012	6,653,000,840	253,433,601	202,410,619	3,471	73,015	58,315	0.0522
2013	6,382,287,931	265,450,581	205,214,083	3,126	84,917	65,647	0.0490
2014	6,186,160,266	264,652,388	205,891,657	2,733	96,836	75,335	0.0442
2015	5,949,579,558	241,072,234	184,980,671	2,589	93,114	71,449	0.0435
2016	5,955,657,106	255,778,330	190,747,956	2,404	106,397	79,346	0.0404
2017	6,346,235,469	282,630,641	206,982,318	2,602	108,621	79,547	0.0410

Total Losses

		<u>Severity</u>	<u>Frequency</u>	<u>R-Squared</u>	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+5.9%	-3.5%	0.757	0.884
Observed annual rate of change (8 years)	=	+8.2%	-4.1%	0.854	0.881
Observed annual rate of change (6 years)	=	+7.8%	-5.0%	0.888	0.909

Normal Losses

		<u>Severity</u>	<u>Frequency</u>	<u>R-Squared</u>	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+5.0%	-3.5%	0.770	0.884
Observed annual rate of change (8 years)	=	+6.9%	-4.1%	0.854	0.881
Observed annual rate of change (6 years)	=	+6.1%	-5.0%	0.829	0.909
Selected annual rate of change	=	+6.0%	-4.0%		

* in 100,000's

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BUSINESSOWNERS

TABLE C1-3

FIRE
CONTENTS
MULTISTATE
SEVERITY AND FREQUENCY TREND

Accident Year	Trended Exposures	Total Losses	Normal Losses	Incurred Occurrences	Average Occurrence Cost (Total)	Average Occurrence Cost (Normal)	Average Occurrence Frequency*
2008	1,114,582,203	54,825,493	48,589,504	2,240	24,476	21,692	0.2010
2009	1,123,280,245	75,453,049	62,030,539	2,402	31,413	25,825	0.2138
2010	1,120,331,497	94,817,827	75,594,456	2,645	35,848	28,580	0.2361
2011	1,105,877,115	88,390,544	73,238,806	2,816	31,389	26,008	0.2546
2012	1,080,001,171	88,378,554	74,035,560	2,821	31,329	26,244	0.2612
2013	1,021,330,801	78,876,763	66,032,023	2,289	34,459	28,848	0.2241
2014	1,015,837,910	80,801,926	70,275,864	2,142	37,723	32,809	0.2109
2015	1,031,096,366	83,285,946	70,193,331	1,967	42,342	35,685	0.1908
2016	1,041,079,238	77,755,996	65,601,979	1,898	40,967	34,564	0.1823
2017	1,114,861,662	89,203,226	75,604,946	1,875	47,575	40,323	0.1682

Total Losses

		<u>Severity</u>	<u>Frequency</u>	<u>R-Squared</u> <u>Severity</u>	<u>R-Squared</u> <u>Frequency</u>
Observed annual rate of change (10 years)	=	+5.8%	-2.7%	0.809	0.337
Observed annual rate of change (8 years)	=	+5.3%	-5.8%	0.725	0.848
Observed annual rate of change (6 years)	=	+8.1%	-8.0%	0.940	0.971

Normal Losses

		<u>Severity</u>	<u>Frequency</u>	<u>R-Squared</u> <u>Severity</u>	<u>R-Squared</u> <u>Frequency</u>
Observed annual rate of change (10 years)	=	+5.9%	-2.7%	0.876	0.337
Observed annual rate of change (8 years)	=	+6.0%	-5.8%	0.817	0.848
Observed annual rate of change (6 years)	=	+8.2%	-8.0%	0.926	0.971
Selected annual rate of change	=	+6.0%	-2.5%		

* in 100,000's

WASHINGTON

BUSINESSOWNERS

CALCULATION OF ADJUSTED EXTENDED COVERAGE LOSSES

DEFINITION OF EXTENDED COVERAGE TYPE OF LOSS GROUP

Extended coverage losses are defined as losses causing property damage to buildings, property damage to contents and time element losses due to wind and hail, explosion, riot, riot attending a strike and civil commotion, and vandalism and malicious mischief.

CALCULATION OF LOSS TREND FACTORS

The Current Cost Factors and Loss Projection Factors for fire losses are also applied to extended coverage losses. The Loss Trend Adjustments applied to extended coverage losses are summarized in Table C2-1, along with the annual CCFs and LPFs from Table C4.

The method used to determine fire trend is also applied to extended coverage losses. The historical data and the selected internal annual rates of change are shown in Tables C2-2 and C2-3.

Because the Businessowners deductible applies to all property losses, the same deductible trending procedure used with the fire losses is used with the extended coverage losses.

EC EXCESS LOSS PROCEDURE

In analyzing the Businessowners EC losses, we have adjusted the data for abnormal frequencies and severities so that it reflects long term excess potential exhibited on a state and regional basis. Normal losses by state and year are defined to be equal to the total Businessowners EC losses multiplied by the ratio of normal losses to incurred losses calculated using the long term Businessowners experience database. The potential for catastrophes is recognized by applying the state excess multiplier to the normal losses. The calculation of the EC excess multiplier is shown in Table C2-4.

LOSS ADJUSTMENT EXPENSE

Trended and smoothed losses are loaded for all loss adjustment expenses using the factor selected based on the data displayed in Table C11-1.

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TABLE C2-1

SUMMARY OF EXTENDED COVERAGE LOSS TREND

<u>Year</u>	<u>Buildings Current Cost Factors*</u>	<u>Contents Current Cost Factors*</u>
9/30/2013	1.148	1.077
9/30/2014	1.134	1.055
9/30/2015	1.084	1.036
9/30/2016	1.062	1.032
9/30/2017	1.036	1.019
Loss Projection Factor**	1.067	1.035
Annual Loss Trend Adjustments	+2.5%	+1.1%

* Adjusts losses for inflationary changes which have taken place between the actual accident date and the midpoint of the latest period of external trend information.

** Adjusts losses for the projected inflationary changes from the midpoint of the latest period of external trend information to the anticipated average accident date for policies written under the proposed loss costs.

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TABLE C2-2

EXTENDED COVERAGE
BUILDINGS
MULTISTATE
SEVERITY AND FREQUENCY TREND

Accident Year	Trended Exposures	Total Losses	Normal Losses	Incurred Occurrences	Average Occurrence Cost (Total)	Average Occurrence Cost (Normal)	Average Occurrence Frequency*
2008	6,282,651,462	103,053,327	86,350,518	8,920	11,553	9,681	0.1420
2009	6,276,401,933	154,607,082	106,608,825	12,043	12,838	8,852	0.1919
2010	6,659,354,673	194,315,655	115,525,160	11,242	17,285	10,276	0.1688
2011	6,727,564,157	291,008,077	125,659,944	11,810	24,641	10,640	0.1755
2012	6,653,000,840	381,076,560	171,567,671	17,823	21,381	9,626	0.2679
2013	6,382,287,931	244,151,663	124,275,065	12,019	20,314	10,340	0.1883
2014	6,186,160,266	135,217,740	87,274,961	6,863	19,702	12,717	0.1109
2015	5,949,579,558	182,132,369	103,022,933	7,507	24,262	13,724	0.1262
2016	5,955,657,106	134,228,195	102,970,546	6,599	20,341	15,604	0.1108
2017	6,346,235,469	178,502,841	118,175,808	7,229	24,693	16,347	0.1139

Total Losses

				<u>R-squared</u>	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+6.9%	-5.3%	0.585	0.318
Observed annual rate of change (8 years)	=	+2.3%	-8.9%	0.186	0.512
Observed annual rate of change (6 years)	=	+2.7%	-15.1%	0.263	0.706

Normal Losses

				<u>R-squared</u>	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	6.7%	-5.3%	0.836	0.318
Observed annual rate of change (8 years)	=	8.0%	-8.9%	0.840	0.512
Observed annual rate of change (6 years)	=	12.0%	-15.1%	0.970	0.706

Selected annual rate of change = +6.5%

* in 100,000's

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BUSINESSOWNERS

TABLE C2-3

EXTENDED COVERAGE
CONTENTS
MULTISTATE
SEVERITY AND FREQUENCY TREND

Accident Year	Trended Exposures	Total Losses	Normal Losses	Incurred Occurrences	Average Occurrence Cost (Total)	Average Occurrence Cost (Normal)	Average Occurrence Frequency*
2008	1,114,582,203	7,623,457	6,825,510	1,258	6,060	5,426	0.1129
2009	1,123,280,245	14,885,765	11,455,083	2,025	7,351	5,657	0.1803
2010	1,120,331,497	13,740,708	10,876,182	2,057	6,680	5,287	0.1836
2011	1,105,877,115	14,840,649	11,367,500	1,918	7,738	5,927	0.1734
2012	1,080,001,171	47,679,265	19,381,517	3,347	14,245	5,791	0.3099
2013	1,021,330,801	18,965,601	11,209,627	2,481	7,644	4,518	0.2429
2014	1,015,837,910	12,569,741	9,064,971	1,571	8,001	5,770	0.1547
2015	1,031,096,366	14,519,675	10,302,698	1,461	9,938	7,052	0.1417
2016	1,041,079,238	12,979,245	10,560,573	1,503	8,636	7,026	0.1444
2017	1,114,861,662	12,583,249	9,544,395	1,585	7,939	6,022	0.1422

Total Losses

				<u>R-squared</u>	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+3.1%	-0.8%	0.153	0.007
Observed annual rate of change (8 years)	=	+0.9%	-6.3%	0.008	0.316
Observed annual rate of change (6 years)	=	-6.5%	-14.7%	0.283	0.771

Normal Losses

				<u>R-squared</u>	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+2.2%	-0.8%	0.252	0.007
Observed annual rate of change (8 years)	=	+3.1%	-6.3%	0.274	0.316
Observed annual rate of change (6 years)	=	+5.0%	-14.7%	0.316	0.771

Selected annual rate of change = +3.0%

* in 100,000's

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TABLE C2-4

DEVELOPMENT OF EXTENDED COVERAGE EXCESS MULTIPLIER

YEAR ENDING	(1) EARNED PREMIUMS	(2) INCURRED LOSSES	(3) NORMAL INCURRED LOSSES	(4) NORMAL LOSS RATIO	(5) STATE EXCESS LOSS RATIO
9/30/1988	501,709	119,959	119,959	0.239	
9/30/1989	549,835	318,969	318,969	0.580	
9/30/1990	623,896	421,575	242,554	0.389	0.287
9/30/1991	688,056	461,939	398,006	0.578	0.093
9/30/1992	746,119	536,099	386,191	0.518	0.201
9/30/1993	794,197	1,956,366	247,382	0.311	2.152
9/30/1994	841,145	134,302	134,302	0.160	
9/30/1995	837,826	600,467	506,464	0.604	0.112
9/30/1996	875,145	786,605	556,367	0.636	0.263
9/30/1997	898,548	772,346	600,943	0.669	0.191
9/30/1998	958,272	476,271	476,271	0.497	
9/30/1999	1,070,698	1,793,398	976,776	0.912	0.763
9/30/2000	1,406,303	1,011,843	1,011,843	0.720	
9/30/2001	1,759,172	927,245	927,245	0.527	
9/30/2002	1,964,310	747,456	747,456	0.381	
9/30/2003	2,123,408	513,380	513,380	0.242	
9/30/2004	2,246,331	1,405,237	1,052,011	0.468	0.157
9/30/2005	2,391,512	486,317	486,317	0.203	
9/30/2006	2,413,153	1,483,259	1,308,858	0.542	0.072
9/30/2007	2,496,760	3,592,739	1,421,675	0.569	0.870
9/30/2008	2,729,415	1,949,155	1,274,837	0.467	0.247
9/30/2009	2,788,964	1,609,913	1,461,200	0.524	0.053
9/30/2010	2,887,748	938,922	938,922	0.325	
9/30/2011	2,873,034	1,497,018	1,497,018	0.521	
9/30/2012	2,893,758	1,536,943	1,402,973	0.485	0.046
9/30/2013	2,995,146	2,136,345	2,008,855	0.671	0.043
9/30/2014	3,067,373	2,692,620	1,727,520	0.563	0.315
9/30/2015	3,189,356	2,354,297	1,555,482	0.488	0.250
9/30/2016	3,212,857	4,206,024	2,003,920	0.624	0.685
9/30/2017	3,241,082	1,255,020	1,255,020	0.387	
TOTALS				14.800	6.800
(6) STATE EXCESS COMPONENT = (TOTAL (5) / TOTAL (4))					0.459
(7) STATE EXCESS MULTIPLIER = (1 + (6))					1.459

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EXPLANATORY NOTES TO TABLE C2-4

OBJECTIVE

Due to the absence or presence of catastrophic wind losses, Extended Coverage (EC) experience can be extremely volatile; in recognition of this, an excess loss procedure is used to smooth the losses incurred during the experience period. Under this approach a given year's aggregate losses are split into normal and excess components (defined below). The excess loss experience of the long-term review period (1988-present) is used to develop a state excess multiplier which is applied to the normal losses for each accident year. The state excess multiplier is derived in such a manner as to provide an estimate, based on the long-term experience, of the expected volume of excess loss dollars per normal loss dollar in the review period. Therefore, by applying the state excess multiplier to each year's normal incurred losses, a normal review period ratemaking database is generated which reflects both normal loss experience and the expected, average annual excess loss experience (averaged over the long-term review period).

COLUMN (1)

EARNED PREMIUMS

The earned premiums for EC are a portion of the total earned premium obtained by multiplying each individual year's statewide unadjusted earned premium by its long-term ratio of unadjusted EC losses to total losses.

COLUMN (2)

INCURRED LOSSES

The unadjusted incurred losses are shown for each year.

COLUMN (3)

NORMAL INCURRED LOSSES

Normal losses are defined as that portion of each month's losses which does not exceed the normal loss ratio cutoff, aggregated by fiscal year.

Note: 2.0 times the monthly earned premiums are defined to be the normal loss ratio cutoff.

COLUMN (4)

NORMAL LOSS RATIO

Normal loss ratios (NLR) are calculated by dividing the normal losses in Column (3) by the earned premiums in Column (1).

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BUSINESSOWNERS

EXPLANATORY NOTES TO TABLE C2-4 (Cont'd)

COLUMN (5) STATE EXCESS LOSS RATIO

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

LINE (6) STATE EXCESS COMPONENT

The State Excess Component is determined by dividing the sum of all state excess loss ratios by the sum of all normal loss ratios (where the sum is taken across all accident years).

LINE (7) STATE EXCESS MULTIPLIER

The State Excess Multiplier is derived by adding one (1.000) to the State Excess Component.

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BUSINESSOWNERS

CALCULATION OF ADJUSTED ALL OTHER PROPERTY LOSSES

DEFINITION OF ALL OTHER PROPERTY TYPE OF LOSS GROUP

All other property losses are defined as losses due to sprinkler leakage and all other insurable perils which cause property damage to the building, property damage to the contents or time element losses. Included in this type of loss group are losses due to water damage, freezing, vehicles, aircraft and smoke.

CALCULATION OF LOSS TREND FACTORS

The Current Cost Factors and Loss Projection Factors for fire losses are also applied to all other property losses. The Loss Trend Adjustments applied to all other property losses are summarized in Table C3-1, along with the annual CCFs and LPFs from Table C4.

The method used to determine fire trend is also applied to all other property losses. The historical data and the selected internal annual rates of change are shown in Tables C3-2 and C3-3.

Because the Businessowners deductible applies to all property losses, the same deductible trending procedure used with the fire losses is used with the all other property losses.

ALL OTHER PROPERTY LARGE LOSS PROCEDURE

In analyzing the Businessowners AOP losses, we have adjusted the data for abnormal frequencies and severities so that it reflects long term excess potential exhibited on a statewide basis. Normal losses by state and year are defined to be equal to the total Businessowners AOP losses multiplied by the ratio of normal losses to incurred losses calculated using the long term Businessowners experience database. The potential for catastrophes is recognized by applying the state excess multiplier to the normal losses. The calculation of the AOP excess multiplier is shown in Table C3-4.

LOSS ADJUSTMENT EXPENSE

Trended and smoothed losses are loaded for all loss adjustment expenses using the factor selected based on the data displayed in Table C11-1.

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BUSINESSOWNERS

TABLE C3-1

SUMMARY OF ALL OTHER PROPERTY LOSS TREND

<u>Year</u>	<u>Buildings Current Cost Factors*</u>	<u>Contents Current Cost Factors*</u>
9/30/2013	1.148	1.077
9/30/2014	1.134	1.055
9/30/2015	1.084	1.036
9/30/2016	1.062	1.032
9/30/2017	1.036	1.019
Loss Projection Factor**	1.067	1.035
Annual Loss Trend Adjustments	+0.9%	+2.1%

* Adjusts losses for inflationary changes which have taken place between the actual accident date and the midpoint of the latest period of external trend information.

** Adjusts losses for the projected inflationary changes from the midpoint of the latest period of external trend information to the anticipated average accident date for policies written under the proposed loss costs.

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BUSINESSOWNERS

TABLE C3-2

ALL OTHER PROPERTY
BUILDINGS
MULTISTATE
SEVERITY AND FREQUENCY TREND

Accident Year	Trended Exposures	Total Losses	Normal Losses	Incurred Occurrences	Average Occurrence Cost (Total)	Average Occurrence Cost (Normal)	Average Occurrence Frequency*
2008	6,282,651,462	122,864,792	113,510,179	12,035	10,209	9,432	0.1916
2009	6,276,401,933	179,356,505	151,466,742	15,656	11,456	9,675	0.2494
2010	6,659,354,673	187,972,805	165,460,538	15,794	11,902	10,476	0.2372
2011	6,727,564,157	237,339,496	191,942,715	16,972	13,984	11,309	0.2523
2012	6,653,000,840	172,154,782	154,914,334	14,210	12,115	10,902	0.2136
2013	6,382,287,931	161,517,368	148,633,513	12,629	12,789	11,769	0.1979
2014	6,186,160,266	233,118,275	180,870,766	15,137	15,401	11,949	0.2447
2015	5,949,579,558	253,228,835	181,607,571	15,310	16,540	11,862	0.2573
2016	5,955,657,106	149,219,040	138,196,121	9,918	15,045	13,934	0.1665
2017	6,346,235,469	145,864,395	137,734,833	9,603	15,189	14,343	0.1513

Total Losses

				R-squared	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+4.6%	-2.8%	0.772	0.214
Observed annual rate of change (8 years)	=	+3.9%	-5.2%	0.583	0.425
Observed annual rate of change (6 years)	=	+4.9%	-6.1%	0.563	0.312

Normal Losses

				R-squared	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+4.5%	-2.8%	0.924	0.214
Observed annual rate of change (8 years)	=	+4.3%	-5.2%	0.855	0.425
Observed annual rate of change (6 years)	=	+5.5%	-6.1%	0.871	0.312

Selected annual rate of change = +4.0%

* in 100,000's

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BUSINESSOWNERS

TABLE C3-3

ALL OTHER PROPERTY
CONTENTS
MULTISTATE
SEVERITY AND FREQUENCY TREND

Accident Year	Trended Exposures	Total Losses	Normal Losses	Incurred Occurrences	Average Occurrence Cost (Total)	Average Occurrence Cost (Normal)	Average Occurrence Frequency*
2008	1,114,582,203	56,851,447	54,271,560	6,697	8,489	8,104	0.6009
2009	1,123,280,245	92,449,851	80,443,069	9,441	9,792	8,521	0.8405
2010	1,120,331,497	98,284,474	88,713,782	10,186	9,649	8,709	0.9092
2011	1,105,877,115	108,718,356	96,825,077	10,051	10,817	9,633	0.9089
2012	1,080,001,171	104,134,314	96,586,717	10,997	9,469	8,783	1.0182
2013	1,021,330,801	107,459,272	100,174,733	9,813	10,951	10,208	0.9608
2014	1,015,837,910	116,483,034	94,507,258	9,561	12,183	9,885	0.9412
2015	1,031,096,366	102,961,314	89,344,049	8,182	12,584	10,920	0.7935
2016	1,041,079,238	100,105,377	92,668,957	7,644	13,096	12,123	0.7342
2017	1,114,861,662	100,195,281	95,203,424	7,455	13,440	12,770	0.6687

Total Losses

				R-squared	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+5.0%	-0.4%	0.885	0.004
Observed annual rate of change (8 years)	=	+5.2%	-4.6%	0.840	0.631
Observed annual rate of change (6 years)	=	+6.9%	-8.4%	0.886	0.959

Normal Losses

				R-squared	
		<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+4.9%	-0.4%	0.904	0.004
Observed annual rate of change (8 years)	=	+5.4%	-4.6%	0.867	0.631
Observed annual rate of change (6 years)	=	+7.4%	-8.4%	0.932	0.959

Selected annual rate of change = +4.5%

* in 100,000's

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TABLE C3-4

DEVELOPMENT OF ALL OTHER PROPERTY EXCESS MULTIPLIER

	(1)	(2)	(3)	(4)	(5)
<u>YEAR</u> <u>ENDING</u>	<u>EARNED</u> <u>PREMIUMS</u>	<u>INCURRED</u> <u>LOSSES</u>	<u>NORMAL</u> <u>INCURRED</u> <u>LOSSES</u>	<u>NORMAL</u> <u>LOSS</u> <u>RATIO</u>	<u>STATE</u> <u>EXCESS</u> <u>LOSS</u> <u>RATIO</u>
9/30/1988	2,295,280	470,569	470,569	0.205	
9/30/1989	2,515,455	1,182,471	1,015,924	0.404	0.066
9/30/1990	2,854,279	870,921	870,921	0.305	
9/30/1991	3,147,806	1,808,860	1,506,515	0.479	0.096
9/30/1992	3,413,440	1,148,388	1,148,388	0.336	
9/30/1993	3,633,395	1,686,742	1,685,456	0.464	
9/30/1994	3,848,178	2,373,349	1,645,758	0.428	0.189
9/30/1995	3,832,995	2,551,187	2,248,219	0.587	0.079
9/30/1996	4,003,725	3,981,218	3,306,646	0.826	0.168
9/30/1997	4,110,793	11,528,661	3,816,937	0.929	1.876
9/30/1998	4,384,024	6,291,000	4,795,908	1.094	0.341
9/30/1999	4,898,365	5,578,120	4,815,088	0.983	0.156
9/30/2000	6,433,734	4,499,502	4,239,570	0.659	0.040
9/30/2001	8,048,086	6,132,797	6,132,797	0.762	
9/30/2002	8,986,577	4,982,050	4,982,050	0.554	
9/30/2003	9,714,435	3,363,161	3,363,161	0.346	
9/30/2004	10,276,802	5,827,000	5,827,000	0.567	
9/30/2005	10,940,991	3,630,455	3,630,455	0.332	
9/30/2006	11,039,998	3,476,962	3,476,962	0.315	
9/30/2007	11,422,494	4,959,800	4,959,800	0.434	
9/30/2008	12,486,873	4,992,998	4,992,998	0.400	
9/30/2009	12,759,305	19,055,700	11,373,259	0.891	0.602
9/30/2010	13,211,237	8,663,472	7,733,404	0.585	0.070
9/30/2011	13,143,923	9,810,918	9,607,553	0.731	0.015
9/30/2012	13,238,731	7,736,122	7,736,122	0.584	
9/30/2013	13,702,576	5,911,538	5,911,538	0.431	
9/30/2014	14,033,006	16,344,531	10,209,447	0.728	0.437
9/30/2015	14,591,073	8,715,451	8,715,451	0.597	
9/30/2016	14,698,588	7,529,047	7,529,047	0.512	
9/30/2017	14,827,712	12,056,423	12,056,423	0.813	
TOTALS				17.281	4.135
(6) STATE EXCESS COMPONENT = (TOTAL (5) / TOTAL (4))					0.239
(7) STATE EXCESS MULTIPLIER = (1 + (6))					1.239

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EXPLANATORY NOTES TO TABLE C3-4

OBJECTIVE	Similar to Extended Coverage, the All Other Property (AOP) smoothing procedure uses a loss ratio approach to reflect both the frequency and severity of unusual loss events. The excess procedure uses longer term statewide AOP experience (1988 - present) to account for the volatile nature of weather related losses (water damage from bursting pipes, or the weight of ice, sleet or snow) which are the predominant causes of large AOP losses in a given experience period. A monthly normal loss ratio cutoff of 2.0 is used to define normal and excess losses. The resulting ratio of excess to normal losses over the long-term experience period is then applied to the normal losses used in the loss cost level review.
COLUMN (1)	<u>EARNED PREMIUMS</u> The unadjusted earned premiums for AOP each year and are a portion of the total earned premium obtained by multiplying each individual state's ratio of AOP losses to total losses.
COLUMN (2)	<u>INCURRED LOSSES</u> These are the unadjusted incurred losses for each year.
COLUMN (3)	<u>NORMAL INCURRED LOSSES</u> The normal incurred losses are shown for each year and are defined to be that portion of each month's losses which does not exceed 2.0 times the monthly earned premiums.
COLUMN (4)	<u>NORMAL LOSS RATIO</u> The normal loss ratio for each year is the ratio of the normal incurred losses for each year divided by the earned premiums for the year. Column (4) = Column (3) ÷ Column (1)
COLUMN (5)	<u>STATE EXCESS LOSS RATIO</u> The excess loss ratio for each year is the ratio of the excess losses to the earned premium for the year. The excess losses are calculated as the incurred losses minus the normal incurred losses for each year.

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EXPLANATORY NOTES TO TABLE C3-4 (Cont'd)

LINE (6)

STATE EXCESS COMPONENT

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

LINE (7)

STATE EXCESS MULTIPLIER

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

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TABLE C4

DEVELOPMENT OF CURRENT COST FACTORS AND LOSS PROJECTION FACTORS

Period Ending June 30, 2018

Part A: Quarterly Indices for Buildings and Contents

Buildings - Xactware Commercial Index (XCI) (Base: 2008 = 100.0)
 Contents - Producer Price Index (PPI) - U.S. Dept. of Labor,
 (Finished Goods Less Energy) (Base: 2008 = 100.0)

Quarter Ending	XCI	PPI
9/30/2015	112.9	115.7
12/31/2015	113.5	115.7
3/31/2016	114.0	116.2
6/30/2016	114.2	116.1
9/30/2016	114.8	116.1
12/31/2016	115.5	116.4
3/31/2017	116.2	117.3
6/30/2017	117.5	118.3
9/30/2017	118.6	118.1
12/31/2017	119.1	118.9
3/31/2018	120.3	119.4
6/30/2018	121.2	119.9

Part B: Calculation of Current Cost Factors (CCF)

Fiscal Year Ending	Year Ending Averages		Current Cost Factors to Period Ending June 30, 2018		
	XCI	PPI	Buildings*	Contents*	
9/30/2013	105.6	111.1	121.2/105.6= 1.148	119.7/111.1= 1.077	
9/30/2014	106.9	113.5	121.2/106.9= 1.134	119.7/113.5= 1.055	
9/30/2015	111.8	115.5	121.2/111.8= 1.084	119.7/115.5= 1.036	
9/30/2016	114.1	116.0	121.2/114.1= 1.062	119.7/116.0= 1.032	
9/30/2017	117.0	117.5	121.2/117.0= 1.036	119.7/117.5= 1.019	

*The CCF's for Buildings are calculated using the latest point. The CCF's for Contents are calculated using a 67% / 33% weighted average of the latest two quarter ending points.

Part C: Computation of Loss Projection Factors

	Buildings	Contents
Annual Rate of Change	+2.66%	+1.39%
Loss Projection Factor**	1.067	1.035

**To project losses from the midpoint of the latest quarter, 5/15/2018, to the average accident date of 11/1/2020. (29.5/12)

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EXPLANATORY NOTES TO TABLE C4

PART A: QUARTERLY XACTWARE AND PRODUCER PRICE INDICES

XCI

The Xactware Commercial Index, based on Xactware's XactAnalysis reports, measures the costs of building material and repairs for commercial properties. The index, which has been available since 2nd Quarter 2005, is being used by ISO to calculate trends in building costs. The Xactware index is based on regular surveys of nearly 25,000 material and equipment suppliers and contractors, in addition to claims settlement data. The index values are created by estimating the cost to rebuild a sample set of different structures ranging in size, style, and quality in each economic market. The Xactware index is used in this filing to adjust for current cost from in determining the loss projection factor.

PPI

The Producer Price Index is a time series which measures the price level for a predetermined group of goods produced in all stages of processing relative to the price level for an earlier point in time (which is denoted the base and is currently 2008). There are many sub-indices which comprise the PPI, however the composite index based on the weights assigned by the U.S. government is used.

PART B: CALCULATION OF CURRENT COST FACTORS (CCFs)

FISCAL YEAR AVERAGES

The fiscal year averages are simply the means of the appropriate quarterly indices for the given fiscal years ending September 30. These measure the average cost level of the year relative to the base year.

CURRENT COST FACTORS

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

PART C: COMPUTATION OF LOSS PROJECTION FACTORS

This part of the table shows the calculation of the Loss Projection Factors. This is done by fitting a least squares exponential curve to the quarterly points. For this review, 12 points are used for buildings, and 12 points are used for contents.

The indices for the points used in fitting the curve are displayed in Part A. The annual rates of change in the indices based on the exponential fit are displayed in Part C. These annual rates of change are projected over the period which extends from the latest period of cost information to the average accident date in order to calculate the respective Loss Projection Factors.

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TABLE C5

DEVELOPMENT OF LOSS TREND ADJUSTMENT (LTA)
BOP SEVERITY AND FREQUENCY USING EXPOSURES

I. EXTERNAL RATE OF CHANGE

		BUILDINGS	CONTENTS
Year	(1) Fire, EC and AOP Weights	(2a) Current <u>Cost Factors</u>	(2b) Current <u>Cost Factors</u>
2013	0.10	1.138	1.079
2014	0.15	1.120	1.063
2015	0.20	1.091	1.036
2016	0.25	1.052	1.027
2017	0.30	1.034	1.021
(3)	Average CCF for Fire, EC and AOP	1.073	1.038
(4a)	Annual Rate of Change	0.0236	0.0116
(4b)	Projection Period (a)	21.50	21.50
(4c)	Loss Projection Factor (LPF) $(1 + (4a)) ^ ((4b) / 12)$	1.043	1.021
(5a)	Total Trend (3) x (4c)	1.119	1.060
(5b)	Projection Period (b)	53.00	53.00
(5c)	Annualized Total Trend for Fire, EC and AOP $(5a) ^ (12 / (5b))$	1.026	1.013

II. INTERNAL ANNUAL RATE OF CHANGE

		(6)
		Selected BOP
	BUILDINGS	CONTENTS
Fire	1.060	1.060
EC	1.065	1.030
AOP	1.040	1.045

- (a) The number of months from the midpoint of the latest quarter of external trend used, 11/15/2017, to the assumed average accident date of 9/1/2019.
- (b) The number of months from the weighted midpoint of the experience period, 4/1/2015, to the assumed average accident date of 9/1/2019.

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TABLE C5 (Cont'd)

DEVELOPMENT OF LOSS TREND ADJUSTMENT (LTA)
BOP SEVERITY AND FREQUENCY USING EXPOSURES

III. LTA CALCULATION

	(7)	(8)	(9)	(10)	(11)	(12)
	Annual	Annual	Indicated	Formula	Frequency	Final
	<u>External</u>	<u>Internal</u>	Severity	Severity	<u>Effect</u>	LTA
			LTA	LTA (c)		(10) x (11)
			<u>(8) / (7)</u>			
BUILDINGS						
Fire	1.026	1.060	1.033	1.022	0.960	0.981
EC	1.026	1.065	1.038	1.025	1.000	1.025
AOP	1.026	1.040	1.014	1.009	1.000	1.009
CONTENTS						
Fire	1.013	1.060	1.046	1.031	0.975	1.005
EC	1.013	1.030	1.017	1.011	1.000	1.011
AOP	1.013	1.045	1.032	1.021	1.000	1.021

- (c) The formula LTA is calculated as two-thirds of the indicated LTA. This is equivalent to calculating the overall severity trend giving 33% weight to the external trend and 67% weight to the selected internal trend.

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EXPLANATORY NOTES TO TABLE C5

I. EXTERNAL RATE OF CHANGE

COLUMN (1)

WEIGHTS

The selected weights are the same for each type of loss group.

COLUMN (2)

CURRENT COST FACTORS (CCF)

The CCFs are shown here for buildings and contents.

LINE (3)

AVERAGE CCFs

The average CCFs for the experience period are calculated based on the weights shown in column (1).

LINE (4)

LOSS PROJECTION FACTORS

The annual rate of change, projection period in years (Exponent), and LPF are shown here.

LINE (5)

TOTAL TREND

The total trend is the product of the average CCF and LPF. The total trend is converted to an annual basis by raising it to the reciprocal of the number of years between the weighted midpoint of the experience period and the assumed average accident date. For Fire, EC and AOP the weighted midpoint of the experience period is 4/1/2015. Accordingly, there are 53 months to the assumed average accident date of 9/1/2019.

II. INTERNAL ANNUAL RATES OF CHANGE

COLUMN (6)

SELECTED BOP

The displayed annual rates of change in the average claim costs for Fire, EC, and AOP were selected based on several least squares exponential fits of the annual claim costs for each type of loss group. This was done to the most recent nine years of Businessowners data. Refer to Tables C1, C2 and C3 for the least squares exponential fits.

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EXPLANATORY NOTES TO TABLE C5 (Cont'd)

III. LTA CALCULATION

COLUMN (7)

ANNUAL EXTERNAL

The annual external rates of change from line (5c) are shown here.

COLUMN (8)

ANNUAL INTERNAL

The annual internal rates of change in average loss from column (6) are shown here.

COLUMN (9)

INDICATED LTA

The indicated severity LTAs are calculated by dividing the annual internal rates of change by the annual external rates of change.

COLUMN (10)

FORMULA LTA

The severity LTAs in column (10) were selected to temper the full effect of internal trend data. Without such tempering, full weight would in effect be given to the internal data without any consideration of the external cost indices.

COLUMN (11)

FREQUENCY EFFECT

The displayed annual rates of change in claim frequency for Fire, EC and AOP were selected based on several least squares exponential fits of the claim frequency by type of loss group.

COLUMN (12)

FINAL LTA

The final LTA is the combination of the severity and frequency trend adjustments, calculated as column (10) times column (11).

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CALCULATION OF ADJUSTED BURGLARY AND THEFT LOSSES

DEFINITION OF BURGLARY AND THEFT TYPE OF LOSS GROUP	Burglary and theft losses are defined as losses due to burglary, theft and robbery of property other than money and securities. This includes time element losses and losses resulting from property damage to contents.
CALCULATION OF LOSS TREND FACTORS	<p>The method used to determine internal fire trend is also applied to burglary losses. The historical internal data and the selected annual rates of change are shown in Table C6.</p> <p>Because the Businessowners deductible applies to all property losses, the same deductible trending procedure used with the fire losses is used with the burglary and theft losses.</p>
BURGLARY AND THEFT LARGE LOSS PROCEDURE	The presence or absence of large losses during the review period can produce large fluctuations in loss cost levels if not appropriately treated. To stabilize the experience, large loss factors have been applied to normal losses. In the large loss procedure, the portion of a loss over \$20,000 at the 1989 cost level is defined as an excess loss, and the portion of a loss under \$20,000 at the 1989 cost level is defined as a normal loss. The state's loss amounts adjusted for excess occurrences are derived by multiplying the normal losses by the multistate ratio of total losses to normal losses.
LOSS ADJUSTMENT EXPENSE	Trended and smoothed losses are loaded for all loss adjustment expenses using the factor selected based on the data displayed in Table C11-2.

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TABLE C6

BURGLARY
MULTISTATE
SEVERITY AND FREQUENCY TREND

Accident <u>Year</u>	Trended <u>Exposures</u>	Total <u>Losses</u>	Normal <u>Losses</u>	Incurred <u>Occurrences</u>	Average Occurrence <u>Cost (Total)</u>	Average Occurrence <u>Cost Normal</u>	Average Occurrence <u>Frequency*</u>
2008	7,397,233,665	20,155,530	18,379,410	3,825	5,269	4,805	0.0517
2009	7,399,682,178	20,493,157	19,468,087	3,845	5,330	5,063	0.0520
2010	7,779,686,169	18,057,048	17,396,343	3,377	5,347	5,151	0.0434
2011	7,833,441,271	17,432,490	16,879,125	3,135	5,561	5,384	0.0400
2012	7,733,002,011	18,188,352	17,019,089	3,070	5,925	5,544	0.0397
2013	7,403,618,732	16,126,215	15,448,132	2,593	6,219	5,958	0.0350
2014	7,201,998,175	18,800,667	17,599,986	2,758	6,817	6,381	0.0383
2015	6,980,675,924	19,901,162	18,309,637	2,709	7,346	6,759	0.0388
2016	6,996,736,344	19,338,200	18,431,452	2,737	7,065	6,734	0.0391
2017	7,461,097,131	22,610,998	21,138,156	2,996	7,547	7,055	0.0402

Total Losses

		<u>Severity</u>	<u>Frequency</u>	<u>R-squared</u> <u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+4.6%	-3.0%	0.943	0.527
Observed annual rate of change (8 years)	=	+5.3%	-0.8%	0.948	0.097
Observed annual rate of change (6 years)	=	+4.9%	+1.2%	0.878	0.192

Normal Losses

		<u>Severity</u>	<u>Frequency</u>	<u>R-squared</u> <u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=	+4.6%	-3.0%	0.979	0.527
Observed annual rate of change (8 years)	=	+4.9%	-0.8%	0.971	0.097
Observed annual rate of change (6 years)	=	+4.8%	+1.2%	0.931	0.192
Selected annual rate of change	=	+4.0%	-4.0%		

* in 100,000's

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CALCULATION OF ADJUSTED LIABILITY LOSSES

DEFINITION OF LIABILITY TYPE OF LOSS GROUP

Liability losses and allocated loss adjustment expenses include the data reported as premises/operations liability, products liability, medical payments and all other liability.

EXCESS LOSS PROCEDURE

The liability coverage included with the basic Businessowners coverage is subject to a limit on loss payments equal to \$300,000. This limit is applied to all indemnity losses resulting from an occurrence. When the total of indemnity losses on an occurrence exceeds \$300,000, the portion over \$300,000 has been excluded from this review.

For smoothing purposes, we considered the impact of all losses from an occurrence. This was accomplished by combining the capped indemnity losses and defense costs. The procedure sums losses by occurrence, calculates the normal portion of the occurrence (defined as that part of loss and ALAE less than \$50,000), and replaces the actual excess with an expected excess amount based on the yearly multistate experience. This excess loss factor is equal to the ratio of the total multistate capped indemnity losses plus all allocated loss adjustment expense to the total multistate normal losses.

CALCULATION OF LOSS TREND FACTORS

The method used to determine internal fire trend is also applied to liability losses.

Loss Trend Factors for Businessowners liability lessors/occupants, and liability sales and payroll losses are based on \$300,000 limit Businessowners occurrence cost and frequency rates of change.

These combined rates of change are projected to an assumed average loss date of November 1, 2020 based on an assumed effective date for trending of November 1, 2019.

The historical data underlying the selected annual rates of change are shown in Table C7 for liability lessors/occupants, liability sales, and liability payroll risks.

In this review, multistate dollars of losses and number of occurrences contained in the trend exhibits are based on reported paid amounts developed to ultimate using paid development factors. This has been done in the interest of stability of ultimate loss and occurrence estimates from one review to another.

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CALCULATION OF ADJUSTED LIABILITY LOSSES (Cont'd)

LOSS DEVELOPMENT PROCEDURE

The application of loss development factors recognizes the important ratemaking concept that not all of the liability losses for a particular accident year have been finally determined at the time the experience is compiled.

The incurred losses and loss adjustment expenses underlying the statewide loss cost level indications were evaluated as of December 31, 2017.

Fiscal accident year ending September 30, 2017 includes all losses and loss adjustment expenses paid on accidents from October 1, 2016 to September 30, 2017 and all losses and loss adjustment expenses outstanding on those accidents as of December 31, 2017, 15 months after the inception of the accident year.

Similarly, fiscal accident years ending September 30, 2016, 2015, 2014, and 2013 include all losses paid and outstanding as of 27, 39, 51 and 63 months, respectively, after the inception of the accident year.

Thus, the immature experience reported as of 15, 27, 39, 51 or 63 months must be adjusted to an ultimate settlement basis. For liability sales and liability payroll, this adjustment is accomplished through the use of multistate loss development factors. For liability lessors/occupants, statewide loss development factors are credibility weighted with multistate factors. A Bayesian credibility study was done on multistate 15 to 27 and 27 to 39 months link ratios. The study concluded that there is significant statewide variation through 39 months. For these two link ratios, statewide credibility is determined by the formula $Z=L/(L+K)$, where Z is the credibility, and L is the 3-year total losses for the particular state (at the earliest of the two evaluations). K is a constant that varies as follows:

<u>15 to 27 Months</u>	<u>27 to 39 Months</u>
\$ 5,000,000	\$ 65,000,000

The complement of credibility is assigned to multistate link ratios. Three-year averages are calculated for each link ratio using a “best three of five” approach. Specifically, for the latest five years, the highest and lowest factors were removed from the calculations and the three-year average was calculated using the remaining factors. Development after 123 months is assumed to be unity.

UNALLOCATED LOSS ADJUSTMENT EXPENSE

The final adjustment to the liability losses is to include unallocated loss adjustment expenses using the factor selected based on the data displayed in Table C11-3.

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TABLE C7-1
LIABILITY- LESSORS/OCCUPANTS
MULTISTATE
SEVERITY AND FREQUENCY TREND

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					(3)/(5)	(4)/(5)	(5)/(2)
					Average	Average	Average
Accident	Trended	Paid Total	Paid Normal	Paid	Occurrence	Occurrence	Occurrence
<u>Year</u>	<u>Exposures</u>	<u>Losses</u>	<u>Losses*</u>	<u>Occurrences**</u>	<u>Cost (Total)</u>	<u>Cost (Normal)</u>	<u>Frequency***</u>
2008	4,428,765,982	268,620,255	132,536,081	14,846	18,094	8,927	0.3352
2009	4,210,613,086	257,257,183	135,555,211	14,958	17,199	9,062	0.3552
2010	4,507,447,079	274,644,498	135,348,800	14,896	18,437	9,086	0.3305
2011	4,581,765,981	302,202,613	141,409,824	15,208	19,872	9,299	0.3319
2012	4,919,250,752	244,095,247	107,678,184	11,215	21,765	9,601	0.2280
2013	4,846,529,051	221,286,335	108,957,852	9,199	24,056	11,845	0.1898
2014	4,961,361,400	326,370,124	163,498,097	12,209	26,733	13,392	0.2461
2015	4,813,457,294	318,188,286	158,464,785	10,486	30,343	15,112	0.2179
2016	4,621,249,567	248,489,741	158,152,795	8,587	28,938	18,418	0.1858
2017	5,026,484,497	239,254,303	193,855,700	7,938	30,140	24,421	0.1579

Total Losses

				<u>Severity</u>	<u>Frequency</u>	<u>R-Squared</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=			+7.4%	-8.4%	0.940		0.825
Observed annual rate of change (8 years)	=			+7.9%	-9.0%	0.934		0.756
Observed annual rate of change (6 years)	=			+6.8%	-5.6%	0.845		0.446

Normal Losses

				<u>Severity</u>	<u>Frequency</u>	<u>R-Squared</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=			+11.4%	-8.4%	0.871		0.825
Observed annual rate of change (8 years)	=			+15.1%	-9.0%	0.942		0.756
Observed annual rate of change (6 years)	=			+19.1%	-5.6%	0.978		0.446
Selected annual rate of change	=			+7.5%	-4.5%			

* Including basic indemnity and allocated loss adjustment expense developed separately to an ultimate settlement basis.

** Developed to an ultimate settlement basis.

*** in 100,000's

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TABLE C7-2
LIABILITY - SALES
MULTISTATE SEVERITY AND FREQUENCY TREND

Accident Year	Trended Exposures	Paid Total Losses	Paid Normal Losses*	Paid Occurrences**	Occurrence Cost (Total)	Occurrence Cost (Normal)	Occurrence Frequency***
2008	16,236,001	27,362,624	13,940,417	2,788	9,814	5,000	0.0172
2009	16,252,566	24,011,004	13,879,305	2,867	8,375	4,841	0.0176
2010	15,372,937	19,884,684	12,631,151	2,752	7,226	4,590	0.0179
2011	14,660,500	20,131,469	11,046,980	2,595	7,758	4,257	0.0177
2012	14,838,386	24,392,547	12,115,392	2,394	10,189	5,061	0.0161
2013	15,863,360	30,325,246	14,926,789	2,389	12,692	6,247	0.0151
2014	20,104,973	40,991,128	21,891,826	3,177	12,903	6,891	0.0158
2015	24,523,580	50,460,460	29,979,721	3,964	12,731	7,564	0.0162
2016	27,926,951	50,842,542	35,887,666	3,940	12,905	9,109	0.0141
2017	33,258,878	56,399,192	47,954,987	3,648	15,462	13,147	0.0110

<u>Total Losses</u>				<u>R-Squared</u>			
				<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=			7.3%	-3.9%	0.700	0.655
Observed annual rate of change (8 years)	=			10.7%	-5.2%	0.851	0.711
Observed annual rate of change (6 years)	=			6.3%	-5.8%	0.733	0.572

<u>Normal Losses</u>				<u>R-Squared</u>			
				<u>Severity</u>	<u>Frequency</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=			11.0%	-3.9%	0.791	0.655
Observed annual rate of change (8 years)	=			16.0%	-5.2%	0.930	0.711
Observed annual rate of change (6 years)	=			18.7%	-5.8%	0.941	0.572
Selected annual rate of change	=			8.5%	-2.5%		

* Includes basic indemnity and allocated loss adjustment expense developed separately to an ultimate settlement basis.

** Developed to an ultimate settlement basis.

*** in 100,000's

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TABLE C7-3
LIABILITY - PAYROLL
MULTISTATE SEVERITY AND FREQUENCY TREND

Accident	Trended	Paid	Paid		Occurrence	Occurrence	
<u>Year</u>	<u>Exposures</u>	<u>Total</u>	<u>Normal</u>	<u>Paid</u>	<u>Cost</u>	<u>Cost</u>	<u>Occurrence</u>
		<u>Losses</u>	<u>Losses*</u>	<u>Occurrences**</u>	<u>(Total)</u>	<u>(Normal)</u>	<u>Frequency***</u>
2008	4,850,709	47,676,209	23,781,462	2,791	17,082	8,521	0.0575
2009	4,476,991	47,114,375	23,106,692	3,266	14,427	7,075	0.0729
2010	3,868,562	43,938,009	20,348,878	2,630	16,707	7,738	0.0680
2011	3,539,085	50,521,291	21,982,513	2,169	23,289	10,133	0.0613
2012	3,396,518	46,474,014	19,658,940	2,461	18,887	7,989	0.0724
2013	3,555,371	58,619,888	20,839,240	2,069	28,337	10,074	0.0582
2014	3,619,036	52,352,723	22,725,998	2,072	25,265	10,967	0.0573
2015	3,710,807	45,823,318	25,776,075	2,024	22,636	12,733	0.0546
2016	3,927,565	48,295,954	28,638,418	1,944	24,838	14,728	0.0495
2017	4,034,556	44,668,405	30,556,548	2,002	22,313	15,264	0.0496

Total Losses

				<u>Severity</u>	<u>Frequency</u>	<u>R-Squared</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=			5.2%	-3.3%	0.507		0.533
Observed annual rate of change (8 years)	=			3.4%	-4.8%	0.233		0.780
Observed annual rate of change (6 years)	=			0.9%	-6.7%	0.016		0.854

Normal Losses

				<u>Severity</u>	<u>Frequency</u>	<u>R-Squared</u>	<u>Severity</u>	<u>Frequency</u>
Observed annual rate of change (10 years)	=			8.4%	-3.3%	0.824		0.533
Observed annual rate of change (8 years)	=			10.1%	-4.8%	0.863		0.780
Observed annual rate of change (6 years)	=			13.8%	-6.7%	0.966		0.854
Selected annual rate of change	=			7.5%	-2.0%			

* Includes basic indemnity and allocated loss adjustment expense developed separately to an ultimate settlement basis.

** Developed to an ultimate settlement basis.

*** in 100,000's

WASHINGTON

BUSINESSOWNERS

TABLE C8-1

LOSS DEVELOPMENT
LIABILITY - LESSORS/OCCUPANTS

\$ 300,000 LIMIT INCURRED LOSSES AS OF:

<u>YEAR</u>	<u>15 MONTHS</u>	<u>27 MONTHS</u>	<u>39 MONTHS</u>	<u>LINK RATIOS</u>	
				<u>27:15</u>	<u>39:27</u>
2003	2,879,621	3,597,942	4,910,064	1.249	1.365
2004	1,729,006	2,100,729	2,768,788	1.215	1.318
2005	1,726,976	3,423,676	4,257,839	1.982	1.244
2006	2,707,032	3,451,106	4,366,807	1.275	1.265
2007	2,563,988	3,239,869	4,531,747	1.264	1.399
2008	2,495,920	3,020,324	3,640,234	1.210	1.205
2009	2,238,710	3,846,528	4,799,057	1.718	1.248
2010	2,894,510	3,832,792	3,839,948	1.324	1.002
2011	1,969,433	2,842,786	2,934,802	1.443	1.032
2012	1,478,912	2,087,592	2,784,594	1.412	1.334
2013	2,628,102	3,579,032	4,334,552	1.362	1.211
2014	1,441,122	1,710,291	2,752,934	1.187	1.610
2015	2,127,284	3,093,938	3,427,587	1.454	1.108
2016	2,373,772	3,426,338		1.443	
2017	2,143,186				

(1) Average Best 3 of 5	(A) Statewide	1.406	1.218
	(B) Multistate	1.504	1.255
(2) Credibility		0.543	0.114
(3) Credibility Weighted Average		1.451	1.251

Summary of Factors

	<u>Factor</u>
63 to Ultimate**	1.012
51 to Ultimate**	1.032
39 to Ultimate**	1.110
27 to Ultimate	1.389
15 to Ultimate	2.015

**Multistate

WASHINGTON
BUSINESSOWNERS
TABLE C8-2
MULTISTATE LOSS DEVELOPMENT
LIABILITY - LESSORS/OCCUPANTS
\$300,000 LIMIT INCURRED LOSSES AS OF:

<u>YEAR</u>	<u>15 MONTHS</u>	<u>27 MONTHS</u>	<u>39 MONTHS</u>	<u>51 MONTHS</u>	<u>63 MONTHS</u>	<u>75 MONTHS</u>	<u>87 MONTHS</u>	<u>99 MONTHS</u>	<u>111 MONTHS</u>	<u>123 MONTHS</u>
2003	168,913,608	264,128,915	315,221,162	329,043,285	328,573,692	331,968,749	335,392,885	341,737,546	343,315,378	343,705,426
2004	168,558,546	248,352,758	300,439,433	323,892,353	328,534,459	324,888,506	322,942,516	322,480,603	322,594,586	323,653,719
2005	172,259,401	236,048,961	284,818,523	304,384,297	311,262,134	311,857,934	311,153,238	312,709,480	315,363,449	317,676,314
2006	170,626,963	240,374,515	294,605,222	309,019,265	307,556,807	307,781,536	309,450,243	310,958,093	311,855,616	314,509,442
2007	168,996,766	248,584,758	300,359,357	314,258,464	317,694,629	317,720,055	320,250,614	323,369,693	323,739,400	321,769,844
2008	195,267,130	272,962,521	325,573,538	348,409,778	351,931,774	348,982,552	350,434,500	350,583,276	350,666,186	348,742,217
2009	191,438,288	275,981,378	340,920,390	356,222,202	363,421,893	365,682,351	360,459,020	361,662,976	362,086,243	
2010	197,633,834	273,588,043	332,733,268	355,369,148	361,210,752	358,648,144	359,685,608	359,843,177		
2011	195,894,645	284,137,813	351,602,187	381,599,761	389,816,168	391,750,295	395,196,762			
2012	171,940,662	246,446,296	298,214,820	320,419,011	325,715,697	326,315,718				
2013	152,714,996	225,589,133	269,900,000	288,138,051	297,743,323					
2014	161,719,441	245,984,466	324,340,796	363,459,838						
2015	154,612,316	247,132,950	326,144,270							
2016	151,565,899	229,257,588								
2017	155,833,831									
<u>LINKRATIOS</u>										
<u>YEAR</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>	
2003	1.564	1.193	1.044	0.999	1.010	1.010	1.019	1.005	1.001	
2004	1.473	1.210	1.078	1.014	0.989	0.994	0.999	1.000	1.003	
2005	1.370	1.207	1.069	1.023	1.002	0.998	1.005	1.008	1.007	
2006	1.409	1.226	1.049	0.995	1.001	1.005	1.005	1.003	1.009	
2007	1.471	1.208	1.046	1.011	1.000	1.008	1.010	1.001	0.994	
2008	1.398	1.193	1.070	1.010	0.992	1.004	1.000	1.000	0.995	
2009	1.442	1.235	1.045	1.020	1.006	0.986	1.003	1.001		
2010	1.384	1.216	1.068	1.016	0.993	1.003	1.000			
2011	1.450	1.237	1.085	1.022	1.005	1.009				
2012	1.433	1.210	1.074	1.017	1.002					
2013	1.477	1.196	1.068	1.033						
2014	1.521	1.319	1.121							
2015	1.598	1.320								
2016	1.513									
BEST 3 OF 5	1.504	1.255	1.076	1.020	1.000	1.005	1.003	1.002	1.002	
	<u>15 to Ult.</u>	<u>27 to Ult.</u>	<u>39 to Ult.</u>	<u>51 to Ult.</u>	<u>63 to Ult.</u>	<u>75 to Ult.</u>	<u>87 to Ult.</u>	<u>99 to Ult.</u>	<u>111 to Ult.</u>	
FACTORS	2.095	1.393	1.110	1.032	1.012	1.012	1.007	1.004	1.002	

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WASHINGTON
BUSINESSOWNERS
TABLE C8-3
MULTISTATE LOSS DEVELOPMENT
LIABILITY - SALES
\$300,000 LIMIT INCURRED LOSSES AS OF:

<u>YEAR</u>	<u>15 MONTHS</u>	<u>27 MONTHS</u>	<u>39 MONTHS</u>	<u>51 MONTHS</u>	<u>63 MONTHS</u>	<u>75 MONTHS</u>	<u>87 MONTHS</u>	<u>99 MONTHS</u>	<u>111 MONTHS</u>	<u>123 MONTHS</u>
2003	9,922,415	10,635,457	10,290,685	9,995,030	9,885,437	9,934,791	9,981,047	9,979,972	9,980,772	9,980,772
2004	11,444,701	10,599,737	10,309,194	10,693,274	10,898,782	10,871,839	11,194,848	11,111,879	11,066,099	11,066,099
2005	11,313,790	10,504,976	11,477,730	12,363,400	12,608,101	12,772,108	12,734,745	12,738,393	12,639,797	12,639,797
2006	9,617,206	11,726,758	14,146,809	14,547,828	14,604,869	14,659,823	14,713,122	14,716,589	14,732,769	14,877,685
2007	11,959,848	15,298,500	17,441,115	18,411,420	18,524,155	18,545,246	18,360,577	18,442,748	18,408,499	18,419,776
2008	16,956,152	19,482,710	20,957,275	22,396,632	23,238,706	23,433,413	23,385,023	23,461,090	23,484,751	23,171,005
2009	19,299,158	22,792,205	26,823,870	28,817,741	28,967,666	29,107,425	29,016,159	28,974,948	28,975,272	
2010	21,260,562	24,693,815	27,098,887	27,732,178	28,338,335	28,507,692	28,956,486	28,568,031		
2011	18,408,319	22,202,974	25,012,094	26,464,426	26,219,728	26,033,924	25,740,428			
2012	22,781,000	27,438,764	32,905,182	36,397,604	37,046,240	36,136,830				
2013	27,963,592	38,093,778	43,202,951	45,462,068	46,685,142					
2014	43,956,636	60,571,596	72,444,540	77,414,584						
2015	61,631,710	81,140,571	94,368,217							
2016	68,126,413	86,679,664								
2017	67,024,028									

BUSINESSOWNERS LIABILITY LINK RATIOS

<u>YEAR</u>	<u>27: 15</u>	<u>39: 27</u>	<u>51: 39</u>	<u>63: 51</u>	<u>75: 63</u>	<u>87: 75</u>	<u>99: 87</u>	<u>111: 99</u>	<u>123:111</u>
2003	1.072	0.968	0.971	0.989	1.005	1.005	1.000	1.000	1.000
2004	0.926	0.973	1.037	1.019	0.998	1.030	0.993	0.996	1.000
2005	0.929	1.093	1.077	1.020	1.013	0.997	1.000	0.992	1.000
2006	1.219	1.206	1.028	1.004	1.004	1.004	1.000	1.001	1.010
2007	1.279	1.140	1.056	1.006	1.001	0.990	1.004	0.998	1.001
2008	1.149	1.076	1.069	1.038	1.008	0.998	1.003	1.001	0.987
2009	1.181	1.177	1.074	1.005	1.005	0.997	0.999	1.000	
2010	1.161	1.097	1.023	1.022	1.006	1.016	0.987		
2011	1.206	1.127	1.058	0.991	0.993	0.989			
2012	1.204	1.199	1.106	1.018	0.975				
2013	1.362	1.134	1.052	1.027					
2014	1.378	1.196	1.069						
2015	1.317	1.163							
2016	1.272								
BEST									
3 OF 5	1.317	1.164	1.060	1.015	1.001	0.995	1.001	1.000	1.000
	<u>15 to Ult.</u>	<u>27 to Ult.</u>	<u>39 to Ult.</u>	<u>51 to Ult.</u>	<u>63 to Ult.</u>	<u>75 to Ult.</u>	<u>87 to Ult.</u>	<u>99 to Ult.</u>	<u>111 to Ult.</u>
FACTORS	1.645	1.249	1.073	1.012	0.997	0.996	1.001	1.000	1.000

WASHINGTON
BUSINESSOWNERS
TABLE C8-4
MULTISTATE LOSS DEVELOPMENT
LIABILITY - PAYROLL
\$300,000 LIMIT INCURRED LOSSES AS OF:

<u>YEAR</u>	<u>15 MONTHS</u>	<u>27 MONTHS</u>	<u>39 MONTHS</u>	<u>51 MONTHS</u>	<u>63 MONTHS</u>	<u>75 MONTHS</u>	<u>87 MONTHS</u>	<u>99 MONTHS</u>	<u>111 MONTHS</u>	<u>123 MONTHS</u>
2003	20,620,352	26,848,695	33,034,560	34,805,799	36,510,380	36,904,731	37,594,126	38,125,495	38,313,245	39,261,059
2004	19,371,684	28,305,767	34,026,351	39,167,028	41,822,144	42,429,249	43,211,222	43,455,733	44,032,452	43,538,725
2005	27,248,889	35,381,965	43,767,133	45,566,472	47,958,829	48,248,560	48,574,591	48,105,992	48,586,167	49,045,765
2006	31,563,414	39,411,191	43,806,704	45,685,698	47,281,813	48,682,130	50,406,909	51,760,459	51,725,804	50,690,804
2007	37,704,265	47,045,520	53,192,200	57,136,446	58,814,276	60,811,929	61,576,456	62,364,883	61,938,580	62,049,589
2008	40,664,922	50,442,234	57,752,932	64,348,328	68,724,715	70,049,529	71,221,728	69,992,725	71,935,094	72,637,774
2009	45,554,382	53,863,403	64,469,091	66,923,167	70,997,633	71,446,652	71,429,932	73,728,037	75,702,936	
2010	45,126,344	58,539,740	67,001,794	73,868,428	76,998,868	77,003,643	77,567,409	79,320,196		
2011	48,131,340	63,238,411	74,281,322	81,378,836	83,753,093	85,428,432	85,407,471			
2012	42,284,923	55,615,528	66,094,443	73,708,983	78,517,877	79,367,490				
2013	48,421,946	66,812,054	80,777,617	88,521,235	95,286,920					
2014	53,233,273	77,368,588	95,038,660	106,614,915						
2015	55,200,249	77,975,698	96,748,735							
2016	59,399,078	82,960,543								
2017	60,997,231									

BUSINESSOWNERS LIABILITY LINK RATIOS

<u>YEAR</u>	<u>27: 15</u>	<u>39: 27</u>	<u>51: 39</u>	<u>63: 51</u>	<u>75: 63</u>	<u>87: 75</u>	<u>99: 87</u>	<u>111: 99</u>	<u>123:111</u>
2003	1.302	1.230	1.054	1.049	1.011	1.019	1.014	1.005	1.025
2004	1.461	1.202	1.151	1.068	1.015	1.018	1.006	1.013	0.989
2005	1.298	1.237	1.041	1.053	1.006	1.007	0.990	1.010	1.009
2006	1.249	1.112	1.043	1.035	1.030	1.035	1.027	0.999	0.980
2007	1.248	1.131	1.074	1.029	1.034	1.013	1.013	0.993	1.002
2008	1.240	1.145	1.114	1.068	1.019	1.017	0.983	1.028	1.010
2009	1.182	1.197	1.038	1.061	1.006	1.000	1.032	1.027	
2010	1.297	1.145	1.102	1.042	1.000	1.007	1.023		
2011	1.314	1.175	1.096	1.029	1.020	1.000			
2012	1.315	1.188	1.115	1.065	1.011				
2013	1.380	1.209	1.096	1.076					
2014	1.453	1.228	1.122						
2015	1.413	1.241							
2016	1.397								
BEST									
3 of 5	1.397	1.208	1.104	1.056	1.012	1.007	1.021	1.012	1.000
<u>FACTORS</u>	<u>15 to Ult.</u>	<u>27 to Ult.</u>	<u>39 to Ult.</u>	<u>51 to Ult.</u>	<u>63 to Ult.</u>	<u>75 to Ult.</u>	<u>87 to Ult.</u>	<u>99 to Ult.</u>	<u>111 to Ult.</u>
	2.070	1.482	1.227	1.111	1.052	1.040	1.033	1.012	1.000

WASHINGTON

BUSINESSOWNERS

TABLE C9

DEVELOPMENT OF EXPOSURE TREND FACTORSBuildings

<u>Year</u>	(1) Annual Written <u>Increase</u>	(2) Calendar Yr. Written <u>Factors</u>	(3) Fiscal Yr. Written <u>Factors(a)</u>	(4) Projection <u>Factor</u>	(5) Exposure Trend <u>Factors(a)</u>
2012	2.7%	1.120			
2013	2.6%	1.092	1.099	1.063	1.168
2014	2.5%	1.065	1.072	1.063	1.139
2015	2.3%	1.041	1.047	1.063	1.113
2016	2.1%	1.020	1.025	1.063	1.090
2017	2.0%	1.000	1.005	1.063	1.068

Contents

<u>Year</u>	(6) Annual Written <u>Increase</u>	(7) Calendar Yr. Written <u>Factors</u>	(8) Fiscal Yr. Written <u>Factors(a)</u>	(9) Projection <u>Factor</u>	(10) Exposure Trend <u>Factors(a)</u>
2012	1.8%	1.100			
2013	2.1%	1.077	1.083	1.053	1.140
2014	2.1%	1.055	1.061	1.053	1.117
2015	1.9%	1.035	1.040	1.053	1.095
2016	1.8%	1.017	1.022	1.053	1.076
2017	1.7%	1.000	1.004	1.053	1.057

SalesPayroll

<u>Year</u>	(11) Selected Average <u>Annual Trend(b)</u>	(12) Exposure Trend <u>Factors(a)</u>	<u>Year</u>	(13) Selected Average <u>Annual Trend(b)</u>	(14) Exposure Trend <u>Factors(a)</u>
2013	1.7%	1.127	2013	2.8%	1.216
2014	1.7%	1.108	2014	2.8%	1.183
2015	1.7%	1.089	2015	2.8%	1.151
2016	1.7%	1.071	2016	2.8%	1.119
2017	1.7%	1.053	2017	2.8%	1.089

(a) Fiscal Year Ending September 30.

(b) Derived from data supplied by Moody's Analytics.

WASHINGTON

BUSINESSOWNERS

EXPLANATORY NOTES TO TABLE C9

OBJECTIVE

Cost changes over time to both real and personal property result in the purchasing by insureds of increased amounts of insurance. In addition, certain Businessowners classes have sales and payroll exposure bases for liability, which are inflation sensitive. To reflect the impact of this phenomenon, exposure trend factors are applied to reported sales and payroll amounts of insurance to bring them to prospective exposure levels. In this analysis, exposure trend factors for Businessowners data with amount of insurance exposure bases have been developed from Commercial Property data for buildings and contents (see columns 1 through 10). Exposure trend factors for Businessowners data with sales and payroll exposure bases have been developed from General Liability data (see columns 11 through 14).

COLUMNS (1) AND (6)

ANNUAL WRITTEN INCREASE

The annual written increases for 2012 through 2017 for buildings and contents amount of insurance were developed from the actual changes in amount of insurance from one year to the next for a sample of renewal policies (based on BGI building and contents experience). Specifically, the change in amount of insurance for each policy in the sample was weighted with its prior year's aggregate loss costs to obtain a weighted change for each year. A sample of renewal policies was used because not all companies code their data so that identification of renewal policies is possible.

COLUMNS (2) AND (7)

CALENDAR YEAR WRITTEN FACTORS

The written factors for a given year are the product of the written annual changes for all years subsequent to that year.

COLUMNS (3) AND (8)

FISCAL YEAR WRITTEN FACTORS

Fiscal year written factors are calculated using a weighted average of current and prior Calendar year written factors based on the following:

<u>Fiscal Year Ending</u>	<u>Current Year Weight</u>	<u>Prior Year Weight</u>
March 31st	25%	75%
June 30th	50%	50%
September 30th	75%	25%
December 31st	100%	0%

WASHINGTON

BUSINESSOWNERS

EXPLANATORY NOTES TO TABLE C9 (Cont'd)

COLUMNS (4)
AND (9)

PROJECTION FACTORS

The projection factors are used to bring the fiscal year written factors at a 4/1/2017 level to the 5/1/2020 level (a time period of 37 months). This date is the average date of writing for policies written at the revised loss costs (i.e., 6 months beyond an assumed revision date of 11/1/2019). Based on selected average annual changes of 2.0% for buildings and 1.7% for contents, the projection factors are calculated as follows:

$$\text{Buildings: } (1.020)^{37/12} = 1.063$$

$$\text{Contents: } (1.017)^{37/12} = 1.053$$

COLUMNS (5)
AND (10)

EXPOSURE TREND FACTORS

The exposure trend factors are calculated as the product of the fiscal year written factors and the projection factors.

COLUMNS (11)
AND (13)

SELECTED AVERAGE ANNUAL TREND

The selected average annual trend for sales was based upon the average annual growth rates in consumption components. The selected average annual trend for payroll was based on average hourly earnings of contracting workers. These econometric models were supplied by Moody's Analytics.

COLUMNS (12)
AND (14)

EXPOSURE TREND FACTORS

The exposure trend factors were derived to project the reported sales and payroll exposures from the midpoint of each accident year to 5/1/2020, which is the average date of writing for policies written at the revised loss costs (i.e., 6 months beyond an assumed revision date of 11/1/2019). The trend factors for accident year ending 9/30/2017 were calculated as follows:

$$\text{Sales: } (1.017)^{37/12} = 1.053$$

$$\text{Payroll: } (1.028)^{37/12} = 1.089$$

where 37 is the number of months between the midpoint of accident year ending 9/30/2017 (4/1/2017) and the average date of writing (5/1/2020).

WASHINGTON
BUSINESSOWNERS

TABLE C10
STATEWIDE CREDIBILITY CALCULATION

		<u>Statewide Property</u>	<u>Statewide Liability L/O</u>	<u>Multistate Sales</u>	<u>Multistate Payroll</u>
(1)	Full credibility occurrence standard for frequency with (P, K) = (95%, 5%)	1,537	1,537	1,537	1,537
(2)	Severity modification factor	5.412	3.360	4.966	3.404
(3)	Full credibility occurrence standard adjusted for severity ((1) X (2))	8,318	5,164	7,633	5,232
(4)	Selected credibility occurrence standard adjusted for severity	8,300	5,200	7,600	5,200
(5)	Multistate five-year ratio of earned risks to occurrences	37.6	86.1	9.8	43.2
(6)	Full credibility earned risks standard ((4) X (5))	312,080	447,720	74,480	224,640
(7)	Five-year earned risks	428,374	230,200	201,553	416,560
(8)	Statewide credibility [(7)/(6)] ^{1/2}	1.000	0.717	1.000	1.000

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EXPLANATORY NOTES TO TABLE C10

LINE (1)	<p><u>FULL CREDIBILITY OCCURRENCE STANDARD FOR FREQUENCY</u></p> <p>Based on a Poisson distribution, the expected numbers of occurrences is determined such that the probability that the actual number of occurrences will be within 5.0% of the expected number of occurrences is greater than 95%.</p>
LINE (2)	<p><u>SEVERITY MODIFICATION FACTOR</u></p> <p>This factor defined as $(1 + S^2 / M^2)$ is used to modify the frequency standard into a severity standard, where S is the standard deviation and M is the mean of the loss severity distribution (on a normal loss basis).</p>
LINE (3)	<p><u>FULL CREDIBILITY OCCURRENCE STANDARD ADJUSTED FOR SEVERITY</u></p> <p>This standard is the product of the frequency standard in line (1) and the severity modification factor in line (2).</p>
LINE (4)	<p><u>SELECTED CREDIBILITY OCCURRENCE STANDARD ADJUSTED FOR SEVERITY</u></p> <p>This standard is selected based on the calculated credibility occurrence standard in line (3).</p>
LINE (5)	<p><u>MULTISTATE FIVE-YEAR RATIO OF EARNED RISKS TO OCCURRENCE</u></p> <p>This ratio was determined based on Commercial Statistical Plan data.</p>
LINE (6)	<p><u>FULL CREDIBILITY EARNED RISKS STANDARD</u></p> <p>To translate the severity-adjusted occurrence standard to an equivalent standard based on earned risks the selected severity adjusted occurrence standard in line (4) is multiplied by the multistate five-year ratio of earned risks to occurrences in line (5).</p>
LINE (7)	<p><u>FIVE-YEAR STATEWIDE EARNED RISKS</u></p> <p>This is the number of earned risks in the state for the five-year period ending September 30, 2017.</p>

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EXPLANATORY NOTES TO TABLE C10 (Cont'd)

LINE (8)

CREDIBILITY

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

$$Z = (R/C)^{1/2}$$

where Z = Credibility
R = Statewide earned risks (line (6))
C = Full Credibility Earned Risks Standard (line (5))

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LOSS ADJUSTMENT EXPENSE FACTORS

OBJECTIVE The reported indemnity losses must be loaded for any loss adjustment expenses (LAE) that are not reported in statistical detail to ISO.

PROPERTY COVERAGES For the property coverages, only the incurred indemnity losses are reported to ISO under the Commercial Statistical Plan. All loss adjustment expenses must be loaded in. A factor representing the ratio of incurred losses plus all LAE to incurred losses was selected based on multistate financial data (see Table C11-1 and C11-2 for the underlying data).

LIABILITY COVERAGE For liability coverage, allocated loss adjustment expenses are reported in detail to ISO under the Commercial Statistical Plan. Unallocated loss adjustment expenses must be loaded into the losses. A factor representing the ratio of the sum of the incurred indemnity losses plus all LAE to the sum of the incurred indemnity losses plus allocated LAE was selected based on multistate financial data (see Table C11-3 for the underlying data).

SELECTED FACTORS The following factors have been used in this review to load incurred losses for all loss adjustment expenses:

Fire	1.100
Extended Coverage	1.125
All Other Property	1.125
Burglary and Theft	1.210
Liability	1.085

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TABLE C11-1

Fire and Allied Lines Insurance
Multistate Expense Experience
Loss Adjustment Expense-IEE *

		<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
(1) Fire						
(a) Direct Losses Incurred	Agency	\$3,868,429	\$3,734,693	\$4,151,380	\$4,212,429	\$4,578,775
	Direct	1,154,677	953,467	1,301,675	1,095,469	1,046,624
	Combined	5,023,106	4,688,160	5,453,055	5,307,898	5,625,399
(b) Direct Loss Adjustment Expenses Incurred	Agency	409,156	389,298	433,539	447,719	471,760
	Direct	74,634	78,051	107,764	74,655	67,101
	Combined	483,790	467,349	541,303	522,374	538,861
(2) Allied Lines**						
(a) Direct Losses Incurred	Agency	7,578,267	3,632,545	3,322,394	3,580,656	4,911,196
	Direct	1,033,302	1,170,331	1,167,944	1,149,364	1,392,341
	Combined	8,611,569	4,802,876	4,490,338	4,730,020	6,303,537
(b) Direct Loss Adjustment Expenses Incurred	Agency	687,057	585,974	478,746	514,824	547,386
	Direct	120,569	116,333	139,251	135,498	154,396
	Combined	807,626	702,307	617,997	650,322	701,782

Incurred Percentages**

		<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
(3) Loss Adjustment Expense as Ratio to Losses Incurred						
(a) Fire (1b)/(1a)	Combined	9.6%	10.0%	9.9%	9.8%	9.6%
(b) Allied Lines (2b)/(2a)	Combined	9.4%	14.6%	13.8%	13.7%	11.1%

NOTE: All dollar amounts displayed in thousands.

* Items (1) & (2) are from the Insurance Exhibit Information compiled by A.M. Best.

** Incurred percentages have been calculated on a direct basis, rather than net of reinsurance.

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TABLE C11-2

Burglary
Multistate Expense Experience
Loss Adjustment Expense-IEE
Agency and Direct Writers Combined*

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
(1) Direct Losses Incurred	\$25,850	\$30,606	\$21,021	\$38,222	\$40,301
(2) Direct Loss Adjustment Expenses Incurred	4,944	7,807	8,202	9,327	4,868
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
(1) Direct Losses Incurred	\$45,955	\$22,862	\$29,225	\$59,411	\$50,793
(2) Direct Loss Adjustment Expenses Incurred	8,626	6,263	8,758	7,364	7,481

Incurred Percentages**

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
(3) Loss Adj. Expenses Incurred as a ratio to Losses Incurred [(2)/(1)]	19.1%	25.5%	39.0%	24.4%	12.1%
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
(3) Loss Adj. Expenses Incurred as a ratio to Losses Incurred [(2)/(1)]	18.8%	27.4%	30.0%	12.4%	14.7%

NOTE: All dollar amounts displayed in thousands.

* Items (1) & (2) are from the Insurance Exhibit Information compiled by A.M Best.

** Incurred percentages have been calculated on a direct basis, rather than net of reinsurance.

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TABLE C11-3

General Liability Excluding Medical Professional Liability
Multistate Expense Experience
Loss Adjustment Expense Special Call*

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
(1) Direct Losses Incurred	\$14,928,481	\$14,382,009	\$15,368,235	\$19,672,402	\$20,662,587
(2) Allocated Loss Adjustment Expenses Incurred	3,526,884	3,322,282	3,132,853	3,942,510	2,814,743
(3) Unallocated Loss Adjustment Expenses Incurred	1,399,507	1,529,660	1,644,185	1,818,161	1,889,987

Incurred Percentages**

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
(4) Unallocated Loss Adjustment Expense as Ratio to Losses + Allocated Loss Adjustment Expense (3)/[(1)+(2)]	7.6%	8.6%	8.9%	7.7%	8.1%

Ten Years of Historical Multistate Expense Experience
Unallocated Loss Adjustment Expense Factor
Incurred Percentages**

2007	7.0%
2008	6.8%
2009	7.7%
2010	8.6%
2011	7.9%
2012	7.6%
2013	8.6%
2014	8.9%
2015	7.7%
2016	8.1%

NOTE: All dollar amounts displayed in thousands.

* Items (1), (2), and (3) are based in available ISO Special Call submissions.

** Incurred percentages have been calculated on a direct basis, rather than net of reinsurance.

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SECTION D - HURRICANE MODEL PROCEDURES

Windstorm or Hail Exclusion Credits.....	D-2
Revised State Loss Costs	D-3-4

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WINDSTORM OR HAIL EXCLUSION CREDITS

WINDSTORM OR HAIL EXCLUSION CREDITS

The windstorm or hail exclusion credits shown on Table 29.A.39.d.(LC) are calculated using losses for the five accident years ending September 30, 2017. The five-year losses attributable to the wind and hail causes of loss were compared to the five-year losses attributable to all causes of loss for property to determine the portion of the property base loss cost that covers wind and hail. This was done on a statewide basis, separately for building and business personal property (BPP). The resulting percentages were rounded to the nearest 5% and capped at a minimum of 10% and a maximum of 50% for buildings, and a minimum of 5% and a maximum of 50% for BPP. The calculations are shown below:

Territory	Coverage	(1) Total Losses	(2) Wind and Hail Losses	(3) Percent (2)/(1)
ALL	Building	143,806,366	8,590,493	10%
	BPP	51,404,504	840,937	5%

The resulting percentages were applied to the proposed base building and BPP loss costs, respectively, to determine the loss cost credits (i.e., the loss costs to be subtracted from the base loss costs when the new Windstorm or Hail Exclusion endorsement is applicable.)

DIVISION TEN
BUSINESSOWNERS
LOSS COST PAGES

LOSS COSTS

Territory	BASE LOSS COSTS					
	PROPERTY		LIABILITY			
	Building Per \$100 Of Limit Of Ins.	Business Personal Property Per \$100 Of Limit Of Ins.	Occupant Liability Per \$100 Of Limit Of Ins.	Occupant Liability Per \$1,000 Of Annual Gross Sales	Occupant Liability Per \$1,000 Of Annual Payroll	Lessors Liability Per \$100 Of Limit Of Ins.
701	0.178	0.204	0.036	0.744	13.993	0.011
702	0.182	0.240	0.040	0.721	14.494	0.013

Table #1(LC) Base Loss Costs – Property And Liability

SECTION III
RATING AND ELIGIBILITY RULES

RULE 23.
PREMIUM DEVELOPMENT – MANDATORY
COVERAGES

- C. Premium Determination
 - 6. Premium Determination
 - c. Additional Rating Considerations
 - (3) Permanent Yards – Maintenance Or Storage

Territory	Loss Cost Per \$100		
	Public Protection (Fire) Classification		
	01–04	05–08	09–10
701, 702	0.238	0.287	0.335

Table 23.C.6.c.(3)(LC) Permanent Yards – Maintenance Or Storage Premium Determination

COMMERCIAL LINES MANUAL
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LOSS COST PAGES

**RULE 29.
ENDORSEMENTS**

A. Property Endorsements**39. Windstorm Or Hail Exclusion****d. Rate Modification**

Territory	Coverage (Code)	Credit
701	Buildings (1)	0.018
	Business Personal Property (2)	0.010
702	Buildings (1)	0.018
	Business Personal Property (2)	0.012

Table 29.A.39.d.(LC) Windstorm Or Hail Exclusion Credits**B. Liability Endorsements****7. Employment-Related Practices Liability****b. Employment-Related Practices Liability
Coverage Endorsement****(5) Premium Determination**

Number Of Employees	Loss Cost Per Employee		
	Mercantile Restaurant	Wholesale	All Other
1-25	\$ 4.920	\$ 7.330	\$ 5.860
Each Additional Employee	3.440	5.130	4.100

**Table 29.B.7.b.(5)(LC) Employment-Related Practices
Liability Premium Determination**