

LOSS COSTS – IMPLEMENTATION

MAY 7, 2024

COMMERCIAL AUTOMOBILE

LI-CA-2024-124

MONTANA REVISED COMMERCIAL AUTO ADVISORY PROSPECTIVE LOSS COSTS TO BE IMPLEMENTED

KEY MESSAGE

Loss costs representing a **20.2%** statewide change to be implemented.

BACKGROUND

In circular [LI-CA-2024-068](#), we provided you with information about the Commercial Auto loss cost level experience review.

CONSIDERATION OF COVID-19

There will almost certainly be long-term behavioral, social and economic changes as a result of COVID-19. So far, we observe that the pandemic resulted in decreases for Commercial Auto frequencies with some offsetting effects on severity. We are including the pandemic experience in our review without adjustment. We will continue to monitor existing reporting trends, including how new data entering the experience period of our next review reflects COVID-19 impacts. Please feel free to contact us for additional discussion, clarification or questions.

See the filing material for further details.

ISO ACTION

We are implementing [CA-2024-BRLA1](#), which presents a review of Commercial Auto loss cost experience. Refer to the attached explanatory material for complete details about the filing.

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

SUPPLEMENTARY INFORMATION

We are including supplementary information for Montana, which provides additional information on the attached loss cost level experience review.

NOTE: This supplementary information is **not** part of the experience review document and, in states where we are making a filing, is **not** part of the filing.

EFFECTIVE DATE

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

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

This effective date applies only to those insurers who have filed their Commercial Auto loss cost adjustments to be automatically applicable to future ISO loss cost revisions.

IMPACT ON THE STATISTICAL REPORTING OF LOSS COST MULTIPLIER

For the purpose of reporting your company Loss Cost Multiplier under the CSP, as of September 1, 2024, the multiplier must be based on the relationship between your gross rates and the ISO advisory prospective loss costs contained in this circular.

COMPANY ACTION

You must independently determine the final rates you will use. The action, if any, you must take in response to this filing is dependent upon how you filed to have your loss cost adjustments apply to subsequent revisions of ISO loss costs. Any submission you make with respect to this revision must comply with applicable regulatory filing requirements.

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

In all correspondence with the Insurance Department on this revision, you should refer to ISO Filing Number CA-2024-BRLA1 and SERFF Tracking Number ISOF-G134086985, NOT this circular number.

CAUTION: This reference filing revises only certain advisory prospective loss costs for Commercial Auto in this state. In determining whether or not to revise your rates, you should consider the application of your loss cost adjustments to any loss costs not included in this revision.

RATING SOFTWARE IMPACT

No new attributes are being introduced with this revision.

POLICYHOLDER NOTIFICATION

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

FUTURE ISO ACTION

We will provide a status report for this and other Basic Limits Loss Costs (BRLA1) revisions. Please refer to the Insurance Lines Services web site (www.verisk.com/ils). In addition to other information, this web site contains copies of major multistate filing status reports that are updated approximately every two weeks.

REVISION DISTRIBUTION

We will issue a Notice to Manualholders with an edition date of 9-24 (or the earliest possible subsequent date), along with any new and/or revised manual pages.

REFERENCE(S)

- [LI-CL-2024-016](#) (03/12/2024) Commercial Lines Revised Lead Time Requirements Listing
- [LI-CA-2024-068](#) (03/06/2024) Commercial Auto Experience Level Indications Reviewed By Staff

ATTACHMENT(S)

- Filing [CA-2024-BRLA1](#)
- Supplementary Information

FILES AVAILABLE FOR DOWNLOAD

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

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

DATA QUALITY

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

ACKNOWLEDGEMENT OF ACTUARIAL QUALIFICATIONS

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

I, Rebecca Gordon, am an Actuarial Associate for ISO, and I, Kevin Hughes, am an Actuarial Director for Commercial Auto for ISO. We are jointly responsible for the content of this Statement of Actuarial Opinion. We are both members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

ISO RISK ANALYZER®

The loss cost analysis in this circular is reflected in ISO Risk Analyzer®, a suite of predictive models that help with granular pricing of insurance risks. Risk Analyzer can provide loss costs for refined territories and classes, as well as feed custom modeling efforts. For more information, please visit <https://www.verisk.com/riskanalyzer>.

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

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- Other issues for this circular, please contact Customer Support:

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

MONTANA

BASIC LIMITS PROSPECTIVE LOSS COST LEVEL – COMMERCIAL AUTOMOBILE

FILING CA-2024-BRLA1

EXECUTIVE SUMMARY

PURPOSE	<p>This document:</p> <ul style="list-style-type: none">• revises the advisory prospective loss costs for the major Commercial Automobile classes. These loss costs represent a 20.2% statewide change from the loss costs currently in effect.• provides the analyses used to derive these advisory loss costs.
DEFINITION OF THE ISO ADVISORY PROSPECTIVE LOSS COSTS	<p>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 and projected through trending to a future point in time. Throughout this document the words “loss cost” are synonymous with the words “prospective loss cost.”</p>
AUTO ACCIDENT FREQUENCY	<p>During the recent pandemic, economic activity was artificially constrained, resulting in an unprecedented drop in auto accident frequency. Following that period, ISO has observed that accident frequency has not risen as quickly as expected and remains below pre-pandemic levels. Today this means we have loss experience being reviewed from time periods with both significantly higher frequency than today, and significantly lower frequency than today, and the future is marked by greater-than-usual uncertainty. We continue to carefully assess each experience indication for appropriateness, using actuarial judgment to intervene where necessary.</p>
FORMAT	<p>In this document, all explanatory material appears first, followed by all exhibits, and then the revised prospective loss costs. Explanatory pages are numbered B-1 through C-28, the exhibits are labeled EXHIBIT A1 through EXHIBIT C19, and the revised prospective loss cost pages are numbered D-1 through D-9.</p>
AUTO DEALERS AND GARAGEKEEPERS	<p>The Auto Dealers Liability coverage and the Auto Dealers and Garagekeepers Physical Damage coverages are not being reviewed this year.</p>

REVISED LOSS
COST CHANGES

The statewide advisory loss cost level changes are:

<u>Trucks, Tractors & Trailers</u>	<u>Indicated</u>	<u>Filed</u>
Liability		
Single Limit Liability	17.6%	17.6%
Physical Damage		
Other than Collision	22.1%	22.1%
Collision	34.3%	34.3%
Total Trucks, Tractors & Trailers	21.7%	21.7%
<u>Private Passenger Types</u>		
Liability		
Single Limit Liability	9.0%	9.0%
Physical Damage		
Other than Collision	9.6%	9.6%
Collision	15.3%	15.3%
Total Private Passenger Types	10.2%	10.2%
<u>Grand Total</u>	20.2%	20.2%

Loss cost level changes are relative to the current loss costs.

INDICATED VS.
FILED

Indicated changes are based on standard ISO methodology, utilizing a 8/1/2023 trend effective date. The filed loss cost level changes are the same as the indicated without any exceptions.

PRIOR ISO
REVISIONS

The latest selected revisions in this state are:

<u>Filing</u>	CA-2023-BRLA1	CA-2022-BRLA1	CA-2021-BRLA1
Rate Level/ Loss Costs	Loss Costs	Loss Costs	Loss Costs
Effective Date	8/1/2023	7/1/2022	7/1/2021
<u>Changes</u>			
Indicated	11.5%	4.3%	8.1%
Filed	10.4%	3.6%	8.0%
Approved	10.4%	3.6%	8.0%

HISTORICAL
SOURCE DATA

The sources of the data underlying this loss cost review are:

- ISO companies reporting voluntary automobile experience under the Commercial Automobile modules of ISO's statistical plans.
- Accident year data through year ended 12/31/2022 for all coverages.

ADJUSTMENTS TO
REPORTED
EXPERIENCE

Loss Trend

To adjust the loss data to levels expected to prevail during the period when the revised loss costs will be in effect, historical losses have been multiplied by trend factors. These trend factors are based on the changes in claim cost and claim frequency that are expected to arise between the historical experience period and the prospective period during which the revised loss costs are anticipated to be in effect. Historically, frequency trends for Commercial Auto liability have been quite variable, have differed between Trucks, Tractors, and Trailers (TTT) and Private Passenger Types (PPT) liability classes, and have often displayed cyclical patterns. As a result, an exponential curve of the form $Y=A(B^X)$ does not fit the data well over the long term. To reflect these characteristics and the difficulty in predicting turning points and rates of change, frequency trend is being selected to be 0% for TTT and PPT for both the Bodily Injury and Property Damage coverages.

Claim cost trend data through fourth quarter 2022 and claim frequency trend data through third quarter 2022 were used in selecting the following annual liability trend factors:

<u>Coverage</u>	<u>Annual Trend Factor</u>
Trucks, Tractors, and Trailers Liability:	
Bodily Injury	+8.6%
Property Damage	+11.6%
Private Passenger Types Liability:	
Bodily Injury	+8.6%
Property Damage	+11.6%
Trucks, Tractors & Trailers OTC	+8.5%
Trucks, Tractors & Trailers Collision	+11.5%
Private Passenger Types OTC	+8.0%
Private Passenger Types Collision	+11.0%

Liability Premium Trend

To recognize the trend in the Vehicle Age factors and Original Cost New factors for Trucks, Tractors & Trailers and Private Passenger Types Liability, aggregate loss costs at current level have been multiplied by premium trend factors. The selected annual Liability premium trends are +0.0% for Trucks, Tractors & Trailers and -0.2% for Private Passenger Types.

Physical Damage Vehicle Value Factor (VVF) Trends

To recognize the trend in the vehicle value component of the rating procedure (which includes Vehicle Age and Original Cost New) for Trucks, Tractors & Trailers and Private Passenger Types Physical Damage, aggregate loss costs at current level have been multiplied by VVF trend factors. The selected annual VVF trend factors for Trucks, Tractors & Trailers are +0.8% and +0.2% for OTC and Collision respectively. For Private Passenger Types, the VVF trend factors are +2.5% and +1.1% for OTC and Collision respectively.

Standard actuarial procedures have been used in calculating the loss costs including adjusting the losses to ultimate settlement level, reflecting all loss adjustment expenses.

TEN LARGEST COMPANIES/ GROUPS IN THIS REVIEW

LIABILITY (ASLOB 19.3 & 19.4)

1. Cincinnati Ins Co.
2. Liberty Mutual Ins Co.
3. Travelers Ind Co.
4. Employers Mutual Cas Co.
5. Nationwide Mut Ins Co.
6. Western Nat'l Mut Ins Co.
7. Tokio Marine Cos.
8. NGM Ins Co.
9. Insurance Co of North America
10. Allstate Ins Co.

PHYSICAL DAMAGE (ASLOB 21.2)

1. Liberty Mutual Ins Co.
2. Cincinnati Ins Co.
3. Travelers Ind Co.
4. Employers Mutual Cas Co.
5. Western Nat'l Mut Ins Co.
6. NGM Ins Co.
7. Tokio Marine Cos.
8. Nationwide Mut Ins Co.
9. American International Group
10. Federated Mut Ins Co.

Insurers are listed in descending order based on the percent of statewide written premium volume from Annual Statement Page 15 for the year ending 12/31/2022 for the Annual Statement Line of Business (ASLOB) indicated.

MARKET SHARE

The market share of ISO participating insurers used in this review as measured by Annual Statement Page 15 written premium for the year ending 12/31/2022 is:

Liability (ASLOB 19.3 & 19.4)
48.4%

Physical Damage (ASLOB 21.2)
38.1%

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 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 selected loss costs are appropriate for its use.

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MONTANA
COMMERCIAL AUTOMOBILE
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OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

INTRODUCTION Commercial Automobile advisory prospective loss costs are determined by evaluating the adequacy of the current ISO 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. This evaluation is done separately by coverage for the major classes.

**STEP 1:
DETERMINATION
OF STATEWIDE
LOSS COST
INDICATION** The first step in this process is the determination of the statewide loss cost indication by major class/coverage. In other words, what percentage changes on average must be made to the current ISO loss costs in order to achieve adequacy for the prospective conditions? The percentage changes are presented on the exhibits labeled "Determination of Statewide Advisory Loss Cost Level Change." See the calculations in **Exhibits B1-B4**.

**STEP 2:
DISTRIBUTION TO
TERRITORIES** For all of the liability coverages and for Trucks, Tractors & Trailers and Private Passenger Types Physical Damage, ISO then distributes the filed statewide basic limit loss cost change to the individual territorial loss costs by comparing the relative loss experience by territory to the statewide average. See the calculations in **Exhibits B5-B10**.

**STEP 3:
APPLICATION OF
PERCENT CHANGES** The last step is the calculation of the ISO advisory prospective loss costs. This is achieved by applying either the filed statewide or territorial changes to the current ISO loss costs. For liability, the percentage change is applied at the basic limit; for physical damage, it is applied at the base OCN, age and deductible. The resulting Loss Costs are displayed in Section D.

OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

STEP 1 – DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGE

OBJECTIVE The objective of this procedure is to determine the indicated statewide advisory loss cost level change. This procedure answers the question: what percentage changes must be made on average to the current ISO loss costs in order for them to be adequate to cover indemnity losses and all loss adjustment expenses incurred in the prospective period in which the revised loss costs are assumed to be in effect?

DESCRIPTION This procedure compares the developed and trended incurred losses and loss adjustment expenses with the aggregate loss costs at current ISO loss cost level, which is the aggregate amount that would have been collected if the current ISO 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 several years and a weighted average is calculated. The weights are determined as a function of the credibility or volume of claim experience. The average experience ratio is then credibility weighted with the 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. See the calculations in **Exhibits B1-B4**.

EXPERIENCE BASE The experience used in this review is the latest available as reported under the ISO Commercial Statistical Plan. All coverages are on an accident year basis. For liability, the review is conducted on a \$100,000 basic limits basis - indemnity losses are limited to \$100,000 per occurrence.

AGGREGATE LOSS COSTS (Item 1) The aggregate loss costs at current ISO loss cost level are the loss-related revenue that would have been collected if the current ISO loss costs were used during the experience period. It is calculated by extending the exposures by the current ISO loss costs. For liability, the \$100,000 basic limit loss costs are used. For Trucks, Tractors, and Trailers and Private Passenger Types Physical Damage, loss costs are on an all deductibles combined basis.

Trucks, Tractors & Trailers and Private Passenger Types aggregate loss costs are placed on the prospective OCN and Vehicle Age relativity level by the application of premium trend factors.

INCURRED
LOSSES & LAE
(Item 2)

The incurred losses and loss adjustment expenses are our best estimate of the ultimate payment for indemnity losses and loss adjustment expenses using the claim frequency and severity levels ISO expects to occur during the prospective period for which the revised loss costs will be used.

For the liability coverages, the reported incurred losses and allocated loss adjustment expenses are subject to the following adjustments:

- Incurred indemnity losses are capped at the basic limit;
- Developed to an ultimate settlement basis by the application of loss development factors;
- Loaded for unallocated loss adjustment expenses;
- Placed on the prospective cost/frequency levels by the application of trend factors.

For the physical damage coverages, the reported paid (accident year) losses are subject to the following adjustments:

- Paid Other Than Collision losses are adjusted using an Excess Wind and Water procedure;
- Developed to an ultimate settlement basis by the application of loss development factors;
- Loaded for all loss adjustment expenses;
- Placed on the prospective cost/frequency levels by the application of trend factors.

Refer to Section C for the support for these loss related adjustments.

EXPERIENCE
RATIO
(Item 3)

The experience ratio is the ratio of the incurred losses and loss adjustment expenses to the aggregate loss costs at current ISO loss cost level. It measures the adequacy of the current ISO loss costs for the prospective period.

YEAR WEIGHTS
(Item 4)

The number of years of experience used and year weights are determined by the total number of claims in the experience period. To the extent there is adequate credibility, ISO uses fewer years and gives greater weight to the most recent years. Refer to the credibility pages of Section C for the methodology used to arrive at both the number of years used and the year weights.

EXPECTED
EXPERIENCE
RATIO
(Item 7)

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. It is calculated as the combined trend factor projected for the number of years between the last revision (or review) and this revision.

CREDIBILITY

Credibility is based upon the number of claims for all years in the experience period. The procedure for assigning credibility is outlined in the credibility pages of Section C.

CREDIBILITY
WEIGHTED
EXPERIENCE
RATIO

The average experience ratio is credibility weighted with the expected experience ratio. The resulting credibility weighted experience ratio, converted to a percentage, is the indicated change to the current ISO loss costs.

OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

STEP 2 – DETERMINATION OF TERRITORY RELATIVITIES

OBJECTIVE The objective of this procedure is to distribute the statewide loss cost indication by territory. In other words, what percentage changes by territory should be made in order to equitably achieve an adequate statewide prospective loss cost level?

TRUCKS, TRACTORS & TRAILERS
AND
PRIVATE
PASSENGER
TYPES
LIABILITY
AND PHYSICAL
DAMAGE

For Trucks, Tractors & Trailers and Private Passenger Types, this procedure compares the individual territory experience ratios to the statewide average experience ratio. The territory experience ratio is calculated for the latest 5 years and a statewide weighted-average experience ratio for the same period is calculated using the aggregate loss costs (product of earned car years (col 1) and underlying loss cost (col 2)) as weights. The territory experience ratio is then credibility weighted with the statewide average experience ratio to produce a formula experience ratio. The territory formula experience ratio is then compared to the statewide weighted average formula experience ratio to determine the territory index to state. The territory index is then multiplied by the filed loss cost level change in order to produce the indicated change to the individual territories. This change is then applied to the current territory base loss cost. See the calculations in **Exhibits B5-B10**.

EXPLANATORY MEMORANDUM FOR TRUCKS, TRACTORS & TRAILERS AND PRIVATE PASSENGER TYPES LIABILITY TERRITORY DEVELOPMENT

COLUMN (1)
EARNED CAR
YEARS

Number of car-years, or exposures, earned in the latest year. These exposures are used to calculate the weighted averages through the analysis. (For calculating the weighted average of the Experience Ratio in Col (4) and the Formula Experience Ratio in Col (6) the product of [Col(1) x Col(2)] are used as weights).

COLUMN (2)
\$100,000 LOSS
COST

Average \$100,000 loss cost at current level (earned aggregate loss cost at current level divided by exposures) is based on the latest accident year experience available and reflects the \$100,000 basic limit at the present ISO manual level trended to a prospective level by the application of premium trend factors.

COLUMN (3)
5 YEAR ENDED
EXPERIENCE
LOSS COST

Loss cost based on the latest 5 years of experience (for purposes of stability). The loss cost is Bodily Injury and Property Damage combined and is trended and developed to an ultimate settlement basis including all loss adjustment expenses.

COLUMN (4)
EXPERIENCE
RATIO LOSS
COST

For each coverage, an experience ratio by territory is derived by dividing the 5 year experience loss cost by the average \$100,000 loss cost at present ISO manual level. [Col. (3) / Col. (2)]

COLUMN (5)
CREDIBILITY

The experience ratio thus calculated is assigned a credibility value on the basis of the number of claims underlying the 5 year pure premium (See Section C for credibility standards). The complement of the credibility is assigned to the statewide experience ratio which appears in Col. (4).

COLUMN (6)
FORMULA
EXPERIENCE
RATIO

The formula experience ratio is a credibility weighted average of the territory group experience ratio and statewide experience ratio. The formula is as follows:

$$\begin{aligned} &[\text{Terr. Group Col. (4) x Terr. Group Col. (5)}] \\ &+[\text{SW Total Col.(4) x (1.0 - Terr. Group Col. (5))}] \end{aligned}$$

COLUMN (7)
INDEX TO
STATE

Territory indices to state are calculated by dividing the territory formula experience ratio by the statewide average formula experience ratio

[Terr. Col (6) / SW Total Col. (6)]

(Statewide Total Col. (6) is the weighted average formula experience ratio using the individual products of [Col. (1) x Col. (2)] as weights.)

COLUMN (8)
BASE CLASS
LOSS COST

Present ISO \$100,000 base class loss cost.

COLUMN (9)
INDICATED BASE
LOSS COST

Indicated base class loss cost for a particular territory. It is calculated by applying the product of the statewide loss cost level change and the territory index [Col. (7)] to the present ISO loss cost.

COLUMN (10)
REVISED BASE
LOSS COST

Revised \$100,000 base loss cost.

COLUMN (11)
ADVISORY
LOSS COST
CHANGE

Percentage change from the present \$100,000 base loss cost to the revised \$100,000 base loss cost.

EXPLANATORY MEMORANDUM FOR TRUCKS, TRACTORS & TRAILERS AND
PRIVATE PASSENGER TYPES
PHYSICAL DAMAGE TERRITORY DEVELOPMENT

COLUMN (1)
EARNED CAR
YEARS

Number of car-years, or exposures, earned in the latest year. These exposures are used to calculate the weighted averages through the analysis. (For calculating the weighted average of the Experience Ratio in Col (4) and the Formula Experience Ratio in Col (6) the product of [Col(1) x Col(2)] are used as weights).

COLUMN (2)
UNDERLYING
LOSS COST

Average loss cost at current level (earned aggregate loss cost at current level divided by exposures) is based on the latest accident year experience available and reflects the present ISO manual loss cost trended to a prospective level by the application of VVF trend factors.

COLUMN (3)
5 YEAR ENDED
EXPERIENCE
LOSS COST

Loss cost based on the latest 5 years of experience (for purposes of stability). The loss cost is trended and include all loss adjustment expenses.

COLUMN (4)
EXPERIENCE
RATIO LOSS
COST

For each coverage, an experience ratio by territory is derived by dividing the 5 year experience loss cost by the average loss cost at present ISO manual level. [Col. (3) / Col. (2)]

COLUMN (5)
CREDIBILITY

The experience ratio thus calculated is assigned a credibility value on the basis of the number of claims underlying the 5 year pure premium (See Section C for credibility standards). The complement of the credibility is assigned to the statewide experience ratio which appears in Col. (4).

COLUMN (6)
FORMULA
EXPERIENCE
RATIO

The formula experience ratio is a credibility weighted average of the territory group experience ratio and statewide experience ratio. The formula is as follows:

$$\begin{aligned} & [\text{Terr. Group Col. (4)} \times \text{Terr. Group Col. (5)}] \\ & + [\text{SW Total Col. (4)} \times (1.0 - \text{Terr. Group Col. (5)})] \end{aligned}$$

COLUMN (7)
INDEX TO
STATE

Territory indices to state are calculated by dividing the territory formula experience ratio by the statewide average formula experience ratio

$$[\text{Terr. Col (6)} / \text{SW Total Col. (6)}]$$

(Statewide Total Col. (6) is the weighted average formula experience ratio using the individual products of [Col. (1) x Col. (2)] as weights.)

COLUMN (8)
BASE CLASS
LOSS COST

Present ISO base class loss cost.

COLUMN (9)
INDICATED BASE
LOSS COST

Indicated base class loss cost for a particular territory. It is calculated by applying the product of the statewide loss cost level change and the territory index [Col. (7)] to the present ISO loss cost.

COLUMN (10)
REVISED BASE
LOSS COST

Revised base loss cost.

COLUMN (11)
ADVISORY
LOSS COST
CHANGE

Percentage change:
[Col. (10) / Col. (8)]

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. See the calculations in **Exhibit C1**.

LIABILITY COVERAGES

For the liability coverages, 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 from a Special Call Submission for available writers.

PHYSICAL DAMAGE COVERAGES

For the physical damage coverages, accident year paid indemnity losses are reported. All loss adjustment expenses must be loaded into the reported losses. A factor representing the ratio of incurred losses plus all LAE to incurred losses was selected based on multistate financial data from the Insurance Expense Exhibits for agency and direct writers.

AVERAGE ANNUAL CHANGE IN LOSSES (LOSS TREND)

OBJECTIVE

The application of the average annual change in losses to historical data recognizes that advisory loss costs are being made for use in a future period based on historical experience. Due to economic and social factors, claim cost and frequency levels continue to change from those underlying the historical data.

DETERMINATION OF HISTORICAL AVERAGE CLAIM COST TREND

To determine the historical average claim cost trend, ISO makes use of the Least Squares Method fitted to the reported time series data; specifically, an exponential curve represented by the equation $Y=A(B^X)$ is fitted to the paid claim cost data. The parameters A and B are calculated by regressing Y, which is the applicable claim cost on X, which is the unit of time. The resulting fitted curve allows the determination of a historical average trend for the data under review. See the calculations in **Exhibits C2-C3**.

LIABILITY LOSS TREND

The historical average annual change in claim costs for both Bodily Injury and Property Damage coverages are measured in this document using a credibility-weighted mix of multistate and statewide data. Prospective average annual changes for claim frequency have been selected based on the historical multistate data, as well as other relevant factors. Combining the state credibility-weighted claim cost trends with the selected claim frequency trends results in the selected Bodily Injury and Property Damage pure premium trend used to adjust the losses to a prospective level.

TREND CREDIBILITY FOR LIABILITY CLAIM SEVERITY

Trend credibility is based on a full credibility standard of 975,000 claims for BI and 390,000 claims for PD. These standards were developed using a Bayesian analysis. Partial credibility is determined by the following formula:

$$A = C/(C+K)$$

where C equals the number of claims for the latest year ended point and K equals 25,000 for bodily injury and 10,000 for property damage. The resulting table of partial credibilities is shown in this section.

LIABILITY:
FREQUENCY
TREND

The data underlying the claim frequency trend selections is shown on the attached claim frequency exhibits. See the calculations in **Exhibits C4-C5**. The exhibits include quarterly points for Multistate incurred frequency trend separately for Trucks, Tractors, and Trailers and Private Passenger Types. As can be seen from these exhibits (and corresponding graphs), frequency for both bodily injury and property damage has generally changed from year to year in an unpredictable manner.

Historically, frequency trends for Commercial Auto liability have been quite variable, have differed between Trucks, Tractors, and Trailers (TTT) and Private Passenger Types (PPT) liability classes, and have often displayed cyclical patterns. As a result, an exponential curve of the form $Y=A(B^X)$ does not fit the data well over the long term. To reflect these characteristics and the difficulty in predicting turning points and rates of change, frequency trend is being selected to be 0% for TTT and PPT for both the Bodily Injury and Property Damage coverages.

PHYSICAL
DAMAGE:
LOSS TREND

Data Selections

- In our Physical Damage Trend review, we try to include as much data as possible for each deductible level that we analyze. With this goal in mind, for a given deductible level, we include all losses written at or below that deductible level. For example, consider an event causing \$1,500 of damage on a policy written with a \$250 deductible. This would be reported as a \$1,250 loss. In order to include as much data as possible in our review, we would generate 3 different records for this loss, one at each deductible that we analyze:

At \$250 deductible: \$1,250 loss

At \$500 deductible: \$1,000 loss

At \$1,000 deductible: \$500 loss

Each of these deductible levels is analyzed independently of the other levels, so that there are no instances of double-counting loss records.

- Wind and Water losses are removed from our Other Than Collision trend reviews due to the high variability of these types of losses from year to year.
- Theft losses have been removed from our Other Than Collision trend reviews due to a large increase in small-value theft claims which have caused an inappropriate distortion in severity trend.

Data Adjustments

In our Physical Damage trend review, we employ two adjustments to the data with the objective of diminishing distortions in the trend that we do not wish to measure. Our goal is to only measure inflationary effects.

PHYSICAL
DAMAGE:
LOSS TREND
(CONT'D)

1) All losses are divided by the appropriate classification factors that correspond to that record in order to diminish the effect that variations in these factors from one year to the next have on the trend calculation. For example, if a shift in the distribution of vehicle weights occurred, we would want to remove the corresponding shift in loss severity from our estimate of severity trend. Due to the introduction of Vehicle Value Factor Trend on the premium side, we are no longer dividing losses by an Age Factor in our loss trend analysis.

2) All Other Than Collision losses are adjusted to correct for the distortion on trend results created by a change in the distribution of types of loss from one year to the next. The Other Than Collision severity is a weighted-average of the severities for each type of loss (glass, fire, theft, etc.). Since each type of loss has a different severity (for example, glass losses have a much smaller severity than other types of loss), then variations in the distribution of types of loss may lead to changes in the severity that we do not want to measure (if one year 5% of losses are glass losses, and the next year 30% of losses are glass losses, we would expect the average severity of all Other Than Collision losses to decrease). To correct this, we calculate the proportion of losses for each type of loss averaged over all years in the experience period.

Consider the following example, where an adjustment is NOT made to the data. Assume 10% annual inflation for all losses:

Type of Loss	Year 1		Year 2	
	Glass	Fire	Glass	Fire
Claims	10	3	15	5
Severity of Each Loss	\$50	\$1,000	\$55	\$1,100
Total Losses	\$500	\$3,000	\$825	\$5,500

Average severity of losses in Year 1 is $(\$500 + \$3,000) / 13 \text{ claims} = \269

Average severity of losses in Year 2 is $(\$825 + \$5,500) / 20 \text{ claims} = \316.25

Average Severity trend = $(\$316.25 / \$269) - 1 = 17.6\%$

Now consider the same scenario, where an adjustment IS made to the data:

Type of Loss	Year 1		Year 2	
	Glass	Fire	Glass	Fire
Claims	10	3	15	5
Percentage of Total Claims	10/13 = 77%	3/13 = 23%	15/20 = 75%	5/20 = 25%

Average Percentage of Claims for Glass losses: $(77\% + 75\%) / 2 = 76\%$

Average Percentage of Claims for Fire losses: $(23\% + 25\%) / 2 = 24\%$

PHYSICAL
DAMAGE:
LOSS TREND
(CONT'D)

The number of claims for each type of loss for each year is replaced by these averages:

Type of Loss	Year 1		Year 2	
	Glass	Fire	Glass	Fire
Claims	76% x 13 = 9.88	24 % x 13 = 3.12	76% x 20 = 15.2	24% x 20 = 4.8
Severity of Each Loss	\$50	\$1,000	\$55	\$1,100
Total Losses	\$494	\$3,120	\$836	\$5,280

Average severity of losses in Year 1 is $(\$494 + \$3,120) / 13 \text{ claims} = \278

Average severity of losses in Year 2 is $(\$836 + \$5,280) / 20 \text{ claims} = \305.80

Average Severity trend = $(\$305.80 / \$278) - 1 = 10.0\%$

Note that the total number of claims each year remains unchanged from the total before the adjustment is made.

Year 1 claims = $9.88 + 3.12 = 13 \text{ claims}$

Year 2 claims = $15.2 + 4.8 = 20 \text{ claims}$

Although new claims totals by type of loss are used in the calculation, the impact of the adjustment is to change only the loss totals, so frequency figures are not changed. The result is equivalent to a re-weighting of the severities so that each type of loss has a consistent weight from year to year.

By keeping each type of loss' proportion of total claims constant from year to year, we remove distortions in the trend caused by changes in the distribution of types of loss.

PHYSICAL
DAMAGE:
LOSS TREND
(CONT'D)

For the OTC coverages, there is a change to how glass losses are handled when shifting from one deductible to another. ISO collects a coverage code indicating if the deductible is waived for glass losses or not ("full glass" and "non-full glass", respectively). However some insurers waive deductibles on glass losses even when the policy isn't a "full glass" coverage policy. Recently we began to also collect a Type of Loss code indicating if a deductible has been waived for the particular claim. In situations where a claim is reported with a coverage code and Type of Loss code that aren't consistent on how a glass loss was handled, we previously used the coverage code to determine how we interpreted the loss amount. Now this scenario is handled based on the information in the new Type of Loss code.

The trend selections for physical damage are based on the data in the attached exhibits. See the calculations in **Exhibits C8-C11**. Each exhibit includes the distribution of losses, by deductible, for the most recent year. We analyze frequency trend and severity trend separately, using data at the \$500, \$1,000, and \$2,000 deductibles for OTC, and at the \$500, \$1,000, and \$2,000 deductibles for Collision.

Historically, claim frequency (like liability claim frequency) had been variable from year to year, often cyclical. As a result, an exponential curve of the form $Y=A(B^x)$ did not fit the frequency data well. In the interest of long-term stability, we have selected 0.0% trend factors for frequency.

Based on this multistate experience and on the continued positive trends in the Consumer Price Index for Bodywork, ISO has selected the following annual trends:

	Trucks, Tractors & Trailers <u>Pure Premium</u>	Private Passenger Types <u>Pure Premium</u>
OTC:	+8.5%	+8.0%
COLL:	+11.5%	+11.0%

COMMERCIAL AUTOMOBILE PHYSICAL DAMAGE
SUPPLEMENTARY EXHIBIT

Quarterly Values <u>Ending</u>	Consumer Price Index for Bodywork	
	<u>Actual</u>	<u>Exponential Fit</u>
3/31/2020	3.194	3.146
6/30/2020	3.248	3.210
9/30/2020	3.263	3.275
12/31/2020	3.283	3.342
3/31/2021	3.315	3.410
6/30/2021	3.384	3.480
9/30/2021	3.458	3.551
12/31/2021	3.561	3.623
3/31/2022	3.703	3.697
6/30/2022	3.848	3.772
9/30/2022	3.903	3.849
12/31/2022	3.984	3.928
3/31/2023	4.050	4.008
6/30/2023	4.122	4.089
9/30/2023	4.142	4.173
12/31/2023	4.131	4.246
	<u>R-Squared</u>	<u>Average Annual Change</u>
16 Point Fit	0.9661	8.5%
12 Point Fit	0.9522	9.3%

LIABILITY PREMIUM TREND

OBJECTIVE

For Trucks, Tractors & Trailers and Private Passenger Types Liability, as new, higher-valued commercial automobiles are introduced and existing vehicles are taken out of service, there is a change in revenue due to the Liability Vehicle Age Factor and the Liability OCN Factor, which represent differences in expected Liability loss experience associated with Vehicle Age and Original Cost New. In order to reflect the revenue impact of such changes during the prospective period, ISO uses a premium trend procedure.

DATA LIMITATIONS UNIQUE TO PREMIUM TREND

We began collecting Vehicle Age and OCN for the Liability coverage in 2016 and the new fields became mandatory in 2019. However, the reporting on Liability records is still insufficient to support a premium trend analysis. Instead, since the new variables have always been part of our physical damage rating plan, we opted to perform our analysis using Collision data. The Collision exposures were rated as if they were Liability exposures. Approximately 80% of vehicles are provided Collision coverage. Nevertheless, we expect that some selection bias is present in the results, and we plan to switch to using Liability exposures for this analysis as soon as that is reasonably possible.

There are more serious data limitations than the selection bias that might be present due to using Collision exposures.

The Vehicle Age values we collect include coding for individual vehicle ages out to the 26th preceding model year, with a final category for the 27th preceding model year and all older vehicles. However the prior version of the ISO rating manual only provided rating factors for vehicle ages out to the tenth preceding model year, terminating with a factor for the 11th preceding model year and older. This final category from the old plan represented approximately 20% of vehicles historically and was reported statistically using an age code of "X".

Although ISO began collecting vehicle age data in fuller detail at the same time as Liability reporting was first introduced, there were similar delays for that change. Consequently, there's a relevant volume of statistically reported data in recent years that still contains exposures coded with the retired age code of "X".

The estimated percentage of total Collision reporting volume represented by companies that are fully reporting vehicle age detail in each year is as follows:

<u>Earned Year Ending</u>	<u>Trucks, Tractors and Trailers</u>	<u>Private Passenger Types</u>
12/31/2018	0.7%	3.4%
12/31/2019	0.9%	4.4%
12/31/2020	7.7%	6.2%
12/31/2021	38.5%	24.2%
12/31/2022	65.3%	55.2%

DATA
LIMITATIONS
UNIQUE TO
PREMIUM TREND,
CONTINUED

For most purposes, a representative average vehicle age value can be assigned to these exposures, allowing the data to be used in our analysis. However, ISO is aware that in the case of premium trend specifically, the indication is not only particularly sensitive to this selection, but also it is also not enough even to choose a correct representative average overall, because here we are focused on the change in the Liability Age Factor over time, even as individual insurers, each of whose book of business has a unique mix, are in the process of switching from reporting Age X to reporting vehicle age in full detail.

As a consequence of these considerations, ISO's actuarial staff made the decision to review premium trend using two cuts of data, and make a judgmental selection based on consideration of both results.

In the first cut of data, we display results using only the most recent four years ending 12/31/2022 for Private Passenger Types, and the three most recent years for Trucks, Tractors and Trailers, and to include in both only companies that reported vehicle age codes in full detail during that timeframe. This first cut has a far smaller volume that is typically used for this analysis, and we do not deem the indications to be fully credible. We observe that the significantly greater volume of usable reporting in the most recent year means that we will have available a much more credible version of this review when we next perform an experience review in one year's time.

The second cut of data includes a much greater volume of data over a full five years, but excludes all vehicles older than the 10th preceding model year. This second cut is much more stable than the first, but likely expresses a significant bias that we are not able to quantify.

DESCRIPTION
OF DATA

Subject to the unique limitations described immediately above, two measures of the average Liability Rating Factors are displayed on the following exhibits. See the calculations in **Exhibits C6-C7**. The data is displayed by coverage. To determine the historical average trend for Factors, ISO makes use of the Least Squares Method to fit a curve to the reported time series data. Specifically, an exponential curve represented by the equation

$$Y = A(B^X)$$

is fitted to the average vehicle value factors. Based on the results of these curves, and mindful of the data limitations discussed above, ISO has selected annual Liability premium trends of 0.0% and 0.0% for Trucks, Tractors & Trailers and Private Passenger Types respectively.

PHYSICAL DAMAGE VVF TREND

OBJECTIVE

In Physical Damage for Trucks, Tractors & Trailers and Private Passenger Types, as new, higher-valued commercial automobiles are introduced and existing vehicles depreciate, there is a change in revenue due to the vehicle value factor component of the rating procedure, which incorporates the effects of Original Cost New and Vehicle Age. In order to reflect the revenue impact of such changes during the prospective period, ISO uses a VVF trend procedure.

DATA LIMITATIONS UNIQUE TO PREMIUM TREND

The Vehicle Value Factors we are concerned with in this analysis include factors for individual vehicle ages out to the 26th preceding model year, with a final category for the 27th preceding model year and all older vehicles. The prior version of the ISO rating manual only provided rating factors for vehicle ages out to the tenth preceding model year, terminating with a factor for the 11th preceding model year and older. This final category from the old plan represented approximately 20% of vehicles historically and was reported statistically using an age code of "X".

Although ISO began collecting vehicle age data in fuller detail beginning in 2016, the changes did not become mandatory for insurers until mid-2019, and many insurers were not able to meet even this deadline. Consequently, there's a relevant volume of statistically reported data in recent years that still contains exposures coded with the retired age code of "X".

The estimated percentage of total reporting volume represented by companies that are fully reporting vehicle age detail in each year is as follows:

<u>Earned Year Ending</u>	<u>Trucks, Tractors and Trailers</u>	<u>Private Passenger Types</u>
12/31/2018	0.6%	3.4%
12/31/2019	0.9%	4.5%
12/31/2020	7.6%	6.3%
12/31/2021	37.5%	24.8%
12/31/2022	64.2%	56.6%

For most purposes, a representative average vehicle age value can be assigned to these exposures, allowing the data to be used in our analysis. However, ISO is aware that in the case of premium trend specifically, the indication is not only particularly sensitive to this selection, but also it is also not enough even to choose a correct representative average overall, because here we are focused on the change in the VVF over time, even as individual insurers, each of whose book of business has a unique mix, are in the process of switching from reporting Age X to reporting vehicle age in full detail.

As a consequence of these considerations, ISO's actuarial staff made the decision to review premium trend using two cuts of data, and make a judgmental selection based on consideration of both results.

DATA
LIMITATIONS
UNIQUE TO
PREMIUM TREND,
CONTINUED

In the first cut of data, we display results using only the most recent four years ending 12/31/2022 for Private Passenger Types, and the three most recent years for Trucks, Tractors and Trailers, and to include in both only companies that reported vehicle age codes in full detail during that timeframe. This first cut has a far smaller volume that is typically used for this analysis, and we do not deem the indications to be fully credible. We observe that the significantly greater volume of usable reporting in the most recent year means that we will have available a much more credible version of this review when we next perform an experience review in one year's time.

The second cut of data includes a much greater volume of data over a full five years, but excludes all vehicles older than the 10th preceding model year. This second cut is much more stable than the first, but likely expresses a significant bias that we are not able to quantify.

DESCRIPTION
OF DATA

Subject to the unique limitations described immediately above, two measures of the average vehicle value factors (VVF) for Comprehensive and Collision are displayed on the following exhibits. See the calculations in **Exhibits C12-C13**. The data is displayed by coverage. To determine the historical average trend for VVF, ISO makes use of the Least Squares Method to fit a curve to the reported time series data. Specifically, an exponential curve represented by the equation

$$Y = A(B^X)$$

is fitted to the average vehicle value factors. Based on the results of these curves, and mindful of the data limitations discussed above, ISO has selected annual VVF trends of 1.0% and 0.5% for Trucks, Tractors & Trailers OTC and Collision coverages respectively. For Private Passenger Types, VVF trends of 2.5% and 1.2% were selected for the OTC and Collision coverages respectively.

LOSS DEVELOPMENT FOR LIABILITY

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

DESCRIPTION OF EXPERIENCE PERIOD DATA For Trucks, Tractors & Trailers, and Private Passenger Types Liability, the incurred losses and allocated loss adjustment expenses underlying the statewide loss cost level indications are on an accident year basis and were evaluated as of March 31, 2023. In other words, accident year ended December 31, 2022 includes all losses and allocated loss adjustment expenses paid through March 31, 2023 on accidents occurring from January 1, 2022 to December 31, 2022 and all losses and allocated loss adjustment expenses outstanding on these accidents as of March 31, 2023, 15 months after the inception of the accident year. Similarly, the incurred losses and allocated loss adjustment expenses for accident year ended December 31, 2021 include all loss and loss adjustment expenses paid through March 31, 2023 on accidents occurring from January 1, 2021 to December 31, 2021 and all losses and allocated loss adjustment expenses outstanding on these accidents as of March 31, 2023, 27 months after the inception of the accident year. The immature experience reported as of 15 or as of 27 months must be adjusted to a mature or ultimate settlement basis through the use of a loss development factor. See the calculations in **Exhibits C14-C15**.

DESCRIPTION OF LOSS DEVELOPMENT METHODOLOGY For Bodily Injury Coverage, states are divided into two multistate groups. One group (No-Fault) consists of states with a no-fault law that has a tort threshold. The other group (Tort) contains the remaining states. The applicable multistate group for this state is used in this document. Losses are developed up to 123 months and are based on \$100,000 CSL data. Three-year averages for Trucks, Tractors & Trailers, and Private Passenger Types are calculated for each link ratio based on a "best three of five" approach. Specifically, for the latest five years, the highest and lowest ratios were removed from the calculation and the three year average was calculated using the three remaining factors. Beyond 123 months the loss development is assumed to be unity.

For Property Damage Coverage, one multistate group is used. Losses are developed up to 111 months and \$100,000 CSL data is used. Three-year averages for Trucks, Tractors & Trailers, and Private Passenger Types are calculated for each link ratio based on a "best three of five" years approach. Specifically, for the latest five years, the highest and lowest ratios were removed from the calculation and the three year average was calculated using the three remaining factors. Development beyond 111 months is assumed to be unity.

STATE
CREDIBILITY
WEIGHTED
FACTORS

For Trucks, Tractors & Trailers and Private Passenger Types, statewide loss development factors are credibility weighted with multistate factors. A Bayesian credibility study was done on state 15 to 27 months and 27 to 39 months loss development factors. The study concluded that there is significant statewide variation for bodily injury through 39 months and for property damage through 27 months. For these 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). The complement of credibility is assigned to multistate loss development factors. K is a constant that varies by coverage as follows:

Trucks, Tractors & Trailers

	<u>15 to 27</u>	<u>27 to 39</u>
Bodily Injury (tort)	\$ 2,500,000	\$ 11,000,000
Bodily Injury (no-fault)	900,000	3,000,000
Property Damage	1,500,000	-

Private Passenger Types

	<u>15 to 27</u>	<u>27 to 39</u>
Bodily Injury (tort)	\$ 1,500,000	\$ 4,000,000
Bodily Injury (no-fault)	700,000	1,700,000
Property Damage	600,000	-

TRUCKS,
TRACTORS &
TRAILERS AND
PRIVATE
PASSENGER
TYPES

For Trucks, Tractors & Trailers and Private Passenger Types, Bodily Injury loss development factors to ultimate are calculated by accumulating the statewide credibility-weighted 15 to 27 month factor and 27 to 39 month factor, and the multistate average 39 to ultimate factor.

For the property damage coverage, loss development factors to ultimate are calculated by accumulating the statewide credibility-weighted 15-27 month factor and the multistate average 27 to ultimate factor.

LOSS DEVELOPMENT FOR PHYSICAL DAMAGE

OBJECTIVE

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

DESCRIPTION OF EXPERIENCE PERIOD DATA

For Physical Damage, paid losses underlying the statewide loss cost level indications are on an accident year basis and were evaluated as of March 31, 2023. In other words, accident year ended December 31, 2022 includes all losses paid through March 31, 2023 on accidents occurring from January 1, 2022 to December 31, 2022. Similarly, the paid losses for accident year ended December 31, 2021 include all losses paid through March 31, 2023 on accidents occurring from January 1, 2021 to December 31, 2021. The immature paid loss experience reported as of 15 or as of 27 months must be adjusted to a mature or ultimate settlement basis through the use of a loss development factor. See the calculations in **Exhibits C16-C17**.

DESCRIPTION OF LOSS DEVELOPMENT METHODOLOGY

For Collision and Other Than Collision coverages, one multistate group is used. Losses are developed to an ultimate settlement basis. Three-year averages are calculated for each age-to-age link ratio. These link ratios are accumulated to develop losses to 123 months. Development beyond 123 months is assumed to be 1.000.

CREDIBILITY PROCEDURE FOR EXPERIENCE LOSS RATIO

OBJECTIVE The extent to which the state experience is reflected in the development of the prospective loss costs is determined by the credibility of the data for that state. Specifically, ISO credibility procedures are based upon the volume of claims for each coverage separately.

METHODOLOGY The standards for full credibility were determined from a credibility study using various size of loss distributions for liability, other than collision and collision respectively. Separate standards by coverage/major class for full credibility were calculated using the Mayerson, Jones and Bowers expansion formula.

CREDIBILITY FOR EXPERIENCE LOSS RATIO The assignment of credibility to the experience loss ratio is based on the total number of claims for the years used. For liability, the claims are based on BI and PD claims combined. For physical damage, credibility is determined separately for OTC and Collision. Partial credibility (Z), as used for the experience loss ratio, is determined using the square root rule as follows:

$$Z = \sqrt{\frac{\text{Claims}}{X}}$$

Where X equals the full credibility standard, by line and coverage, as shown on the following pages of this section.

YEAR WEIGHTS The weights assigned to the loss ratio by year are based on the credibility of the average number of claims for the years of experience used. A maximum of five years of experience may be used. This procedure is described in detail in the flow chart on the following page. The claim standard used to determine the year weights is based on the credibility standard for each coverage. The schedules of the number of claims required for the year weight assignments are shown on the following pages.

COMMERCIAL AUTOMOBILE LIABILITY
FLOWCHART TO DETERMINE
YEAR WEIGHTS AND
EXPERIENCE PERIOD CREDIBILITY

Step 1: Determine Number of Years to be used and Year Weights

1. Add latest 2 years of claims and divide by 2 to determine the 2 year average.
2. If 2 year Avg. claims \geq 11,500,
Then use 2 years of experience and assign 70/30 weights.
3. Add latest 3 years of claims and divide by 3 to determine the 3 year average.
4. If 3 year Avg. claims \geq 1,380,
Then use 3 years of experience and assign 50/30/20 weights.
5. If 3 year Avg. claims $<$ 1,380,
Then use 5 years of experience and assign 30/25/20/15/10 weights.

Step 2: Determine the Experience Period Credibility

Calculate partial credibility based on the total number of claims for the number of years used in the review as determined from Step 1.

COMMERCIAL AUTOMOBILE PHYSICAL DAMAGE
FLOWCHART TO DETERMINE
YEAR WEIGHTS AND
EXPERIENCE PERIOD CREDIBILITY

Step 1: Determine Number of Years to be used and Year Weights

1. Add latest 2 years of claims and divide by 2 to determine the 2 year average.
2. If 2 year Avg. claims \geq Full Standard,
Then use 2 years of experience and assign 70/30 weights.
3. Add latest 3 years of claims and divide by 3 to determine the 3 year average.
4. If 3 year Avg. claims \geq Intermediate Threshold,
Then use 3 years of experience and assign 50/30/20 weights.
5. If 3 year Avg. claims $<$ Intermediate Threshold,
Then use 5 years of experience and assign 30/25/20/15/10 weights.

Step 2: Determine the Experience Period Credibility

Calculate partial credibility based on the total number of claims for the number of years used in the review as determined from Step 1.

<u>Coverage</u>	<u>Intermediate Threshold</u>	<u>Full Standard</u>
Trucks, Tractors & Trailers OTC	1,350	11,000
Trucks, Tractors & Trailers Collision	550	4,500
Private Passenger Types OTC	1,050	8,500
Private Passenger Types Collision	450	3,500

Tables For Use With Trend Data

Bodily Injury				Property Damage			
<u>Number of Claims</u>			<u>Cred.</u>	<u>Number of Claims</u>			<u>Cred.</u>
0	-	641	0.00	0	-	256	0.00
642	-	2027	0.05	257	-	810	0.05
2028	-	3571	0.10	811	-	1428	0.10
3572	-	5303	0.15	1429	-	2121	0.15
5304	-	7258	0.20	2122	-	2903	0.20
7259	-	9482	0.25	2904	-	3793	0.25
9483	-	12037	0.30	3794	-	4814	0.30
12038	-	14999	0.35	4815	-	5999	0.35
15000	-	18478	0.40	6000	-	7391	0.40
18479	-	22619	0.45	7392	-	9047	0.45
22620	-	27631	0.50	9048	-	11052	0.50
27632	-	33823	0.55	11053	-	13529	0.55
33824	-	41666	0.60	13530	-	16666	0.60
41667	-	51923	0.65	16667	-	20769	0.65
51924	-	65909	0.70	20770	-	26363	0.70
65910	-	86111	0.75	26364	-	34444	0.75
86112	-	117857	0.80	34445	-	47142	0.80
117858	-	174999	0.85	47143	-	69999	0.85
175000	-	308333	0.90	70000	-	123333	0.90
308334	-	974999	0.95	123334	-	389999	0.95
975000	-	and over	1.00	390000	-	and over	1.00

K = 25,000

K = 10,000

$$\text{CREDIBILITY FORMULA} = (\# \text{ CLAIMS}) / (\# \text{ CLAIMS} + K)$$

ALL LIABILITY COVERAGES
CREDIBILITY TABLE
NUMBER OF CLAIMS

<u>Credibility</u>			
0.00*	0	-	28
0.05	29	-	114
0.10	115	-	258
0.15	259	-	459
0.20	460	-	718
0.25	719	-	1,034
0.30	1035	-	1,408
0.35	1,409	-	1,839
0.40	1,840	-	2,328
0.45	2,329	-	2,874
0.50	2,875	-	3,478
0.55	3,479	-	4,139
0.60	4,140	-	4,858
0.65	4,859	-	5,634
0.70	5,635	-	6,468
0.75	6,469	-	7,359
0.80	7,360	-	8,308
0.85	8,309	-	9,314
0.90	9,315	-	10,378
0.95	10,379	-	11,499
1.00		>	11,499

The credibility for the loss cost level ratio is determined by the total number of claims for the total number of years of experience used in the review.

*The credibility underlying the calculation of the statewide indication is subject to a minimum of 5% given that there is at least one claim in the experience period.

PHYSICAL DAMAGE
CREDIBILITY TABLES
NUMBER OF CLAIMS

OTHER THAN COLLISION

Cred	Trucks, Tractors & Trailers			Private Passenger Types		
0.00*	0	-	27	0	-	21
0.05	28	-	109	22	-	84
0.10	110	-	247	85	-	191
0.15	248	-	439	192	-	339
0.20	440	-	687	340	-	531
0.25	688	-	989	532	-	764
0.30	990	-	1,347	765	-	1,041
0.35	1,348	-	1,759	1,042	-	1,359
0.40	1,760	-	2,227	1,360	-	1,721
0.45	2,228	-	2,749	1,722	-	2,124
0.50	2,750	-	3,327	2,125	-	2,571
0.55	3,328	-	3,959	2,572	-	3,059
0.60	3,960	-	4,647	3,060	-	3,591
0.65	4,648	-	5,389	3,592	-	4,164
0.70	5,390	-	6,187	4,165	-	4,781
0.75	6,188	-	7,039	4,782	-	5,439
0.80	7,040	-	7,947	5,440	-	6,141
0.85	7,948	-	8,909	6,142	-	6,884
0.90	8,910	-	9,927	6,885	-	7,671
0.95	9,928	-	10,999	7,672	-	8,499
1.00		>	10,999		>	8,499

COLLISION

Cred	Trucks, Tractors & Trailers			Private Passenger Types		
0.00*	0	-	11	0	-	8
0.05	12	-	44	9	-	34
0.10	45	-	101	35	-	78
0.15	102	-	179	79	-	139
0.20	180	-	281	140	-	218
0.25	282	-	404	219	-	314
0.30	405	-	551	315	-	428
0.35	552	-	719	429	-	559
0.40	720	-	911	560	-	708
0.45	912	-	1,124	709	-	874
0.50	1,125	-	1,361	875	-	1,058
0.55	1,362	-	1,619	1,059	-	1,259
0.60	1,620	-	1,901	1,260	-	1,478
0.65	1,902	-	2,204	1,479	-	1,714
0.70	2,205	-	2,531	1,715	-	1,968
0.75	2,532	-	2,879	1,969	-	2,239
0.80	2,880	-	3,251	2,240	-	2,528
0.85	3,252	-	3,644	2,529	-	2,834
0.90	3,645	-	4,061	2,835	-	3,158
0.95	4,062	-	4,499	3,159	-	3,499
1.00		>	4,499		>	3,499

The credibility for loss cost level ratio is determined by the total number of claims for the total number of years of experience used in the review.

*The credibility underlying the calculation of the statewide indication is subject to a minimum of 5% given that there is at least one claim in the experience period.

MONTANA
CLAIMS PER TERRITORY
LIABILITY

Territory	Trucks, Tractors & Trailers Incurred Claims 5 Years Ending 12/31/2022 Combined BI and PD	Private Passenger Types Incurred Claims 5 Years Ending 12/31/2022 Combined BI and PD
101	1,034	125
105	2,033	319
106	738	192
107	561	83
SW Total	4,366	719

Claims for Trend

BI	PD
<u>77</u>	<u>458</u>

MONTANA
CLAIMS PER TERRITORY
PHYSICAL DAMAGE

Territory	Trucks, Tractors & Trailers Paid Claims 5 Years Ending 12/31/2022		Private Passenger Types Paid Claims 5 Years Ending 12/31/2022	
	OTC	Coll	OTC	Coll
101	800	709	268	145
105	1,765	1,693	479	278
106	1,791	677	641	136
107	649	362	139	95
SW Total	5,005	3,441	1,527	654

WIND AND WATER PROCEDURE
OTHER THAN COLLISION

OBJECTIVE

Other Than Collision losses which result from the perils of Wind and Water are relatively infrequent and do not affect each year similarly. While catastrophic incidents are rare, their impact on loss cost indications can be significant. The occurrence of a weather related catastrophe can result in a large positive indication, followed by an indicated decrease when the catastrophe leaves the experience period in subsequent reviews. This ultimately leads to loss cost instability.

In order to address this ratemaking problem, the Wind and Water procedure removes the Wind and Water losses that actually occur in a given year and replaces them with an expected Wind and Water provision, based on the state's long term history of Wind and Water losses. Due to the lower credibility of catastrophic loss experience, a longer experience period or a larger body of data is necessary to compensate.

DESCRIPTION OF
WIND AND WATER
ADJUSTMENT
PROCEDURE

The Wind and Water procedure begins by comparing Wind and Water losses to non-Wind and Water losses for each year in the long term review period. Wind and Water losses have been separately identified as losses reported under the Commercial Statistical Plan (CSP) using Type of Loss (TOL) codes 06 and 07. A ratio of Wind and Water to non-Wind and Water losses is calculated for each year.

The long term 'normal' Wind and Water to non-Wind and Water ratio is determined by calculating the average of the Wind and Water to non-Wind and Water ratios for all years for which data is currently available.

The variation from the long term normal Wind and Water to non-Wind and Water ratio is then determined by calculating the difference between the normal ratio and the Wind and Water ratio for each year.

The loss adjustment required in order to bring each year of experience to a normal Wind and Water level is determined by applying the variation factor (column (5)) to the reported non-Wind and Water losses (column (3)).

The major steps of the procedure are shown in the Exhibits on the following pages.

WIND AND WATER PROCEDURE
OTHER THAN COLLISION
MONTANA

TRUCKS, TRACTORS, AND TRAILERS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			(2) - (1)	(1) / (3)	AVG(4) - (4)	(3) x (5)	(2) + (6)
YEAR ENDING	OTC WIND & WATER LOSSES	OTC TOTAL LOSSES	TOTAL - WIND&WATER LOSSES	WIND & WATER / NON (W&W)	VARIATION FROM AVG. WIND RATIO	WIND & WATER ADJ ADJUSTMENT	OTC TOTAL LOSSES
1987	19,453	362,343	342,890	0.057	0.305	104,581	466,924
1988	119,148	737,112	617,964	0.193	0.169	104,436	841,548
1989	46,416	425,948	379,532	0.122	0.240	91,088	517,036
1990	81,554	589,106	507,552	0.161	0.201	102,018	691,124
1991	646,806	1,207,781	560,975	1.153	-0.791	-443,731	764,050
1992	196,806	836,157	639,351	0.308	0.054	34,525	870,682
1993	117,199	846,623	729,424	0.161	0.201	146,614	993,237
1994	50,098	888,378	838,280	0.060	0.302	253,161	1,141,539
1995	206,580	1,299,868	1,093,288	0.189	0.173	189,139	1,489,007
1996	359,920	1,847,282	1,487,362	0.242	0.120	178,483	2,025,765
1997	294,639	2,147,416	1,852,777	0.159	0.203	376,114	2,523,530
1998	470,382	2,505,913	2,035,531	0.231	0.131	266,655	2,772,568
1999	485,106	2,862,427	2,377,321	0.204	0.158	375,617	3,238,044
2000	621,956	3,601,129	2,979,173	0.209	0.153	455,813	4,056,942
2001	617,095	3,417,793	2,800,698	0.220	0.142	397,699	3,815,492
2002	252,186	2,038,112	1,785,926	0.141	0.221	394,690	2,432,802
2003	319,898	1,968,815	1,648,917	0.194	0.168	277,018	2,245,833
2004	16,867	649,868	633,001	0.027	0.335	212,055	861,923
2005	99,611	678,965	579,354	0.172	0.190	110,077	789,042
2006	62,266	714,707	652,441	0.095	0.267	174,202	888,909
2007	342,383	1,178,425	836,042	0.410	-0.048	-40,130	1,138,295
2008	309,408	1,328,659	1,019,251	0.304	0.058	59,117	1,387,776
2009	304,837	1,969,122	1,664,285	0.183	0.179	297,907	2,267,029
2010	2,358,327	4,140,330	1,782,003	1.323	-0.961	-1,712,505	2,427,825
2011	495,443	1,961,013	1,465,570	0.338	0.024	35,174	1,996,187
2012	241,832	2,375,036	2,133,204	0.113	0.249	531,168	2,906,204
2013	874,101	2,508,280	1,634,179	0.535	-0.173	-282,713	2,225,567
2014	2,156,564	3,979,394	1,822,830	1.183	-0.821	-1,496,543	2,482,851
2015	1,154,083	3,615,925	2,461,842	0.469	-0.107	-263,417	3,352,508
2016	3,142,648	5,548,987	2,406,339	1.306	-0.944	-2,271,584	3,277,403
2017	127,846	2,508,284	2,380,438	0.054	0.308	733,175	3,241,459
2018	1,164,133	4,044,937	2,880,804	0.404	-0.042	-120,994	3,923,943
2019	3,802,195	7,020,525	3,218,330	1.181	-0.819	-2,635,812	4,384,713
2020	303,593	3,533,395	3,229,802	0.094	0.268	865,587	4,398,982
2021	681,131	4,484,360	3,803,229	0.179	0.183	695,991	5,180,351
2022	2,991,253	7,521,042	4,529,789	0.66	-0.298	-1,349,877	6,171,165

(8) NORMAL WIND TO NON W&W RATIO= AVG. (4) 0.362

WIND AND WATER PROCEDURE
OTHER THAN COLLISION
MONTANA

PRIVATE PASSENGER TYPES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			(2) - (1)	(1) / (3)	AVG (4) - (4)	(3) x (5)	(2) + (6)
YEAR ENDING	OTC WIND & WATER LOSSES	OTC TOTAL LOSSES	TOTAL - WIND&WATER LOSSES	WIND & WATER / NON (W&W)	VARIATION FROM AVG. WIND RATIO	WIND & WATER ADJUSTMENT	ADJ OTC TOTAL LOSSES
1987	22,004	308,964	286,960	0.077	0.227	65,140	374,104
1988	57,118	487,173	430,055	0.133	0.171	73,539	560,712
1989	119,690	800,355	680,665	0.176	0.128	87,125	887,480
1990	77,215	810,889	733,674	0.105	0.199	146,001	956,890
1991	766,044	1,827,304	1,061,260	0.722	-0.418	-443,607	1,383,697
1992	134,373	794,126	659,753	0.204	0.100	65,975	860,101
1993	143,350	761,857	618,507	0.232	0.072	44,533	806,390
1994	49,321	744,677	695,356	0.071	0.233	162,018	906,695
1995	167,431	947,251	779,820	0.215	0.089	69,404	1,016,655
1996	107,513	1,528,373	1,420,860	0.076	0.228	323,956	1,852,329
1997	209,250	1,550,092	1,340,842	0.156	0.148	198,445	1,748,537
1998	254,655	1,440,982	1,186,327	0.215	0.089	105,583	1,546,565
1999	246,905	1,423,234	1,176,329	0.210	0.094	110,575	1,533,809
2000	229,716	1,590,374	1,360,658	0.169	0.135	183,689	1,774,063
2001	255,079	1,349,284	1,094,205	0.233	0.071	77,689	1,426,973
2002	50,344	892,206	841,862	0.060	0.244	205,414	1,097,620
2003	128,123	716,857	588,734	0.218	0.086	50,631	767,488
2004	48,471	521,683	473,212	0.102	0.202	95,589	617,272
2005	62,104	539,338	477,234	0.130	0.174	83,039	622,377
2006	17,865	431,954	414,089	0.043	0.261	108,077	540,031
2007	198,223	622,097	423,874	0.468	-0.164	-69,515	552,582
2008	68,340	431,513	363,173	0.188	0.116	42,128	473,641
2009	63,242	572,931	509,689	0.124	0.180	91,744	664,675
2010	811,637	1,415,290	603,653	1.345	-1.041	-628,403	786,887
2011	233,953	962,637	728,684	0.321	-0.017	-12,388	950,249
2012	153,288	943,777	790,489	0.194	0.110	86,954	1,030,731
2013	397,505	1,200,595	803,090	0.495	-0.191	-153,390	1,047,205
2014	785,768	1,728,721	942,953	0.833	-0.529	-498,822	1,229,899
2015	260,485	1,284,363	1,023,878	0.254	0.05	51,194	1,335,557
2016	917,390	2,020,447	1,103,057	0.832	-0.528	-582,414	1,438,033
2017	24,418	552,671	528,253	0.046	0.258	136,289	688,960
2018	190,698	786,006	595,308	0.32	-0.016	-9,525	776,481
2019	890,854	1,566,103	675,249	1.319	-1.015	-685,378	880,725
2020	82,435	706,068	623,633	0.132	0.172	107,265	813,333
2021	113,982	1,272,470	1,158,488	0.098	0.206	238,649	1,511,119
2022	403,276	1,382,971	979,695	0.412	-0.108	-105,807	1,277,164

(8) NORMAL WIND TO NON W&W RATIO= AVG. (4) 0.304

EXPLANATORY MEMORANDUM FOR WIND AND WATER PROCEDURE

COLUMN (1)
OTC WIND AND
WATER LOSSES

Dollar amount of Other Than Collision losses resulting from the perils of Wind and Water (Type of Loss Codes 06 & 07).

COLUMN (2)
OTC TOTAL
LOSSES

Dollar amount of Other Than Collision losses resulting from all perils.

COLUMN (3)
OTC LOSSES
OTHER THAN
WIND AND WATER

Dollar amount of Other Than Collision losses resulting from all perils other than Wind and Water. Column (2) - Column (1).

COLUMN (4)
WIND AND WATER
TO NON-WIND AND
WATER RATIO

Ratio of Wind and Water losses to Non-Wind and Water losses.
Column (1) ÷ Column (3)

COLUMN (5)
VARIATION FROM
AVERAGE WIND
RATIO

Variation from the long term average Wind and Water to non-Wind and Water ratio.
Avg (4) - Column (4).

COLUMN (6)
WIND AND WATER
ADJUSTMENT

Wind and Water loss adjustment to bring experience to average Wind and Water level.
Column (3) * Column (5).

COLUMN (7)
ADJUSTED OTC
TOTAL LOSSES

Column (2) + Column (6).

TERRITORIAL WIND AND WATER PROCEDURE
OTHER THAN COLLISION

OBJECTIVE

The statewide Wind and Water procedure removes the actual Wind and Water losses that occur in a given year and replaces them with an expected Wind and Water provision. The territorial excess Wind and Water procedure distributes the statewide expected Wind and Water loss provision to the individual territories in proportion to each territory's long-term Wind and Water loss experience.

DESCRIPTION OF
TERRITORIAL WIND
AND WATER
PROCEDURE

The first step is to calculate long term Wind and Water to non-Wind and Water ratios by territory. The earliest year of historical Wind and Water experience available for Commercial Auto is 1987. As a new year becomes available, it is added to the procedure. For each year, the territorial ratios are calculated as Wind and Water losses divided by non-Wind and Water losses. An average is then taken of all the ratios for each territory to get the long term Wind and Water to non-Wind and Water ratio.

One potential problem with the average ratios is that a high Wind and Water ratio for one year can distort the average ratio for that territory. To mitigate the effect of unusually large ratios, the ratios are capped at 10 times the statewide median of the Wind and Water ratios before calculating the average. (The statewide median ratio is subject to a minimum value of 0.05.)

The territorial capped average Wind and Water ratios are multiplied by the latest 5 years non-Wind and Water losses for each territory to get the territorial expected Wind and Water losses. The territorial expected Wind and Water losses are divided by the statewide total expected Wind and Water losses to get the territorial expected Wind and Water distribution.

The statewide wind provision is calculated for each year from the statewide procedure by subtracting the non-Wind and Water losses from the total adjusted losses. The individual territorial Wind and Water provisions are then calculated by distributing the statewide wind provision to the territories based on the expected Wind and Water distribution.

Territorial adjusted total losses = territorial Wind and Water provision + territorial non-Wind and Water losses

Because the actual Wind and Water losses are replaced with an expected Wind and Water provision, the number of Wind and Water claims must be adjusted. The territorial Wind and Water provision is divided by the territory's average Wind and Water claim cost to produce the adjusted number of Wind and Water claims. The adjusted Wind and Water claims are added to the non-Wind and Water claims, resulting in the total adjusted claims.

A sample of the territory Wind and Water procedure is shown on the following page.

INSURANCE SERVICES OFFICE INC.

METHODOLOGY FOR CALCULATING 'WIND & WATER PROVISIONS' BY TERRITORY

In order to develop 'Wind and Water Provisions' by territory, the statewide provision is distributed using each territory's 'expected' wind and water losses. This procedure is illustrated in the following example:

Territory	(1) Long-Term Capped* Ratio of Wind & Water to Non-Wind & Water Losses	(2) Non-Wind & Water Losses for Latest Five Years	(3) 'Expected' Wind & Water Losses for Latest Five Years (1) x (2)	(4) 'Expected' Wind & Water Distribution (3) / Total (3)
A	.250	500,000	125,000	.500
B	.750	100,000	75,000	.300
C	.200	250,000	50,000	.200
Territory	(5) Statewide Wind Provision for Year 20XX **	(6) Territory Wind Provision for Year 20XX (4) x (5)	(7) Non-Wind & Water Losses for Year 20XX	(8) Adjusted Total Losses for Year 20XX (6) + (7)
A	100,000	50,000	150,000	200,000
B		30,000	50,000	80,000
C		20,000	80,000	100,000
Territory	(9) Non-Wind & Water Claims for Year 20XX	(10) Five-Year Average Wind & Water Claim Cost	(11) Adjusted Wind & Water Claims for Year 20XX (6) / (10)	(12) Total Adjusted Claims for Year 20XX (9) + (11)
A	200	500	100	300
B	100	400	75	175
C	150	400	50	200

* Average of yearly capped ratios of wind & water to non-wind & water losses, based on territory experience capped at 10 times the statewide median wind & water to non-wind & water ratio. The statewide median ratio is subject to a minimum value of 0.05.

** The Statewide Wind Provision for year 20XX = Total Adjusted Losses for Year 20XX - Non-Wind & Water Losses for Year 20XX

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE

SUMMARY OF PROSPECTIVE LOSS COST LEVEL CHANGES
STATEWIDE LOSS COST LEVEL CHANGES (A)

Coverages	Aggregate Loss Cost at Current Level (B)	Loss Cost Changes (C)
TRUCKS, TRACTORS & TRAILERS (D)		
Liability		
Single Limit Liability	\$ 23,376,377	17.6%
Physical Damage		
Other Than Collision	6,690,893	22.1%
Collision	7,464,680	34.3%
Combined	14,155,573	28.5%
Total Trucks, Tractors & Trailers	37,531,950	21.7%
PRIVATE PASSENGER TYPES		
Liability		
Single Limit Liability	3,148,312	9.0%
Physical Damage		
Other Than Collision	1,608,470	9.6%
Collision	918,058	15.3%
Combined	2,526,528	11.7%
Total Private Passenger Types	5,674,840	10.2%
GRAND TOTAL ALL COVERAGES	43,206,790	20.2%
TOTAL LIABILITY	26,524,689	16.6%
TOTAL PHYSICAL DAMAGE	16,682,101	26.0%

(A) An implementation date of 09/01/2024 is assumed for purposes of trending.

(B) Accident Year ending 12/31/2022 Aggregate Loss Cost at Current Level for all coverages. The Liability loss costs are on a Total Limits basis.

(C) Loss Cost changes are calculated on a \$100,000 CSL Basic Limits basis for Liability and on an all deductibles combined basis for Physical Damage.

(D) For Liability and Physical Damage, classes related to Trucks, Tractors & Trailers, such as the Public Automobile classes, are impacted by the Trucks, Tractors & Trailers loss cost level changes.

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES
FOR TRUCKS, TRACTORS, AND TRAILERS POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	\$5,000 Med Pay
101	18.5%	16.7%
105	16.7%	12.5%
106	20.0%	25.0%
107	16.6%	12.5%

VERISK

MONTANA
 COMMERCIAL AUTOMOBILE INSURANCE
 REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
 TERRITORY LOSS COST LEVEL CHANGES
 FOR TRUCKS, TRACTORS, AND TRAILERS POLICY COVERAGES

Territory Code	Physical Damage		Specified Causes of Loss
	Comprehensive	Collision	
101	17.4%	38.2%	17.9%
105	16.2%	34.7%	16.1%
106	32.6%	34.9%	32.8%
107	20.7%	26.3%	20.5%

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
REVISED BASE LOSS COSTS BY TERRITORY
FOR TRUCKS, TRACTORS, AND TRAILERS POLICY COVERAGES

Territory	Liability	\$5,000	Physical Damage		Specified Causes
Code	\$100,000 CSL	Med Pay ^(a)	Comprehensive ^(b)	Collision ^(c)	of Loss ^(d)
101	308	7	229	405	132
105	294	9	237	439	137
106	162	5	435	414	251
107	436	9	327	471	188

- (a) The loss costs for medical payments have been calculated by multiplying a relativity by the Trucks, Tractors, and Trailers CSL Liability loss costs. The relativities differ by territory and are listed in [EXHIBIT C19](#).
- (b) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1 loss cost.
- (c) Collision base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible loss cost.
- (d) The loss costs for Specified Causes of Loss have been calculated by a relativity of 0.576 to the Trucks, Tractors, and Trailers Comprehensive base loss costs.

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES
FOR PRIVATE PASSENGER TYPES POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	\$5,000 Med Pay
101	4.1%	12.5%
105	11.8%	14.3%
106	9.9%	20.0%
107	8.0%	8.3%

VERISK

MONTANA
 COMMERCIAL AUTOMOBILE INSURANCE
 REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
 TERRITORY LOSS COST LEVEL CHANGES
 FOR PRIVATE PASSENGER TYPES POLICY COVERAGES

Territory Code	Physical Damage		Specified Causes of Loss
	Comprehensive	Collision	
101	7.6%	17.0%	7.8%
105	10.4%	14.6%	10.6%
106	9.7%	14.6%	9.6%
107	9.9%	16.1%	9.8%

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
REVISED BASE LOSS COSTS BY TERRITORY

FOR PRIVATE PASSENGER TYPES POLICY COVERAGES

Territory Code	Liability \$100,000 CSL	\$5,000 Med Pay ^(a)	Physical Damage Comprehensive ^(b)	Collision ^(c)	Specified Causes of Loss ^(d)
101	277	9	310	310	179
105	237	8	307	417	177
106	178	6	518	354	298
107	420	13	389	483	224

(a) The loss costs for medical payments have been calculated by multiplying a relativity by the Private Passenger Types CSL Liability loss costs. The relativities differ by territory and are listed in [EXHIBIT C-19](#).

(b) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1 loss cost.

(c) Collision base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible loss cost.

(d) The loss costs for Specified Causes of Loss have been calculated by a relativity of 0.576 to the Private Passenger Types Comprehensive base loss costs.

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES
FOR VAN POOLS POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	\$5,000 Med Pay
101	18.6%	12.5%
105	16.7%	12.5%
106	20.3%	25.0%
107	16.6%	18.2%

VERISK

MONTANA
 COMMERCIAL AUTOMOBILE INSURANCE
 REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
 TERRITORY LOSS COST LEVEL CHANGES
 FOR VAN POOLS POLICY COVERAGES

Territory Code	Physical Damage		Specified Causes of Loss
	Comprehensive	Collision	
101	17.6%	38.2%	18.2%
105	16.1%	34.6%	16.2%
106	32.5%	34.9%	33.1%
107	20.6%	26.3%	20.7%

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
REVISED BASE LOSS COSTS BY TERRITORY

FOR VAN POOLS POLICY COVERAGES

Territory Code	Liability	\$5,000	Physical Damage		Specified Causes of Loss ^(e)
	\$100,000 CSL ^(a)	Med Pay ^(b)	Comprehensive ^(c)	Collision ^(d)	
101	293	9	348	911	201
105	279	9	360	988	208
106	154	5	661	932	382
107	414	13	497	1060	286

- (a) The loss costs for Van Pools were calculated by a relativity of 0.95 to the Trucks, Tractors, and Trailers CSL Liability loss costs.
- (b) The loss costs for medical payments have been calculated by multiplying a relativity by the Van Pools CSL liability loss costs. The relativities differ by territory and are listed in [EXHIBIT C19](#).
- (c) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1 loss cost and was calculated by a relativity of 1.52 to the Trucks, Tractors, and Trailers loss cost.
- (d) Collision base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible loss cost, and has been calculated by a relativity of 2.25 to the Trucks, Tractors, and Trailers loss cost.
- (e) The loss costs for Specified Causes of Loss were calculated by a relativity of 1.52 to the Trucks, Tractors, and Trailers Specified Causes of Loss loss costs.

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES
FOR TAXIS AND LIMOUSINES POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	\$5,000 Med Pay
101	18.5%	20.9%
105	16.7%	16.7%
106	19.9%	17.4%
107	16.6%	15.9%

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES
FOR TAXIS AND LIMOUSINES POLICY COVERAGES

Territory Code	Physical Damage		Specified Causes of Loss
	Comprehensive	Collision	
101	17.6%	38.2%	18.2%
105	16.1%	34.6%	16.2%
106	32.5%	34.9%	33.1%
107	20.6%	26.3%	20.7%

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
REVISED BASE LOSS COSTS BY TERRITORY

FOR TAXIS AND LIMOUSINES POLICY COVERAGES

Territory	Liability	\$5,000	Physical Damage		Specified Causes
Code	\$100,000 CSL ^(a)	Med Pay ^(b)	Comprehensive ^(c)	Collision ^(d)	of Loss ^(e)
101	1238	52	348	911	201
105	1182	49	360	988	208
106	651	27	661	932	382
107	1753	73	497	1060	286

- (a) The loss costs for Taxis and Limousines were calculated by a relativity of 4.02 to the Trucks, Tractors, and Trailers CSL Liability loss costs.
- (b) The loss costs for medical payments have been calculated by multiplying a relativity by the Taxis and Limousines CSL liability loss costs. The relativities differ by territory and are listed in [EXHIBIT C19](#).
- (c) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1 loss cost and was calculated by a relativity of 1.52 to the Trucks, Tractors, and Trailers loss cost.
- (d) Collision base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible loss cost, and has been calculated by a relativity of 2.25 to the Trucks, Tractors, and Trailers loss cost.
- (e) The loss costs for Specified Causes of Loss were calculated by a relativity of 1.52 to the Trucks, Tractors, and Trailers Specified Causes of Loss loss costs.

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES
FOR SCHOOL AND CHURCH BUSES POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	\$5,000 Med Pay
101	18.2%	25.0%
105	16.7%	22.2%
106	21.6%	25.0%
107	16.9%	18.2%

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES
FOR SCHOOL AND CHURCH BUSES POLICY COVERAGES

Territory Code	Physical Damage		Specified Causes of Loss
	Comprehensive	Collision	
101	17.3%	37.8%	18.4%
105	15.8%	35.1%	16.3%
106	32.7%	35.2%	32.6%
107	20.7%	26.4%	20.8%

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
REVISED BASE LOSS COSTS BY TERRITORY

FOR SCHOOL AND CHURCH BUSES POLICY COVERAGES

Territory Code	Liability	\$5,000	Physical Damage		Specified Causes
	\$100,000 CSL ^(a)	Med Pay ^(b)	Comprehensive ^(c)	Collision ^(d)	of Loss ^(e)
101	117	10	156	255	90
105	112	11	161	277	93
106	62	10	296	261	171
107	166	13	222	297	128

- (a) The loss costs for School and Church Buses were calculated by a relativity of 0.38 to the Trucks, Tractors, and Trailers CSL Liability loss costs.
- (b) The loss costs for medical payments have been calculated by multiplying a relativity by the School and Church Buses CSL liability loss costs. The relativities differ by territory and are listed in [EXHIBIT C19](#).
- (c) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1 loss cost and was calculated by a relativity of 0.68 to the Trucks, Tractors, and Trailers loss cost.
- (d) Collision base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible loss cost, and has been calculated by a relativity of 0.63 to the Trucks, Tractors, and Trailers loss cost.
- (e) The loss costs for Specified Causes of Loss were calculated by a relativity of 0.68 to the Trucks, Tractors, and Trailers Specified Causes of Loss loss costs.

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES
FOR ALL OTHER BUSES POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	\$5,000 Med Pay
101	18.4%	19.6%
105	16.7%	18.2%
106	19.9%	19.6%
107	16.6%	16.4%

VERISK

MONTANA
 COMMERCIAL AUTOMOBILE INSURANCE
 REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
 TERRITORY LOSS COST LEVEL CHANGES
 FOR ALL OTHER BUSES POLICY COVERAGES

Territory Code	Physical Damage		Specified Causes of Loss
	Comprehensive	Collision	
101	17.3%	37.8%	18.4%
105	15.8%	35.1%	16.3%
106	32.7%	35.2%	32.6%
107	20.7%	26.4%	20.8%

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
REVISED BASE LOSS COSTS BY TERRITORY
FOR ALL OTHER BUSES POLICY COVERAGES

Territory Code	Liability	\$5,000	Physical Damage		Specified Causes
	\$100,000 CSL ^(a)	Med Pay ^(b)	Comprehensive ^(c)	Collision ^(d)	of Loss ^(e)
101	973	61	156	255	90
105	929	65	161	277	93
106	512	61	296	261	171
107	1378	78	222	297	128

- (a) The loss costs for All Other Buses were calculated by a relativity of 3.16 to the Trucks, Tractors, and Trailers CSL Liability loss costs.
- (b) The loss costs for medical payments have been calculated by multiplying a relativity by the All Other Buses CSL liability loss costs. The relativities differ by territory and are listed in [EXHIBIT C19](#).
- (c) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1 loss cost and was calculated by a relativity of 0.68 to the Trucks, Tractors, and Trailers loss cost.
- (d) Collision base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible loss cost, and has been calculated by a relativity of 0.63 to the Trucks, Tractors, and Trailers loss cost.
- (e) The loss costs for Specified Causes of Loss were calculated by a relativity of 0.68 to the Trucks, Tractors, and Trailers Specified Causes of Loss loss costs.

VERISK

MONTANA
 AUTOMOBILE LIABILITY INSURANCE - TRUCKS, TRACTORS, AND TRAILERS (A)
 DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGES
 SINGLE LIMIT LIABILITY COVERAGE

	(1) AGGREGATE LOSS COST AT CURRENT LEVEL (B)	(2) \$100,000 INCURRED LOSSES (C)	(3) EXPERIENCE RATIO (2) / (1)	(4) ACCIDENT YEAR WEIGHTS	(5) NUMBER OF INCURRED CLAIMS
ACCIDENT YEAR ENDING					
12/31/18	\$11,887,692	\$17,080,553	1.437	10%	936
12/31/19	\$12,085,819	\$15,896,738	1.315	15%	970
12/31/20	\$12,007,651	\$13,637,534	1.136	20%	806
12/31/21	\$11,948,144	\$14,711,972	1.231	25%	855
12/31/22	\$11,932,811	\$13,642,942	1.143	30%	799

(6) AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)). 1.219

(7) EXPECTED EXPERIENCE RATIO (D). 1.111

(8) CREDIBILITY (E). 0.60

(9) CREDIBILITY WEIGHTED EXPERIENCE RATIO:
 ((6) * (8)) + ((7) * (1.000- (8))). 1.176

(10) INDICATED PERCENTAGE CHANGE IN ADVISORY
 LOSS COST LEVEL ((9) - 1.000). 17.6%

(11) FILED CHANGE. 17.6%

(A) TRUCK, TRACTOR, AND TRAILER EXPERIENCE IS FOR VEHICLES WRITTEN IN
 ACCORDANCE WITH RULE 222 OF THE COMMERCIAL LINES MANUAL, DIVISION 1,
 AUTOMOBILE.

(B) THE AGGREGATE LOSS COST AT CURRENT LEVEL IS CALCULATED BY EXTENDING
 EXPOSURES BY THE CURRENT LOSS COSTS FROM THE LAST REVISION.

(C) LOSSES INCLUDE ALL LOSS ADJUSTMENT EXPENSES FOR BODILY INJURY
 AND PROPERTY DAMAGE LIABILITY. SEE FOLLOWING PAGE.

(D) EXPECTED EXPERIENCE RATIO IS EQUAL TO THE COMBINED TREND FACTOR SHOWN
 ON THE FOLLOWING PAGE, DIVIDED BY THE PREMIUM TREND FACTOR, PROJECTED
 FOR M YEARS. THE PERIOD M IS EQUAL TO THE NUMBER OF YEARS FROM ONE YEAR
 BEYOND THE IMPLEMENTATION DATE OF THE LAST REVISION TO ONE YEAR BEYOND
 THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE
 PURPOSES OF TRENDING, SUBJECT TO A MAXIMUM OF THE N-VALUE CORRESPONDING
 TO THE LATEST YEAR SHOWN ON THE FOLLOWING PAGE, FOOTNOTE B. IN THIS
 REVISION, THE PERIOD M IS 1.083 YEAR(S).

(E) CREDIBILITY IS BASED ON A 5 YEAR TOTAL OF CLAIMS FOR B.I. AND P.D.
 SHOWN IN COLUMN (5). THE STANDARD FOR FULL CREDIBILITY IS 11,500
 CLAIMS (SEE CREDIBILITY TABLES IN SECTION C).

VERISK

MONTANA
TRUCKS, TRACTORS, AND TRAILERS
AUTOMOBILE LIABILITY INSURANCE
DETERMINATION OF SINGLE LIMIT LOSSES

	ACC. YEAR ENDING	BODILY INJURY	PROPERTY DAMAGE	COMBINED
(1) INCURRED LOSSES AND	12/31/18	\$3,987,330	\$3,845,472	
ALLOCATED LOSS	12/31/19	\$3,449,734	\$4,414,192	
ADJUSTMENT EXPENSES	12/31/20	\$3,382,005	\$3,912,150	
	12/31/21	\$3,606,760	\$4,642,106	
	12/31/22	\$2,921,952	\$4,707,734	
(2) DEVELOPED LOSSES AND	12/31/18	\$4,280,479	\$4,257,745	
ALL LOSS ADJUSTMENT	12/31/19	\$3,769,490	\$4,892,315	
EXPENSES (A)	12/31/20	\$3,897,186	\$4,348,863	
	12/31/21	\$4,594,074	\$5,211,600	
	12/31/22	\$4,633,588	\$5,384,118	
(3) SELECTED ANNUAL LOSS				
TREND (SEE TREND		8.6%	11.6%	10.2%
EXHIBIT IN SECTION C)				
(4) TRENDED LOSSES AND	12/31/18	\$7,730,545	\$9,350,008	\$17,080,553
ALL LOSS ADJUSTMENT	12/31/19	\$6,268,662	\$9,628,076	\$15,896,738
EXPENSES (B)	12/31/20	\$5,970,489	\$7,667,045	\$13,637,534
	12/31/21	\$6,477,644	\$8,234,328	\$14,711,972
	12/31/22	\$6,019,031	\$7,623,911	\$13,642,942

(A) INCURRED LOSSES AND ALLOCATED LOSS ADJUSTMENT EXPENSES ARE ADJUSTED BY THE FOLLOWING FACTORS:

- 1 - UNALLOCATED LOSS ADJUSTMENT FACTORS: B.I. 1.065 P.D. 1.105
- 2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	B.I.	P.D.
12/31/18	1.008	1.002
12/31/19	1.026	1.003
12/31/20	1.082	1.006
12/31/21	1.196	1.016
12/31/22	1.489	1.035

(B) TRENDED LOSSES ARE EQUAL TO (2) * ((1.0 + (3)) ** N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF ACCIDENT TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
12/31/18	7/1/18	7.167
12/31/19	7/1/19	6.167
12/31/20	7/1/20	5.167
12/31/21	7/1/21	4.167
12/31/22	7/1/22	3.167

VERISK

MONTANA
TRUCKS, TRACTORS, AND TRAILERS
AUTOMOBILE LIABILITY INSURANCE
DETERMINATION OF LIABILITY TRENDED AGGREGATE LOSS COSTS

	ACC. YEAR ENDING	AGGREGATE LOSS COSTS
(1) AGGREGATE LOSS COSTS	12/31/18	\$11,887,692
AT CURRENT LEVEL	12/31/19	\$12,085,819
	12/31/20	\$12,007,651
	12/31/21	\$11,948,144
	12/31/22	\$11,932,811
(2) SELECTED ANNUAL PREMIUM		
TREND (SEE TREND		0.0%
EXHIBIT IN SECTION C)		
(3) TRENDED AGGREGATE	12/31/18	\$11,887,692
LOSS COSTS AT	12/31/19	\$12,085,819
CURRENT LEVEL (A)	12/31/20	\$12,007,651
	12/31/21	\$11,948,144
	12/31/22	\$11,932,811

(A) TRENDED AGGREGATE LOSS COSTS ARE EQUAL TO (1) * ((1.0 + (2)) ** N),
WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF
WRITING TO SIX MONTHS BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF
09/01/24 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDED.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD
12/31/18	1/1/18	7.167
12/31/19	1/1/19	6.167
12/31/20	1/1/20	5.167
12/31/21	1/1/21	4.167
12/31/22	1/1/22	3.167

VERISK

MONTANA
 AUTOMOBILE PHYSICAL DAMAGE INSURANCE - TRUCKS, TRACTORS AND TRAILERS (A)
 DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGES

COVERAGE	ACCIDENT YEAR ENDING	(1)	(2)	(3)	(4)	(5)
		AGGREGATE LOSS COST AT CURRENT LEVEL (B)	INCURRED LOSSES (C)	EXPERIENCE RATIO (2) / (1)	ACCIDENT YEAR WEIGHTS	NUMBER OF PAID CLAIMS
O.T.C.	12/31/18	\$6,042,739	\$7,919,498	1.311	10%	948
	12/31/19	\$6,095,308	\$8,158,855	1.339	15%	983
	12/31/20	\$6,093,695	\$7,549,597	1.239	20%	928
	12/31/21	\$6,843,830	\$8,196,381	1.198	25%	1,047
	12/31/22	\$6,690,893	\$9,251,344	1.383	30%	1,099
COLL.	12/31/20	\$6,590,915	\$10,326,968	1.567	20%	604
	12/31/21	\$7,358,147	\$11,039,852	1.500	30%	712
	12/31/22	\$7,464,680	\$10,426,010	1.397	50%	723

		O.T.C.	COLLISION
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).	1.295	1.462
(7)	EXPECTED EXPERIENCE RATIO (D).	1.083	1.123
(8)	CREDIBILITY (E).	0.65	0.65
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ((6) * (8)) + ((7) * (1.000- (8))).	1.221	1.343
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ((9) - 1.000).	22.1%	34.3%
(11)	FILED CHANGE.	22.1%	34.3%

- (A) TRUCK, TRACTOR AND TRAILER EXPERIENCE IS FOR VEHICLES WRITTEN IN ACCORDANCE WITH RULE 222 OF THE COMMERCIAL LINES MANUAL, DIVISION 1, AUTOMOBILE.
- (B) THE AGGREGATE LOSS COST AT CURRENT LEVEL IS CALCULATED BY EXTENDING EXPOSURES BY THE CURRENT LOSS COSTS AND ADJUSTING TO A PROSPECTIVE VVF LEVEL BY THE APPLICATION OF VVF TREND FACTORS. (SEE SUBSEQUENT PAGE).
- (C) LOSSES INCLUDE ALL LOSS ADJUSTMENT EXPENSES FOR O.T.C. AND COLL. SEE FOLLOWING PAGE.
- (D) EXPECTED EXPERIENCE RATIO IS EQUAL TO THE LOSS TREND FACTOR DIVIDED BY THE VVF TREND FACTOR, PROJECTED FOR M YEARS. THE PERIOD M IS EQUAL TO THE NUMBER OF YEARS FROM ONE YEAR BEYOND THE IMPLEMENTATION DATE OF THE LAST REVISION TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE PURPOSES OF TRENDING, SUBJECT TO A MAXIMUM OF THE N-VALUE CORRESPONDING TO THE LATEST YEAR SHOWN ON THE FOLLOWING PAGE, FOOTNOTE B. IN THIS REVISION, THE PERIOD M IS 1.083 YEAR(S).
- (E) CREDIBILITY IS BASED ON A 5 YEAR TOTAL OF CLAIMS FOR O.T.C. AND A 3 YEAR TOTAL OF CLAIMS FOR COLLISION SHOWN IN COLUMN (5). THE STANDARDS FOR FULL CREDIBILITY ARE 11,000 CLAIMS FOR O.T.C. AND 4,500 CLAIMS FOR COLLISION (SEE CREDIBILITY TABLES IN SECTION C).

VERISK

MONTANA
TRUCKS, TRACTORS AND TRAILERS
AUTOMOBILE PHYSICAL DAMAGE INSURANCE
DETERMINATION OF PHYSICAL DAMAGE LOSSES

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) PAID LOSSES	12/31/18	\$3,923,943	----
	12/31/19	\$4,384,713	----
	12/31/20	\$4,398,982	\$5,235,735
	12/31/21	\$5,180,351	\$6,284,841
	12/31/22	\$6,171,165	\$6,815,609
(2) DEVELOPED LOSSES AND	12/31/18	\$4,414,436	----
ALL LOSS ADJUSTMENT	12/31/19	\$4,932,802	----
EXPENSES (A)	12/31/20	\$4,953,804	\$5,884,312
	12/31/21	\$5,833,723	\$7,013,883
	12/31/22	\$7,143,895	\$7,383,860
(3) SELECTED ANNUAL LOSS TREND (SEE TREND EXHIBIT IN SECTION C)		8.5%	11.5%
(4) TRENDED LOSSES AND	12/31/18	\$7,919,498	----
ALL LOSS ADJUSTMENT	12/31/19	\$8,158,855	----
EXPENSES (B)	12/31/20	\$7,549,597	\$10,326,968
	12/31/21	\$8,196,381	\$11,039,852
	12/31/22	\$9,251,344	\$10,426,010

(A) PAID LOSSES ARE ADJUSTED BY THE FOLLOWING:

1 - LOSS ADJUSTMENT EXPENSE FACTORS:

O.T.C	COLL.
1.125	1.125

2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	O.T.C.	COLL.
12/31/18	1.000	-----
12/31/19	1.000	-----
12/31/20	1.001	0.999
12/31/21	1.001	0.992
12/31/22	1.029	0.963

(B) TRENDED LOSSES ARE EQUAL TO (2) * ((1.0 + (3)) ** N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF ACCIDENT TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/18	7/1/18	7.167	-----
12/31/19	7/1/19	6.167	-----
12/31/20	7/1/20	5.167	5.167
12/31/21	7/1/21	4.167	4.167
12/31/22	7/1/22	3.167	3.167

VERISK

MONTANA
TRUCKS, TRACTORS AND TRAILERS
AUTOMOBILE PHYSICAL DAMAGE INSURANCE
DETERMINATION OF PHYSICAL DAMAGE TRENDED
AGGREGATE LOSS COSTS

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) AGGREGATE LOSS COSTS	12/31/18	\$5,706,080	----
AT CURRENT LEVEL	12/31/19	\$5,805,055	----
	12/31/20	\$5,848,076	\$6,525,658
	12/31/21	\$6,618,791	\$7,299,749
	12/31/22	\$6,521,338	\$7,420,159
(2) SELECTED ANNUAL VVF			
TREND (SEE TREND		0.8%	0.2%
EXHIBIT IN SECTION C)			
(3) TRENDED AGGREGATE	12/31/18	\$6,042,739	----
LOSS COSTS AT	12/31/19	\$6,095,308	----
CURRENT LEVEL (A)	12/31/20	\$6,093,695	\$6,590,915
	12/31/21	\$6,843,830	\$7,358,147
	12/31/22	\$6,690,893	\$7,464,680

(A) TRENDED AGGREGATE LOSS COSTS ARE EQUAL TO (1) * ((1.0 + (2)) ** N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF WRITING TO SIX MONTHS BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDED BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/18	1/1/18	7.167	-----
12/31/19	1/1/19	6.167	-----
12/31/20	1/1/20	5.167	5.167
12/31/21	1/1/21	4.167	4.167
12/31/22	1/1/22	3.167	3.167

VERISK

MONTANA
 AUTOMOBILE LIABILITY INSURANCE - PRIVATE PASSENGER TYPES (A)
 DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGES
 SINGLE LIMIT LIABILITY COVERAGE

	(1) AGGREGATE LOSS COST AT CURRENT LEVEL (B)	(2) \$100,000 INCURRED LOSSES (C)	(3) EXPERIENCE RATIO (2) / (1)	(4) ACCIDENT YEAR WEIGHTS	(5) NUMBER OF INCURRED CLAIMS
ACCIDENT YEAR ENDING					
12/31/18	\$2,024,616	\$3,899,252	1.926	10%	214
12/31/19	\$2,059,042	\$2,213,653	1.075	15%	182
12/31/20	\$1,856,738	\$1,238,120	0.667	20%	86
12/31/21	\$1,752,812	\$1,265,091	0.722	25%	121
12/31/22	\$1,689,915	\$2,062,851	1.221	30%	116
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				1.034
(7)	EXPECTED EXPERIENCE RATIO (D).				1.108
(8)	CREDIBILITY (E).				0.25
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ((6) * (8)) + ((7) * (1.000- (8))).				1.090
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ((9) - 1.000).				9.0%
(11)	FILED CHANGE.				9.0%
(A)	PRIVATE PASSENGER TYPE EXPERIENCE IS FOR VEHICLES WRITTEN IN ACCORDANCE WITH RULE 232 OF THE COMMERCIAL LINES MANUAL, DIVISION 1, AUTOMOBILE.				
(B)	THE AGGREGATE LOSS COST AT CURRENT LEVEL IS CALCULATED BY EXTENDING EXPOSURES BY THE CURRENT LOSS COSTS FROM THE LAST REVISION.				
(C)	LOSSES INCLUDE ALL LOSS ADJUSTMENT EXPENSES FOR BODILY INJURY AND PROPERTY DAMAGE LIABILITY. SEE FOLLOWING PAGE.				
(D)	EXPECTED EXPERIENCE RATIO IS EQUAL TO THE COMBINED TREND FACTOR SHOWN ON THE FOLLOWING PAGE, DIVIDED BY THE PREMIUM TREND FACTOR, PROJECTED FOR M YEARS. THE PERIOD M IS EQUAL TO THE NUMBER OF YEARS FROM ONE YEAR BEYOND THE IMPLEMENTATION DATE OF THE LAST REVISION TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE PURPOSES OF TRENDING, SUBJECT TO A MAXIMUM OF THE N-VALUE CORRESPONDING TO THE LATEST YEAR SHOWN ON THE FOLLOWING PAGE, FOOTNOTE B. IN THIS REVISION, THE PERIOD M IS 1.083 YEAR(S).				
(E)	CREDIBILITY IS BASED ON A 5 YEAR TOTAL OF CLAIMS FOR B.I. AND P.D. SHOWN IN COLUMN (5). THE STANDARD FOR FULL CREDIBILITY IS 11,500 CLAIMS (SEE CREDIBILITY TABLES IN SECTION C).				

VERISK

MONTANA
PRIVATE PASSENGER TYPES
AUTOMOBILE LIABILITY INSURANCE
DETERMINATION OF SINGLE LIMIT LOSSES

	ACC. YEAR ENDING	BODILY INJURY	PROPERTY DAMAGE	COMBINED
(1) INCURRED LOSSES AND	12/31/18	\$1,100,955	\$722,021	
ALLOCATED LOSS	12/31/19	\$385,983	\$691,889	
ADJUSTMENT EXPENSES	12/31/20	\$331,466	\$333,896	
	12/31/21	\$167,355	\$533,954	
	12/31/22	\$597,076	\$474,017	
(2) DEVELOPED LOSSES AND	12/31/18	\$1,188,932	\$797,833	
ALL LOSS ADJUSTMENT	12/31/19	\$425,459	\$765,302	
EXPENSES (A)	12/31/20	\$382,311	\$370,062	
	12/31/21	\$228,138	\$597,099	
	12/31/22	\$974,813	\$562,549	
(3) SELECTED ANNUAL LOSS				
TREND (SEE TREND		8.6%	11.6%	9.7%
EXHIBIT IN SECTION C)				
(4) TRENDED LOSSES AND	12/31/18	\$2,147,211	\$1,752,041	\$3,899,252
ALL LOSS ADJUSTMENT	12/31/19	\$707,538	\$1,506,114	\$2,213,653
EXPENSES (B)	12/31/20	\$585,700	\$652,419	\$1,238,120
	12/31/21	\$321,675	\$943,416	\$1,265,091
	12/31/22	\$1,266,282	\$796,569	\$2,062,851

(A) INCURRED LOSSES AND ALLOCATED LOSS ADJUSTMENT EXPENSES ARE ADJUSTED BY THE FOLLOWING FACTORS:

- 1 - UNALLOCATED LOSS ADJUSTMENT FACTORS: B.I. 1.065 P.D. 1.105
2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	B.I.	P.D.
12/31/18	1.014	1.000
12/31/19	1.035	1.001
12/31/20	1.083	1.003
12/31/21	1.280	1.012
12/31/22	1.533	1.074

(B) TRENDED LOSSES ARE EQUAL TO (2) * ((1.0 + (3)) ** N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF ACCIDENT TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
12/31/18	7/1/18	7.167
12/31/19	7/1/19	6.167
12/31/20	7/1/20	5.167
12/31/21	7/1/21	4.167
12/31/22	7/1/22	3.167

VERISK

MONTANA
PRIVATE PASSENGER TYPES
AUTOMOBILE LIABILITY INSURANCE
DETERMINATION OF LIABILITY TRENDED AGGREGATE LOSS COSTS

	ACC. YEAR ENDING	AGGREGATE LOSS COSTS
(1) AGGREGATE LOSS COSTS	12/31/18	\$2,053,363
AT CURRENT LEVEL	12/31/19	\$2,084,051
	12/31/20	\$1,875,493
	12/31/21	\$1,766,948
	12/31/22	\$1,700,116
(2) SELECTED ANNUAL PREMIUM TREND (SEE TREND EXHIBIT IN SECTION C)		-0.2%
(3) TRENDED AGGREGATE LOSS COSTS AT CURRENT LEVEL (A)	12/31/18	\$2,024,616
	12/31/19	\$2,059,042
	12/31/20	\$1,856,738
	12/31/21	\$1,752,812
	12/31/22	\$1,689,915

(A) TRENDED AGGREGATE LOSS COSTS ARE EQUAL TO (1) * ((1.0 + (2)) ** N),
WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF
WRITING TO SIX MONTHS BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF
09/01/24 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD
12/31/18	1/1/18	7.167
12/31/19	1/1/19	6.167
12/31/20	1/1/20	5.167
12/31/21	1/1/21	4.167
12/31/22	1/1/22	3.167

VERISK

MONTANA
 AUTOMOBILE PHYSICAL DAMAGE INSURANCE - PRIVATE PASSENGER TYPES (A)
 DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGES

COVERAGE	ACCIDENT YEAR ENDING	(1)	(2)	(3)	(4)	(5)
		AGGREGATE LOSS COST AT CURRENT LEVEL (B)	INCURRED LOSSES (C)	EXPERIENCE RATIO (2) / (1)	ACCIDENT YEAR WEIGHTS	NUMBER OF PAID CLAIMS
O.T.C.	12/31/18	\$1,322,328	\$1,516,467	1.147	10%	274
	12/31/19	\$1,326,944	\$1,592,241	1.200	15%	301
	12/31/20	\$1,460,152	\$1,360,158	0.932	20%	223
	12/31/21	\$1,809,866	\$2,340,270	1.293	25%	392
	12/31/22	\$1,608,470	\$1,859,036	1.156	30%	337
COLL.	12/31/18	\$1,045,041	\$1,592,980	1.524	10%	164
	12/31/19	\$1,064,575	\$1,517,749	1.426	15%	150
	12/31/20	\$1,062,959	\$1,204,671	1.133	20%	111
	12/31/21	\$995,855	\$1,345,034	1.351	25%	127
	12/31/22	\$918,058	\$890,489	0.970	30%	102

		O.T.C.	COLLISION
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3) * (4)).	1.151	1.222
(7)	EXPECTED EXPERIENCE RATIO (D).	1.059	1.107
(8)	CREDIBILITY (E).	0.40	0.40
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ((6) * (8)) + ((7) * (1.000 - (8))).	1.096	1.153
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ((9) - 1.000).	9.6%	15.3%
(11)	FILED CHANGE.	9.6%	15.3%

- (A) PRIVATE PASSENGER TYPE EXPERIENCE IS FOR VEHICLES WRITTEN IN ACCORDANCE WITH RULE 232 OF THE COMMERCIAL LINES MANUAL, DIVISION 1, AUTOMOBILE.
- (B) THE AGGREGATE LOSS COST AT CURRENT LEVEL IS CALCULATED BY EXTENDING EXPOSURES BY THE CURRENT LOSS COSTS AND ADJUSTING TO A PROSPECTIVE VVF LEVEL BY THE APPLICATION OF VVF TREND FACTORS. (SEE SUBSEQUENT PAGE).
- (C) LOSSES INCLUDE ALL LOSS ADJUSTMENT EXPENSES FOR O.T.C. AND COLL. SEE FOLLOWING PAGE.
- (D) EXPECTED EXPERIENCE RATIO IS EQUAL TO THE LOSS TREND FACTOR DIVIDED BY THE VVF TREND FACTOR, PROJECTED FOR M YEARS. THE PERIOD M IS EQUAL TO THE NUMBER OF YEARS FROM ONE YEAR BEYOND THE IMPLEMENTATION DATE OF THE LAST REVISION TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE PURPOSES OF TRENDING, SUBJECT TO A MAXIMUM OF THE N-VALUE CORRESPONDING TO THE LATEST YEAR SHOWN ON THE FOLLOWING PAGE, FOOTNOTE B. IN THIS REVISION, THE PERIOD M IS 1.083 YEAR(S).
- (E) CREDIBILITY IS BASED ON A 5 YEAR TOTAL OF CLAIMS FOR O.T.C. AND A 5 YEAR TOTAL OF CLAIMS FOR COLLISION SHOWN IN COLUMN (5). THE STANDARDS FOR FULL CREDIBILITY ARE 8,500 CLAIMS FOR O.T.C. AND 3,500 CLAIMS FOR COLLISION (SEE CREDIBILITY TABLES IN SECTION C).

VERISK

MONTANA
PRIVATE PASSENGER TYPES
AUTOMOBILE PHYSICAL DAMAGE INSURANCE
DETERMINATION OF PHYSICAL DAMAGE LOSSES

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) PAID LOSSES	12/31/18	\$776,481	\$670,129
	12/31/19	\$880,725	\$708,939
	12/31/20	\$813,333	\$625,009
	12/31/21	\$1,511,119	\$780,082
	12/31/22	\$1,277,164	\$603,011
(2) DEVELOPED LOSSES AND	12/31/18	\$873,541	\$753,895
ALL LOSS ADJUSTMENT	12/31/19	\$990,816	\$797,556
EXPENSES (A)	12/31/20	\$914,085	\$702,432
	12/31/21	\$1,698,309	\$870,572
	12/31/22	\$1,456,925	\$639,719
(3) SELECTED ANNUAL LOSS TREND (SEE TREND EXHIBIT IN SECTION C)		8.0%	11.0%
(4) TRENDED LOSSES AND	12/31/18	\$1,516,467	\$1,592,980
ALL LOSS ADJUSTMENT	12/31/19	\$1,592,241	\$1,517,749
EXPENSES (B)	12/31/20	\$1,360,158	\$1,204,671
	12/31/21	\$2,340,270	\$1,345,034
	12/31/22	\$1,859,036	\$890,489

(A) PAID LOSSES ARE ADJUSTED BY THE FOLLOWING:

1 - LOSS ADJUSTMENT EXPENSE FACTORS:

O.T.C	COLL.
1.125	1.125

2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	O.T.C.	COLL.
12/31/18	1.000	1.000
12/31/19	1.000	1.000
12/31/20	0.999	0.999
12/31/21	0.999	0.992
12/31/22	1.014	0.943

(B) TRENDED LOSSES ARE EQUAL TO (2) * ((1.0 + (3)) ** N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF ACCIDENT TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/18	7/1/18	7.167	7.167
12/31/19	7/1/19	6.167	6.167
12/31/20	7/1/20	5.167	5.167
12/31/21	7/1/21	4.167	4.167
12/31/22	7/1/22	3.167	3.167

VERISK

MONTANA
PRIVATE PASSENGER TYPES
AUTOMOBILE PHYSICAL DAMAGE INSURANCE
DETERMINATION OF PHYSICAL DAMAGE TRENDED
AGGREGATE LOSS COSTS

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) AGGREGATE LOSS COSTS	12/31/18	\$1,107,477	\$965,842
AT CURRENT LEVEL	12/31/19	\$1,139,986	\$994,930
	12/31/20	\$1,285,345	\$1,004,687
	12/31/21	\$1,633,453	\$951,151
	12/31/22	\$1,487,946	\$887,013
(2) SELECTED ANNUAL VVF			
TREND (SEE TREND		2.5%	1.1%
EXHIBIT IN SECTION C)			
(3) TRENDED AGGREGATE	12/31/18	\$1,322,328	\$1,045,041
LOSS COSTS AT	12/31/19	\$1,326,944	\$1,064,575
CURRENT LEVEL (A)	12/31/20	\$1,460,152	\$1,062,959
	12/31/21	\$1,809,866	\$995,855
	12/31/22	\$1,608,470	\$918,058

(A) TRENDED AGGREGATE LOSS COSTS ARE EQUAL TO (1) * ((1.0 + (2)) ** N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF WRITING TO SIX MONTHS BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 09/01/24 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/18	1/1/18	7.167	7.167
12/31/19	1/1/19	6.167	6.167
12/31/20	1/1/20	5.167	5.167
12/31/21	1/1/21	4.167	4.167
12/31/22	1/1/22	3.167	3.167

VERISK

MONTANA
 COMMERCIAL AUTOMOBILE INSURANCE
 SINGLE LIMIT LIABILITY

DETERMINATION OF LOSS COST LEVEL CHANGES BY TERRITORY
 TRUCKS, TRACTORS, AND TRAILERS (TTT)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	EARNED CAR	\$100000	EXPER LOSS					BASE	BASE	BASE	ADV
T	YRS YR	UND	COST 5 YRS				INDEX	LOSS	LOSS	LOSS	LOSS
E	ENDED	LOSS	END	EXPER		FORM	(6) TO	COST	COST	COST	COST
R	12/31/2022	COST	12/31/2022	RATIO	CRED	RATIO	STATE	PRES	IND*	REV	CHG**
101	11973	224.51	285.09	1.270	0.25	1.250	1.006	260	308	308	18.5%
105	29071	189.96	230.94	1.216	0.40	1.232	0.992	252	294	294	16.7%
106	25309	75.95	101.60	1.338	0.25	1.267	1.020	135	162	162	20.0%
107	6024	298.83	354.52	1.186	0.20	1.232	0.992	374	436	436	16.6%
SW	72377	164.87	204.96	1.243		1.242					

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 17.6 PERCENT.

** PERCENTAGE CHANGE IN LOSS COST IS (COL 10/COL 8)

VERISK

MONTANA
 COMMERCIAL AUTOMOBILE INSURANCE
 SINGLE LIMIT LIABILITY

DETERMINATION OF LOSS COST LEVEL CHANGES BY TERRITORY
 PRIVATE PASSENGER TYPES (PPT)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
								BASE	BASE	BASE	
T	EARNED CAR	\$100000	EXPER LOSS					CLASS	CLASS	CLASS	ADV
E	YRS YR	UND	COST 5 YRS				INDEX	LOSS	LOSS	LOSS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	COST	COST	COST	COST
R	12/31/2022	COST	12/31/2022	RATIO	CRED	RATIO	STATE	PRES	IND*	REV	CHG**
101	1532	245.76	144.33	0.587	0.10	0.941	0.955	266	277	277	4.1%
105	3231	193.76	228.39	1.179	0.15	1.010	1.025	212	237	237	11.8%
106	2929	142.50	154.55	1.085	0.10	0.991	1.006	162	178	178	9.9%
107	746	361.94	328.56	0.908	0.05	0.976	0.991	389	420	420	8.0%
SW	8438	200.28	196.35	0.980		0.985					

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 9.0 PERCENT.

** PERCENTAGE CHANGE IN LOSS COST IS (COL 10/COL 8)

VERISK

MONTANA
 COMMERCIAL AUTOMOBILE INSURANCE
 PHYSICAL DAMAGE - COMPREHENSIVE

DETERMINATION OF LOSS COST LEVEL CHANGES BY TERRITORY
 TRUCKS, TRACTORS, AND TRAILERS (TTT)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	EARNED CAR	UND	EXPER LOSS	EXPER	CRED	FORM	INDEX	BASE	BASE	BASE	ADV
T	YRS YR	LOSS	COST 5 YRS	RATIO			(6) TO	CLASS	CLASS	CLASS	LOSS
E	ENDED		END				STATE	LOSS	LOSS	LOSS	LOSS
R	12/31/2022	COST	12/31/2022					COST	COST	COST	COST
R								PRES	IND*	REV	CHG**
101	8516	129.01	151.39	1.173	0.25	1.309	0.963	195	229	229	17.4%
105	19332	138.27	166.76	1.206	0.40	1.295	0.952	204	237	237	16.2%
106	12543	168.74	279.67	1.657	0.40	1.475	1.085	328	435	435	32.6%
107	4267	188.09	243.39	1.294	0.20	1.342	0.987	271	327	327	20.7%
SW	44658	149.82	202.86	1.354		1.360					

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 22.1 PERCENT.

** PERCENTAGE CHANGE IN LOSS COST IS (COL 10/COL 8)

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
PHYSICAL DAMAGE - COLLISION

DETERMINATION OF LOSS COST LEVEL CHANGES BY TERRITORY
TRUCKS, TRACTORS, AND TRAILERS (TTT)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	EARNED CAR	UND	EXPER LOSS	EXPER	CRED	FORM	INDEX	BASE	BASE	BASE	ADV
T	YRS YR	LOSS	COST 5 YRS	RATIO			(6) TO	CLASS	CLASS	CLASS	LOSS
E	ENDED	LOSS	END				STATE	LOSS	LOSS	LOSS	LOSS
R	12/31/2022	COST	12/31/2022					COST	COST	COST	COST
R								PRES	IND*	REV	CHG**
101	8608	164.49	307.19	1.868	0.35	1.761	1.029	293	405	405	38.2%
105	19977	172.62	297.96	1.726	0.60	1.717	1.004	326	439	439	34.7%
106	12294	133.22	231.97	1.741	0.35	1.717	1.004	307	414	414	34.9%
107	4514	213.22	280.97	1.318	0.25	1.608	0.940	373	471	471	26.3%
SW	45393	164.44	280.15	1.704		1.711					

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 34.3 PERCENT.

** PERCENTAGE CHANGE IN LOSS COST IS (COL 10/COL 8)

VERISK

MONTANA
 COMMERCIAL AUTOMOBILE INSURANCE
 PHYSICAL DAMAGE - COMPREHENSIVE

DETERMINATION OF LOSS COST LEVEL CHANGES BY TERRITORY
 PRIVATE PASSENGER TYPES (PPT)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	EARNED CAR	UND	EXPER LOSS	EXPER	CRED	FORM	INDEX	BASE	BASE	BASE	ADV
T	YRS YR	LOSS	COST 5 YRS	RATIO			(6) TO	CLASS	CLASS	CLASS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	LOSS	LOSS	LOSS	LOSS
R	12/31/2022	COST	12/31/2022	RATIO		RATIO	STATE	COST	COST	COST	COST
								PRES	IND*	REV	CHG**
101	1127	221.69	247.83	1.118	0.15	1.225	0.984	288	310	310	7.6%
105	2263	231.07	296.92	1.285	0.20	1.252	1.006	278	307	307	10.4%
106	1711	414.00	517.78	1.251	0.25	1.246	1.001	472	518	518	9.7%
107	474	268.68	345.70	1.287	0.10	1.248	1.002	354	389	389	9.9%
SW	5575	288.51	358.93	1.244		1.245					

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 9.6 PERCENT.

** PERCENTAGE CHANGE IN LOSS COST IS (COL 10/COL 8)

VERISK

MONTANA
COMMERCIAL AUTOMOBILE INSURANCE
PHYSICAL DAMAGE - COLLISION

DETERMINATION OF LOSS COST LEVEL CHANGES BY TERRITORY
PRIVATE PASSENGER TYPES (PPT)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
T	EARNED CAR		EXPER LOSS					BASE	BASE	BASE	ADV
E	YRS YR	UND	COST 5 YRS				INDEX	LOSS	LOSS	LOSS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	COST	COST	COST	COST
R	12/31/2022	COST	12/31/2022	RATIO	CRED	RATIO	STATE	PRES	IND*	REV	CHG**
101	1095	168.02	245.66	1.462	0.20	1.380	1.015	265	310	310	17.0%
105	1769	249.26	330.07	1.324	0.25	1.351	0.994	364	417	417	14.6%
106	753	211.13	273.41	1.295	0.15	1.350	0.993	309	354	354	14.6%
107	506	265.15	375.19	1.415	0.15	1.368	1.007	416	483	483	16.1%
SW	4123	222.67	302.84	1.360		1.359					

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 15.3 PERCENT.

** PERCENTAGE CHANGE IN LOSS COST IS (COL 10/COL 8) PERCENT.

VERISK

COMMERCIAL AUTOMOBILE LIABILITY INSURANCE
MULTISTATE LOSS ADJUSTMENT EXPENSE EXPERIENCE

Calendar Year

Development of Unallocated Loss Adjustment Expense Factor

		<u>Bodily Injury</u> (000's)					3 YR. <u>AVG</u>	5 YR. <u>AVG</u>
	<u>ITEM</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>		
(1)	Direct Losses Incurred	7,654,798	8,320,652	9,035,311	9,595,965	9,310,024		
(2)	Allocated Loss Adjustment Expenses Incurred	815,413	817,565	931,597	1,024,716	1,155,067		
(3)	Unallocated Loss Adjustment Expense Incurred	610,792	635,032	651,984	644,310	494,093		
(4)	Unallocated LAE as a Ratio to Losses + Allocated LAE (3)/[(1)+(2)]	7.2%	6.9%	6.5%	6.1%	4.7%	5.8%	6.3%
(5)	Selected Factor							6.5%

		<u>Property Damage</u> (000's)					3 YR. <u>AVG</u>	5 YR. <u>AVG</u>
	<u>ITEM</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>		
(1)	Direct Losses Incurred	1,375,898	1,573,076	1,541,286	1,035,696	1,393,223		
(2)	Allocated Loss Adjustment Expenses Incurred	72,662	93,266	84,944	42,405	67,250		
(3)	Unallocated Loss Adjustment Expense Incurred	176,501	179,938	159,014	151,025	139,662		
(4)	Unallocated LAE as a Ratio to Losses + Allocated LAE (3)/[(1)+(2)]	12.2%	10.8%	9.8%	14.0%	9.6%	11.1%	11.3%
(5)	Selected Factor							10.5%

All items are from Special Call Submission for available writers.

VERISK

COMMERCIAL AUTOMOBILE PHYSICAL DAMAGE INSURANCE
MULTISTATE LOSS ADJUSTMENT EXPENSE EXPERIENCE

Calendar Year

Development of Factor to Include all Loss Adjustment Expenses

		(000's)					3 YR. <u>AVG</u>	5 YR. <u>AVG</u>
(1)	<u>ITEM</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>		
	Direct Losses Incurred	5,440,605	5,512,801	5,741,885	5,199,307	6,427,285		
(2)	Loss Adjustment Expenses Incurred	701,565	713,364	735,418	662,147	754,274		
(3)	Losses + LAE Incurred as Ratio to Losses Incurred [(1)+(2)]/(1)	1.129	1.129	1.128	1.127	1.117	1.124	1.126
(4)	Selected							1.125

Items (1) and (2) are from the Insurance Expense Exhibits for agency and direct writers.

VERISK

COMMERCIAL AUTO LIABILITY
 DETERMINATION OF FACTORS TO ADJUST ACCIDENT YEAR
 LOSS RATIOS FOR SUBSEQUENT CHANGES

AVERAGE PAID CLAIM COST DATA

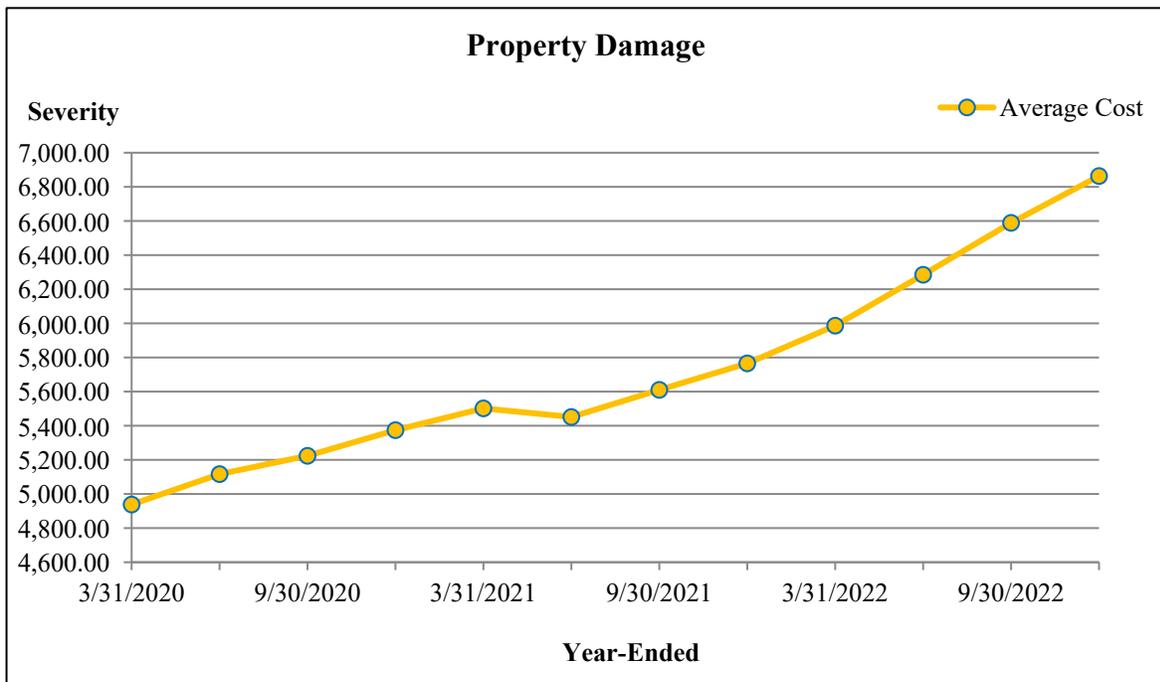
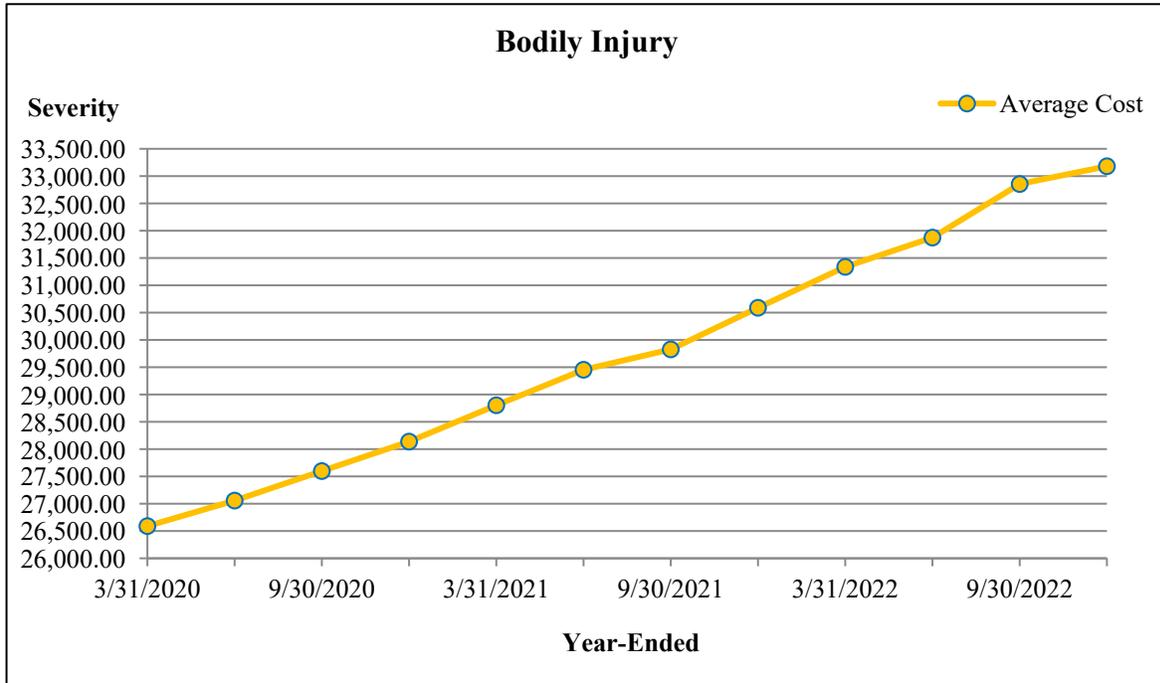
YEAR ENDED	MONTANA				MULTISTATE*			
	BODILY INJURY (\$100000 LIMITS)		PROPERTY DAMAGE (\$100000 LIMITS)		BODILY INJURY (\$100000 LIMITS)		PROPERTY DAMAGE (\$100000 LIMITS)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	EXPONENTIAL		EXPONENTIAL		EXPONENTIAL		EXPONENTIAL	
ACTUAL	FIT	ACTUAL	FIT	ACTUAL	FIT	ACTUAL	FIT	
3/31/2020	36505.72	37029.73	5421.21	5193.29	26589.58	26501.47	4938.06	4894.47
6/30/2020	37083.42	36423.10	5479.55	5312.83	27057.21	27056.06	5116.28	5031.57
9/30/2020	32246.96	35826.41	5689.95	5435.13	27597.87	27622.25	5223.64	5172.52
12/31/2020	36010.76	35239.49	5675.00	5560.24	28137.56	28200.29	5373.91	5317.42
3/31/2021	36357.40	34662.19	5353.88	5688.23	28803.01	28790.43	5501.68	5466.37
6/30/2021	38570.69	34094.34	5307.16	5819.17	29453.20	29392.92	5451.21	5619.50
9/30/2021	35063.97	33535.80	5641.68	5953.12	29826.40	30008.01	5610.10	5776.92
12/31/2021	33299.52	32986.41	5790.07	6090.15	30588.83	30635.98	5765.37	5938.74
3/31/2022	28715.55	32446.01	6085.94	6230.34	31337.64	31277.09	5986.36	6105.10
6/30/2022	27556.07	31914.48	6826.71	6373.76	31874.18	31931.61	6284.77	6276.12
9/30/2022	33882.07	31391.64	6673.55	6520.48	32854.75	32599.83	6588.94	6451.93
12/31/2022	32376.53	30877.38	7001.60	6670.57	33180.70	33282.04	6863.32	6632.67

		BODILY INJURY	PROPERTY DAMAGE
(9)	AVERAGE ANNUAL PERCENT CHANGE IN PAID CLAIM COST (12TH POINT / 8TH POINT)		
	(A) MONTANA	-6.4%	9.5%
	(B) MULTISTATE	8.6%	11.7%
(10)	CREDIBILITY	0.00	0.05
(11)	WEIGHTED AVERAGE ANNUAL PERCENT CHANGE IN PAID CLAIM COSTS {(10) * (9A)} + {(1.0 - (10)) * (9B)}	8.6%	11.6%
(12)	SELECTED ANNUAL PERCENT CHANGE IN CLAIM FREQUENCY	0.0%	0.0%
(13)	AVERAGE ANNUAL PERCENT CHANGE IN LIABILITY LOSS RATIO (11) * (12)	8.6%	11.6%

* EXCLUDES MASSACHUSETTS

VERISK

Commercial Automobile Liability
Average Paid Claim Cost Experience
Multistate*



*Excludes Massachusetts

VERISK

COMMERCIAL AUTO LIABILITY
INCURRED CLAIM FREQUENCY

MULTISTATE*

TRUCKS, TRACTORS, AND TRAILERS

<u>YEAR</u> <u>ENDING</u>	<u>BODILY INJURY</u> <u>ACTUAL</u>	<u>BODILY INJURY</u> <u>ACTUAL CHANGE@</u>	<u>PROPERTY DAMAGE</u> <u>ACTUAL</u>	<u>PROPERTY DAMAGE</u> <u>ACTUAL CHANGE@</u>
12/31/2016	0.7703		2.6939	
3/31/2017	0.7740		2.6772	
6/30/2017	0.7860		2.6747	
9/30/2017	0.7880		2.6508	
12/31/2017	0.7911	2.7% &	2.6566	-1.4% &
3/31/2018	0.7966		2.6735	
6/30/2018	0.7949		2.6876	
9/30/2018	0.7948	0.9%	2.6953	1.7%
12/31/2018	0.7935		2.6986	
3/31/2019	0.7905		2.6935	
6/30/2019	0.7834		2.6600	
9/30/2019	0.7827	-1.5%	2.6521	-1.6%
12/31/2019	0.7763		2.6269	
3/31/2020	0.7479		2.5158	
6/30/2020	0.6702		2.2745	
9/30/2020	0.6242	-20.3%	2.1119	-20.4%
12/31/2020	0.5789		1.9742	
3/31/2021	0.5636		1.9256	
6/30/2021	0.6035		2.0337	
9/30/2021	0.6022	-3.5%	2.0374	-3.5%
12/31/2021	0.6003		2.0271	
3/31/2022	0.6078		2.0388	
6/30/2022	0.6015		2.0222	
9/30/2022	0.6009	-0.2%	1.9969	-2.0%

* EXCLUDES MASSACHUSETTS

@ CHANGE BASED ON YEARS ENDING 9/30/XXXX

& CHANGE BASED ON YEAR ENDING 12/31/2017 divided by 12/31/2016

VERISK

COMMERCIAL AUTO LIABILITY
INCURRED CLAIM FREQUENCY

MULTISTATE*

PRIVATE PASSENGER TYPES

<u>YEAR</u> <u>ENDING</u>	<u>BODILY INJURY</u> <u>ACTUAL</u>	<u>BODILY INJURY</u> <u>ACTUAL CHANGE@</u>	<u>PROPERTY DAMAGE</u> <u>ACTUAL</u>	<u>PROPERTY DAMAGE</u> <u>ACTUAL CHANGE@</u>
12/31/2016	0.7868		2.9292	
3/31/2017	0.7774		2.8643	
6/30/2017	0.7851		2.8427	
9/30/2017	0.7707		2.7589	
12/31/2017	0.7758	-1.4% &	2.7528	-6.0% &
3/31/2018	0.7944		2.7798	
6/30/2018	0.7942		2.7214	
9/30/2018	0.7820	1.5%	2.7129	-1.7%
12/31/2018	0.7783		2.6612	
3/31/2019	0.7596		2.6117	
6/30/2019	0.7429		2.5920	
9/30/2019	0.7300	-6.6%	2.5435	-6.2%
12/31/2019	0.7231		2.4892	
3/31/2020	0.6878		2.3825	
6/30/2020	0.5929		2.0712	
9/30/2020	0.5494	-24.7%	1.8685	-26.5%
12/31/2020	0.4806		1.6452	
3/31/2021	0.4687		1.5327	
6/30/2021	0.5350		1.6935	
9/30/2021	0.5578	1.5%	1.7242	-7.7%
12/31/2021	0.5625		1.7768	
3/31/2022	0.5592		1.8088	
6/30/2022	0.5500		1.8037	
9/30/2022	0.5355	-4.0%	1.8137	5.2%

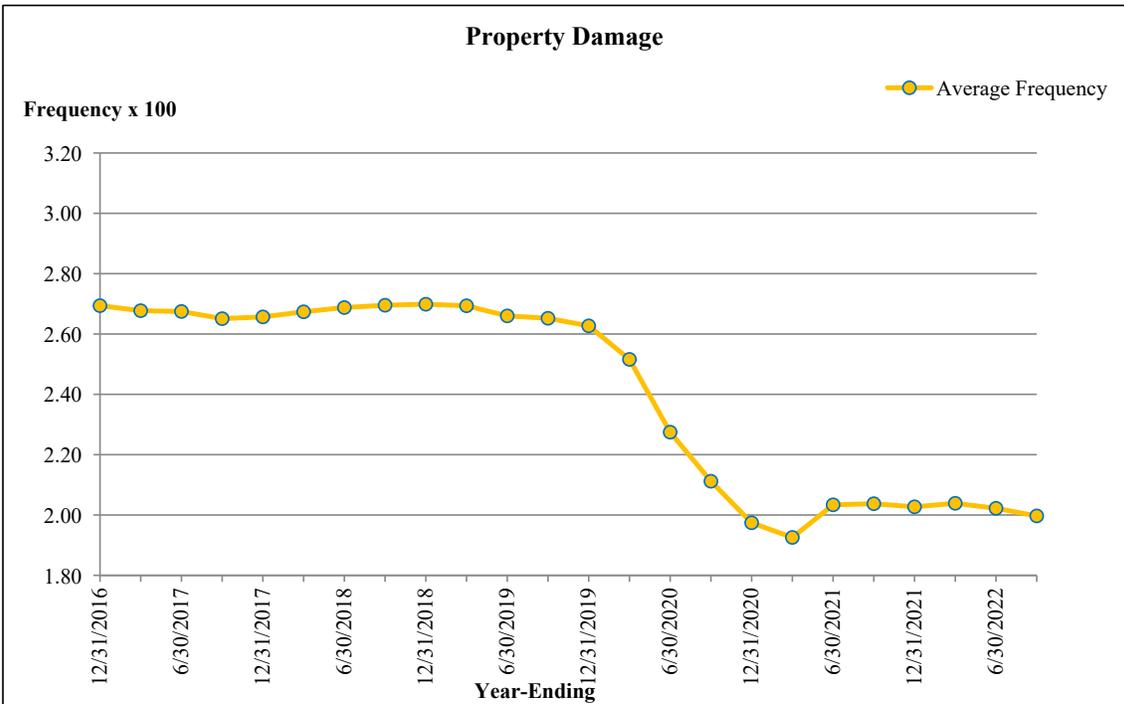
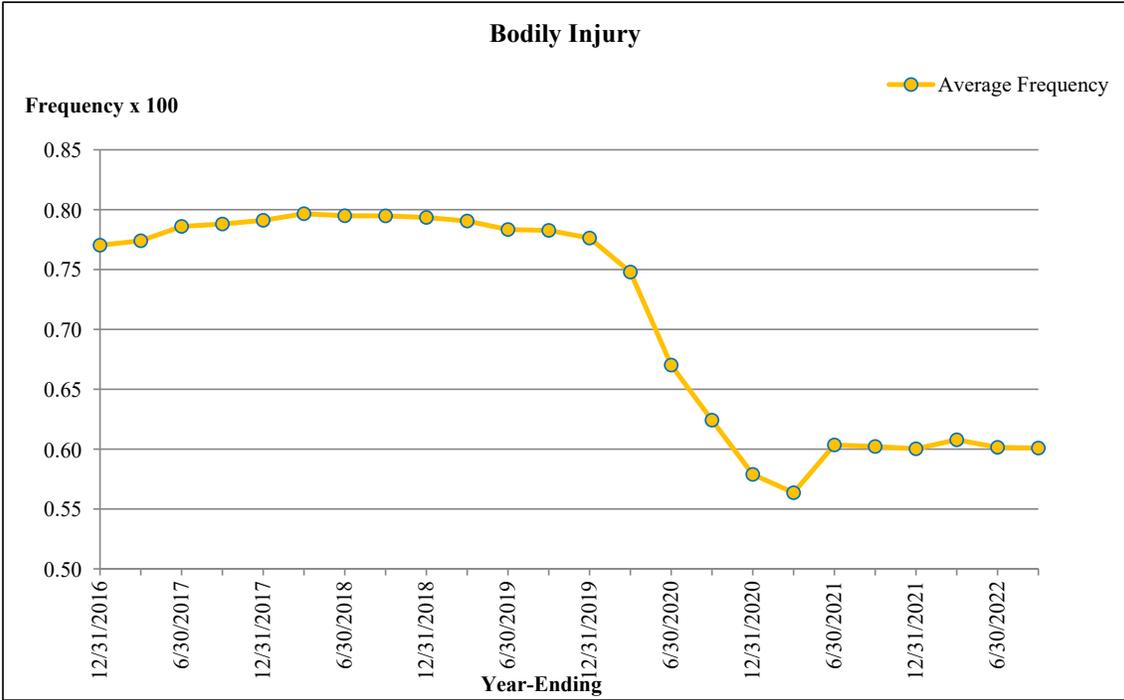
* EXCLUDES MASSACHUSETTS

@ CHANGE BASED ON YEARS ENDING 9/30/XXXX

& CHANGE BASED ON YEAR ENDING 12/31/2017 divided by 12/31/2016

VERISK

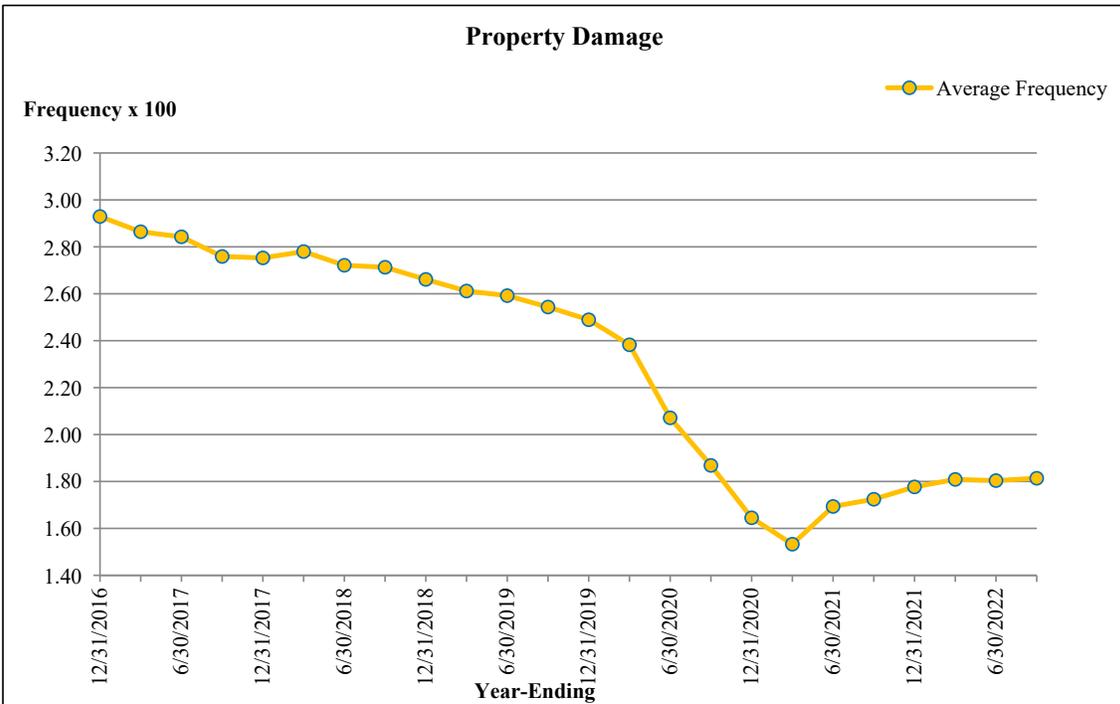
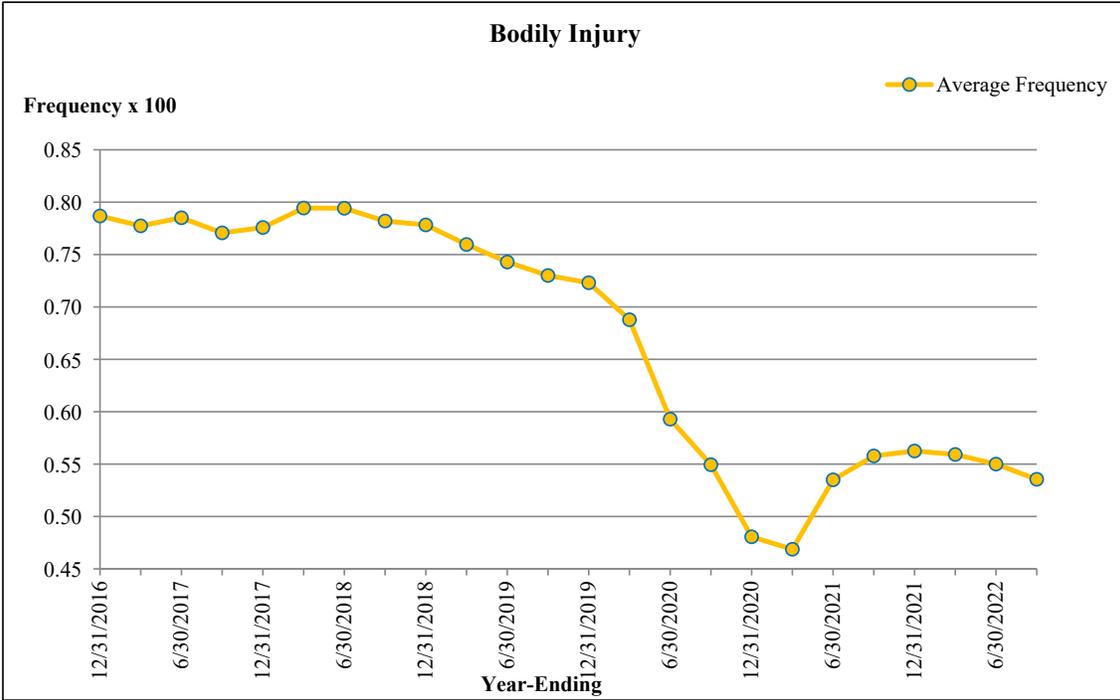
Commercial Automobile Liability
 Incurred Claim Frequency Experience
 Trucks, Tractors, and Trailers
 Multistate*



*Excludes Massachusetts

VERISK

Commercial Automobile Liability
 Incurred Claim Frequency Experience
 Private Passenger Types
 Multistate*



*Excludes Massachusetts

VERISK

Multistate*
Trucks, Tractors & Trailers
Liability
Premium Trend Calculation

Companies Not Reporting Age Code X Data

Year Ending:	Average Rating Factor
--------------	-----------------------

6/30/2020	1.068
12/31/2020	1.068
6/30/2021	1.065
12/31/2021	1.060
6/30/2022	1.056
12/31/2022	1.049

Exponential Trend (Average Annual Change)

6 Points	-0.7%
5 Points	-0.9%
4 Points	-1.0%

* Excludes Massachusetts

VERISK

Multistate*
Trucks, Tractors & Trailers
Liability
Premium Trend Calculation

All Companies
Excluding 11th Preceding Model Year and Older Data

Year Ending:	Average Rating Factor
6/30/2018	1.097
12/31/2018	1.104
6/30/2019	1.110
12/31/2019	1.115
6/30/2020	1.119
12/31/2020	1.120
6/30/2021	1.121
12/31/2021	1.121
6/30/2022	1.123
12/31/2022	1.125

Exponential Trend (Average Annual Change)

9 Points	0.4%
7 Points	0.3%
5 Points	0.2%

Selected Annual Premium Trend: **0.0%**

* Excludes Massachusetts

VERISK

Multistate*
Private Passenger Types
Liability
Premium Trend Calculation

Companies Not Reporting Age Code X Data

Year Ending:	Average Rating Factor
6/30/2019	0.992
12/31/2019	0.991
6/30/2020	0.991
12/31/2020	0.990
6/30/2021	0.989
12/31/2021	0.989
6/30/2022	0.989
12/31/2022	0.985

Exponential Trend (Average Annual Change)

8 Points	-0.2%
6 Points	-0.2%
4 Points	-0.3%

* Excludes Massachusetts

VERISK

Multistate*
Private Passenger Types
Liability
Premium Trend Calculation

All Companies
Excluding 11th Preceding Model Year and Older Data

Year Ending:	Average Rating Factor
6/30/2018	1.000
12/31/2018	1.001
6/30/2019	1.002
12/31/2019	1.002
6/30/2020	1.003
12/31/2020	1.003
6/30/2021	1.002
12/31/2021	1.000
6/30/2022	0.999
12/31/2022	0.998

Exponential Trend (Average Annual Change)

9 Points	-0.1%
7 Points	-0.2%
5 Points	-0.3%

Selected Annual Premium Trend: **-0.2%**

* Excludes Massachusetts

VERISK

Multistate*
Trucks, Tractors & Trailers Physical Damage
Other Than Collision

Frequency (expressed as claims per 100 exposures)

Year Ending:	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
	Value	Change**	Value	Change**	Value	Change**
3/31/2018	1.23		0.77		0.58	
6/30/2018	1.27		0.79		0.59	
9/30/2018	1.30		0.81		0.60	
12/31/2018	1.35		0.83		0.62	
3/31/2019	1.38		0.85		0.63	
6/30/2019	1.41	11.0%	0.86	8.9%	0.63	6.8%
9/30/2019	1.43		0.87		0.64	
12/31/2019	1.43	5.9%	0.86	3.6%	0.63	1.6%
3/31/2020	1.41		0.85		0.63	
6/30/2020	1.37	-2.8%	0.84	-2.3%	0.61	-3.2%
9/30/2020	1.37		0.84		0.61	
12/31/2020	1.37	-4.2%	0.85	-1.2%	0.61	-3.2%
3/31/2021	1.43		0.87		0.62	
6/30/2021	1.49	8.8%	0.89	6.0%	0.63	3.3%
9/30/2021	1.50		0.90		0.63	
12/31/2021	1.51	10.2%	0.90	5.9%	0.63	3.3%
3/31/2022	1.53		0.90		0.64	
6/30/2022	1.52	2.0%	0.90	1.1%	0.65	3.2%
9/30/2022	1.53		0.91		0.66	
12/31/2022	1.51	0.0%	0.90	0.0%	0.65	3.2%

Volume*** of losses for the most recent year by deductible:

Deductible:	Percent of Losses
Full	0.2%
\$50	0.5%
\$100	2.1%
\$200	0.1%
\$250	6.7%
\$500	28.1%
\$1,000	52.2%
\$2,000	6.0%
\$3,000	1.2%
\$5,000	2.9%

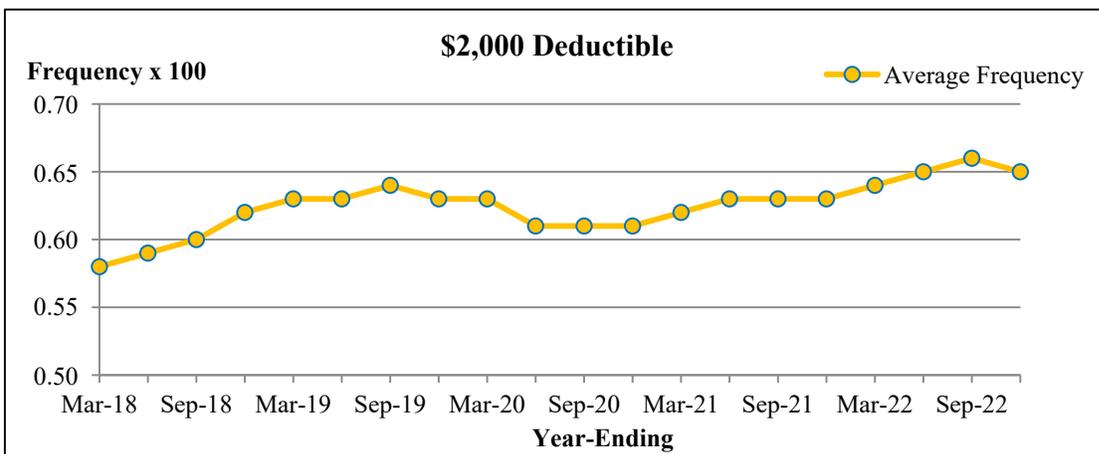
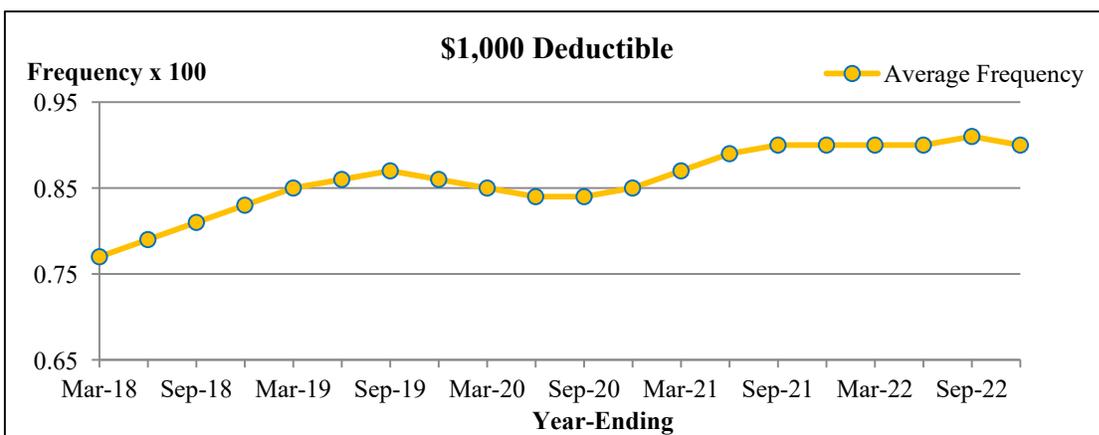
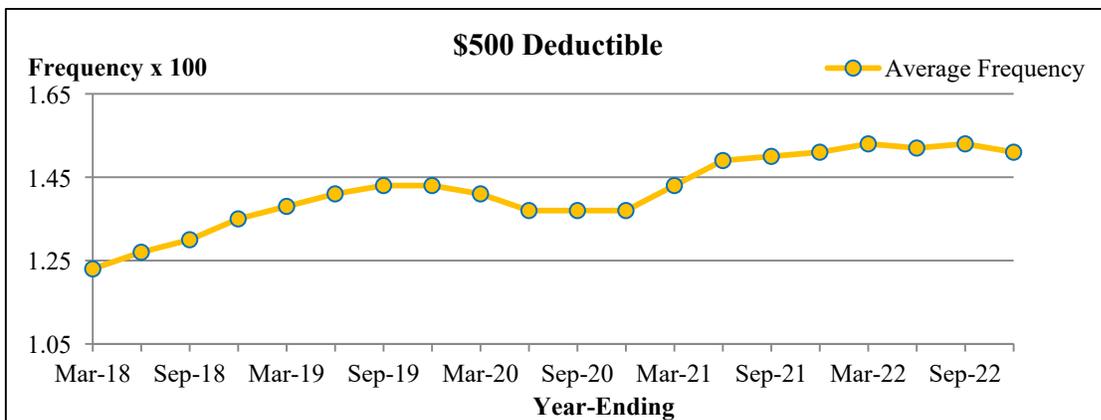
* Multistate data excludes Massachusetts

** Change based on years ending 06/30/xxx and 12/31/xxxx

*** Deductibles above \$2,000, totaling 4.1% of losses, are excluded from the trend calculations.

VERISK

Commercial Automobile
Trucks, Tractors & Trailers Physical Damage
Other Than Collision Frequency Trend
Multistate*



*Excludes Massachusetts

Selected Other Than Collision Frequency Trend Factor: 0.0%

VERISK

Multistate*
Trucks, Tractors & Trailers Physical Damage
Other Than Collision

Severity Trend

	\$500 Deductible	\$1,000 Deductible	\$2,000 Deductible
Year Ending:	Value	Value	Value
3/31/2018	2,640.83	3,986.02	4,672.54
6/30/2018	2,651.17	4,079.11	4,856.43
9/30/2018	2,624.75	4,056.79	4,863.44
12/31/2018	2,708.20	4,238.11	5,105.09
3/31/2019	2,718.65	4,272.74	5,169.61
6/30/2019	2,751.38	4,311.77	5,191.78
9/30/2019	2,781.52	4,394.45	5,267.87
12/31/2019	2,762.98	4,447.51	5,377.06
3/31/2020	2,799.75	4,418.30	5,298.93
6/30/2020	2,835.14	4,461.96	5,379.18
9/30/2020	2,815.93	4,449.59	5,360.68
12/31/2020	2,913.77	4,505.89	5,417.78
3/31/2021	2,974.75	4,596.12	5,603.70
6/30/2021	3,051.08	4,656.88	5,670.18
9/30/2021	3,281.77	4,864.96	5,971.23
12/31/2021	3,396.17	5,058.97	6,206.80
3/31/2022	3,509.83	5,270.21	6,402.83
6/30/2022	3,574.39	5,382.22	6,532.96
9/30/2022	3,551.01	5,469.20	6,642.38
12/31/2022	3,653.08	5,516.57	6,724.08

Average Annual Change Using Exponential Fits:

20 point fit:	7.6%	6.8%	7.4%
16 point fit:	9.2%	7.5%	7.9%
12 point fit:	11.9%	9.9%	10.4%

Selected severity trend:	8.5%
Selected frequency trend:	0.0%
Selected pure premium trend:	8.5%

* Multistate data excludes Massachusetts

VERISK

Multistate*
Trucks, Tractors & Trailers Physical Damage
Collision

Frequency (expressed as claims per 100 exposures)

Year Ending:	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
	Value	Change**	Value	Change**	Value	Change**
3/31/2018	2.22		1.97		1.62	
6/30/2018	2.23		2.00		1.65	
9/30/2018	2.26		2.02		1.67	
12/31/2018	2.27		2.03		1.67	
3/31/2019	2.27		2.03		1.67	
6/30/2019	2.28	2.2%	2.03	1.5%	1.67	1.2%
9/30/2019	2.28		2.03		1.67	
12/31/2019	2.28	0.4%	2.04	0.5%	1.68	0.6%
3/31/2020	2.18		1.94		1.61	
6/30/2020	2.04	-10.5%	1.80	-11.3%	1.49	-10.8%
9/30/2020	1.96		1.72		1.43	
12/31/2020	1.88	-17.5%	1.65	-19.1%	1.38	-17.9%
3/31/2021	1.92		1.67		1.41	
6/30/2021	2.02	-1.0%	1.78	-1.1%	1.49	0.0%
9/30/2021	2.05		1.83		1.54	
12/31/2021	2.08	10.6%	1.86	12.7%	1.58	14.5%
3/31/2022	2.09		1.90		1.61	
6/30/2022	2.09	3.5%	1.91	7.3%	1.63	9.4%
9/30/2022	2.09		1.90		1.64	
12/31/2022	2.08	0.0%	1.90	2.2%	1.65	4.4%

Volume*** of losses for the most recent year by deductible:

Deductible:	Percent of Losses
\$100	0.0%
\$200	0.0%
\$250	0.8%
\$500	27.4%
\$1,000	58.5%
\$2,000	7.6%
\$3,000	2.1%
\$5,000	3.6%

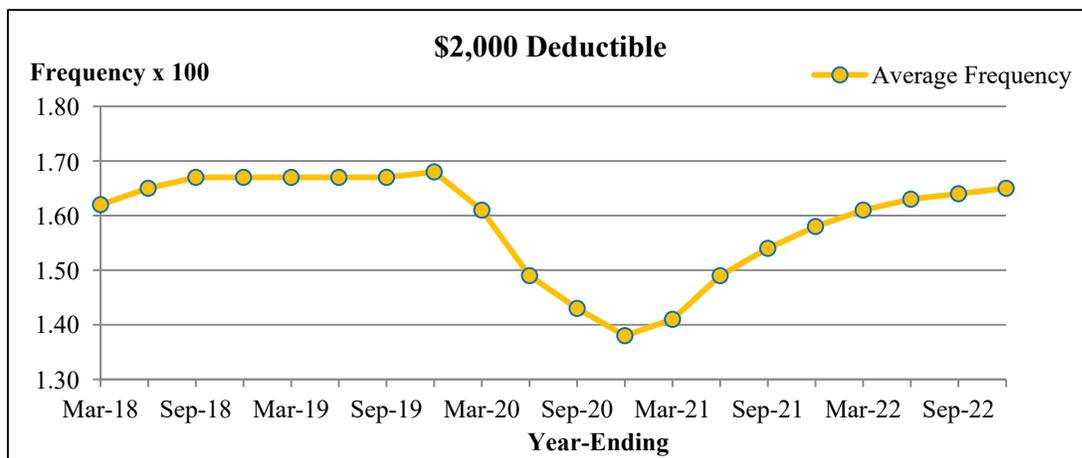
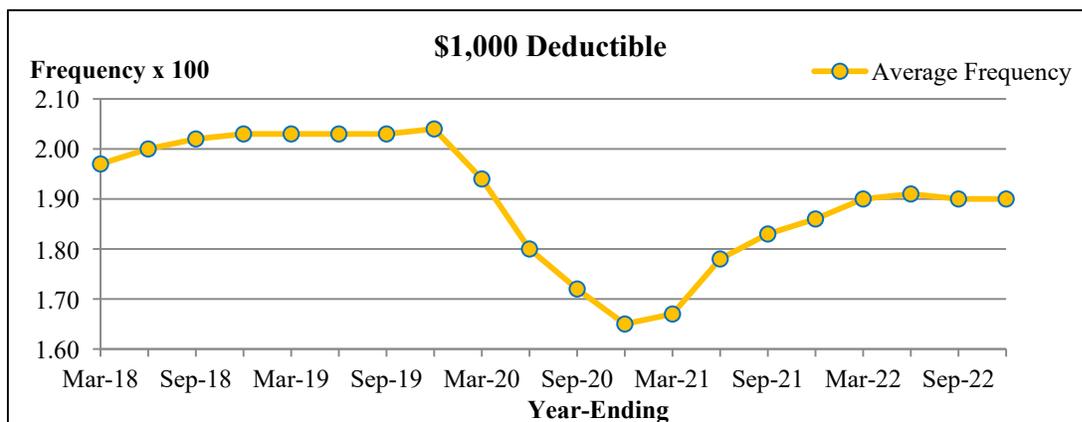
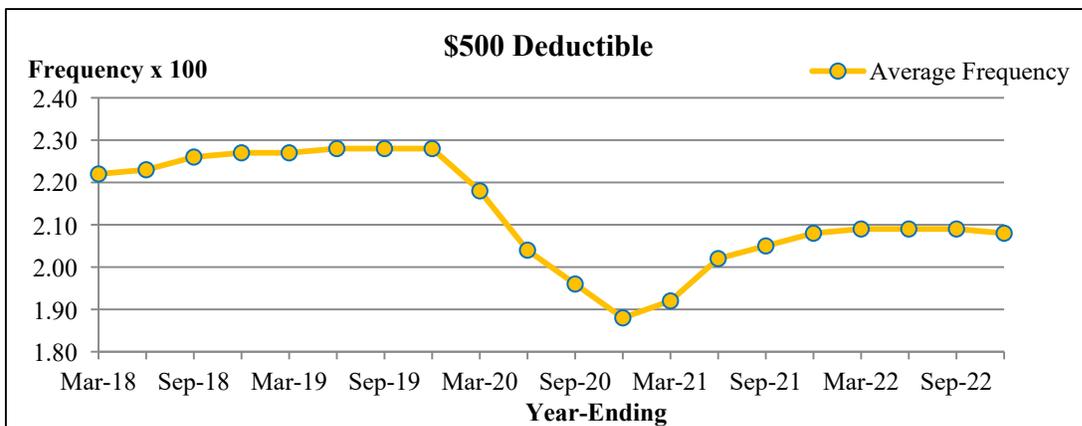
* Multistate data excludes Massachusetts

** Change based on years ending 06/30/xxx and 12/31/xxxx

*** Deductibles above \$2,000, totaling 5.7% of losses, are excluded from trend calculations.

VERISK

Commercial Automobile
Trucks, Tractors & Trailers Physical Damage
Collision Frequency Trend
Multistate*



*Excludes Massachusetts
Selected Collision Frequency Trend Factor: 0.0%

VERISK

Multistate*
Trucks, Tractors & Trailers Physical Damage
Collision

Severity Trend

	\$500 Deductible	\$1,000 Deductible	\$2,000 Deductible
Year Ending:	Value	Value	Value
3/31/2018	5,394.13	6,146.80	6,527.43
6/30/2018	5,460.69	6,209.78	6,608.20
9/30/2018	5,547.32	6,304.38	6,693.83
12/31/2018	5,573.01	6,377.86	6,786.58
3/31/2019	5,652.61	6,456.72	6,907.08
6/30/2019	5,732.38	6,592.33	7,055.79
9/30/2019	5,735.84	6,610.42	7,090.05
12/31/2019	5,791.97	6,669.61	7,154.86
3/31/2020	5,822.31	6,757.99	7,247.68
6/30/2020	5,833.89	6,781.05	7,253.62
9/30/2020	5,868.21	6,928.21	7,399.92
12/31/2020	5,973.42	7,086.94	7,574.81
3/31/2021	6,104.76	7,213.28	7,671.66
6/30/2021	6,330.03	7,446.00	7,936.01
9/30/2021	6,664.56	7,743.95	8,269.00
12/31/2021	7,074.00	8,164.42	8,717.78
3/31/2022	7,452.01	8,573.81	9,181.32
6/30/2022	7,870.23	8,920.41	9,563.66
9/30/2022	8,256.57	9,341.04	9,992.63
12/31/2022	8,561.41	9,645.37	10,231.07

Average Annual Change Using Exponential Fits:

20 point fit:	9.3%	9.4%	9.5%
16 point fit:	11.8%	11.4%	11.3%
12 point fit:	16.7%	14.9%	14.8%

Selected severity trend:	11.5%
Selected frequency trend:	0.0%
Selected pure premium trend:	11.5%

* Multistate data excludes Massachusetts

VERISK

Multistate*
Private Passenger Types Physical Damage
Other Than Collision

Frequency (expressed as claims per 100 exposures)

Year Ending:	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
	Value	Change**	Value	Change**	Value	Change**
3/31/2018	2.99		1.87		1.22	
6/30/2018	3.10		1.92		1.25	
9/30/2018	3.11		1.93		1.24	
12/31/2018	3.19		1.96		1.26	
3/31/2019	3.31		2.03		1.30	
6/30/2019	3.38	9.0%	2.10	9.4%	1.35	8.0%
9/30/2019	3.43		2.14		1.37	
12/31/2019	3.44	7.8%	2.14	9.2%	1.36	7.9%
3/31/2020	3.32		2.07		1.33	
6/30/2020	3.05	-9.8%	1.91	-9.0%	1.23	-8.9%
9/30/2020	2.98		1.89		1.24	
12/31/2020	2.89	-16.0%	1.84	-14.0%	1.20	-11.8%
3/31/2021	2.99		1.89		1.21	
6/30/2021	3.32	8.9%	2.07	8.4%	1.30	5.7%
9/30/2021	3.44		2.14		1.34	
12/31/2021	3.54	22.5%	2.19	19.0%	1.37	14.2%
3/31/2022	3.63		2.25		1.40	
6/30/2022	3.61	8.7%	2.27	9.7%	1.43	10.0%
9/30/2022	3.62		2.28		1.43	
12/31/2022	3.57	0.8%	2.26	3.2%	1.43	4.4%

Volume*** of losses for the most recent year by deductible:

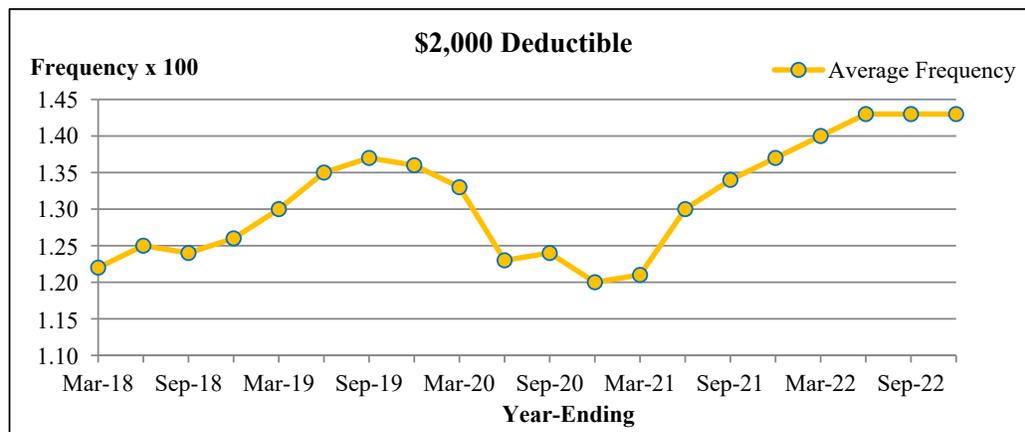
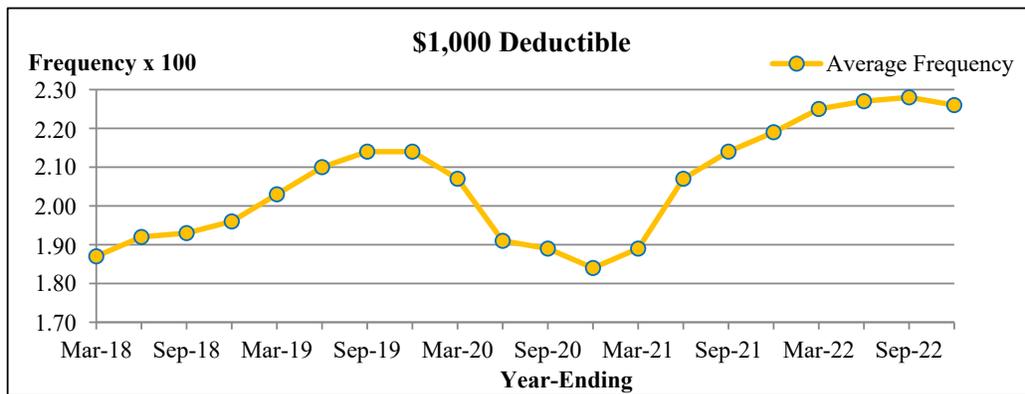
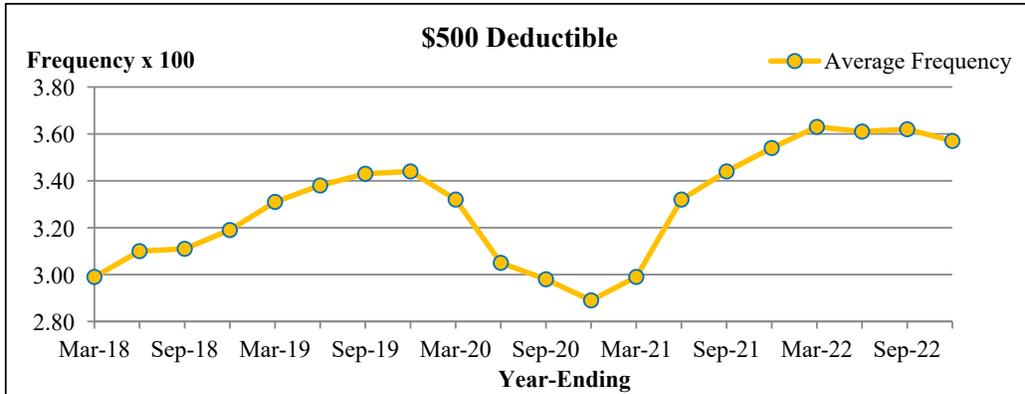
Deductible:	Percent of Losses
Full	0.3%
\$50	0.1%
\$100	1.8%
\$200	0.4%
\$250	11.3%
\$500	39.7%
\$1,000	44.1%
\$2,000	1.8%
\$3,000	0.1%
\$5,000	0.3%

* Multistate data excludes Massachusetts

** Change based on years ending 06/30/xxx and 12/31/xxxx

VERISK

Commercial Automobile
Private Passenger Types Physical Damage
Other Than Collision Frequency Trend
Multistate*



*Excludes Massachusetts
Selected Other Than Collision Frequency Trend Factor: 0.0%

VERISK

Multistate*
Private Passenger Types Physical Damage
Other Than Collision

Severity Trend

	\$500 Deductible	\$1,000 Deductible	\$2,000 Deductible
Year Ending:	Value	Value	Value
3/31/2018	1,883.98	2,449.38	3,035.01
6/30/2018	1,901.02	2,471.81	3,063.31
9/30/2018	1,814.33	2,359.69	2,888.99
12/31/2018	1,861.52	2,435.78	3,013.54
3/31/2019	1,888.85	2,474.26	3,061.21
6/30/2019	1,911.32	2,517.05	3,089.33
9/30/2019	1,912.60	2,554.98	3,128.69
12/31/2019	1,907.02	2,564.25	3,125.36
3/31/2020	1,956.99	2,650.42	3,216.97
6/30/2020	2,026.54	2,683.59	3,274.17
9/30/2020	2,108.25	2,726.31	3,306.57
12/31/2020	2,195.12	2,766.08	3,355.40
3/31/2021	2,190.85	2,726.95	3,341.98
6/30/2021	2,195.30	2,785.35	3,433.31
9/30/2021	2,233.96	2,856.62	3,529.85
12/31/2021	2,292.90	2,963.81	3,716.34
3/31/2022	2,373.00	3,057.67	3,807.95
6/30/2022	2,415.86	3,077.36	3,839.89
9/30/2022	2,436.55	3,181.32	4,029.39
12/31/2022	2,537.61	3,342.55	4,220.63

Average Annual Change Using Exponential Fits:

20 point fit:	7.1%	6.6%	7.1%
16 point fit:	8.5%	7.5%	8.5%
12 point fit:	8.8%	8.3%	10.1%

Selected severity trend:	8.0%
Selected frequency trend:	0.0%
Selected pure premium trend:	8.0%

* Multistate data excludes Massachusetts

VERISK

Multistate*
Private Passenger Types Physical Damage
Collision

Frequency (expressed as claims per 100 exposures)

Year Ending:	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
	Value	Change**	Value	Change**	Value	Change**
3/31/2018	4.96		4.17		3.19	
6/30/2018	4.88		4.17		3.19	
9/30/2018	4.90		4.22		3.23	
12/31/2018	4.87		4.19		3.22	
3/31/2019	4.81		4.18		3.21	
6/30/2019	4.83	-1.0%	4.20	0.7%	3.25	1.9%
9/30/2019	4.82		4.18		3.24	
12/31/2019	4.75	-2.5%	4.18	-0.2%	3.22	0.0%
3/31/2020	4.51		3.95		3.05	
6/30/2020	3.99	-17.4%	3.46	-17.6%	2.68	-17.5%
9/30/2020	3.69		3.17		2.49	
12/31/2020	3.39	-28.6%	2.86	-31.6%	2.29	-28.9%
3/31/2021	3.30		2.79		2.25	
6/30/2021	3.64	-8.8%	3.09	-10.7%	2.50	-6.7%
9/30/2021	3.72		3.21		2.60	
12/31/2021	3.80	12.1%	3.35	17.1%	2.73	19.2%
3/31/2022	3.94		3.49		2.84	
6/30/2022	4.00	9.9%	3.58	15.9%	2.93	17.2%
9/30/2022	4.07		3.69		3.06	
12/31/2022	4.13	8.7%	3.72	11.0%	3.11	13.9%

Volume*** of losses for the most recent year by deductible:

Deductible:	Percent of Losses
\$100	0.0%
\$200	0.0%
\$250	0.9%
\$500	36.1%
\$1,000	56.9%
\$2,000	4.1%
\$3,000	0.6%
\$5,000	1.4%

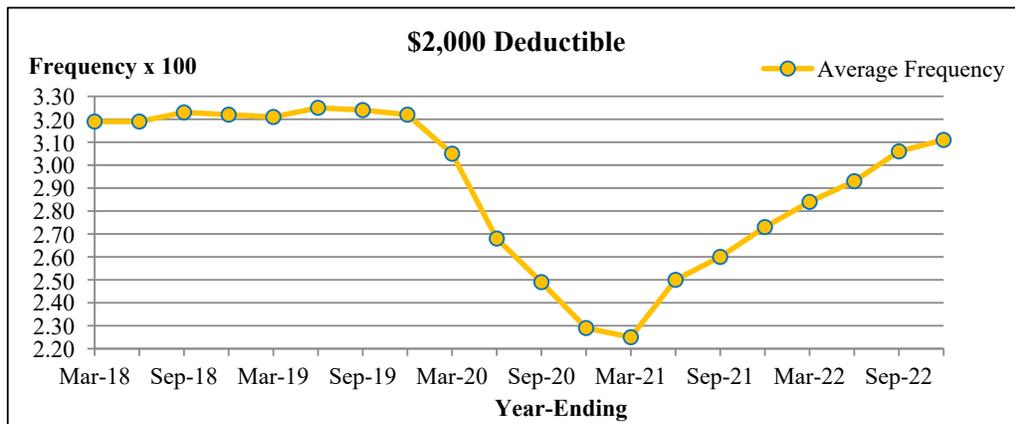
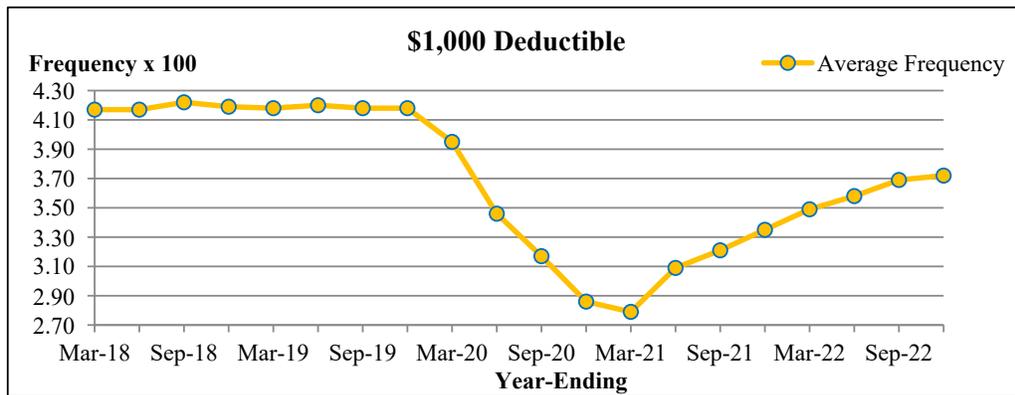
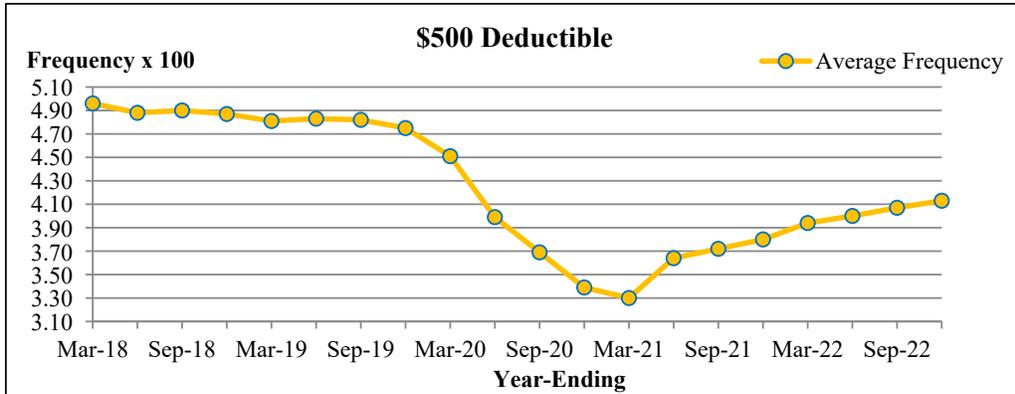
* Multistate data excludes Massachusetts

** Change based on years ending 06/30/xxx and 12/31/xxxx

*** Deductibles above \$2,000, totaling 2.0% of losses, are excluded from trend calculations.

VERISK

Commercial Automobile
Private Passenger Types Physical Damage
Collision Frequency Trend
Multistate*



*Excludes Massachusetts
Selected Collision Frequency Trend Factor: 0.0%

VERISK

Multistate*
Private Passenger Types Physical Damage
Collision

Severity Trend

	\$500 Deductible	\$1,000 Deductible	\$2,000 Deductible
Year Ending:	Value	Value	Value
3/31/2018	4,406.24	4,943.65	5,344.33
6/30/2018	4,553.50	5,036.70	5,444.92
9/30/2018	4,584.74	5,063.41	5,490.97
12/31/2018	4,541.01	5,050.94	5,460.67
3/31/2019	4,634.90	5,126.25	5,561.68
6/30/2019	4,594.19	5,128.72	5,528.23
9/30/2019	4,713.36	5,169.75	5,577.40
12/31/2019	4,881.07	5,309.18	5,761.17
3/31/2020	4,947.80	5,376.79	5,836.85
6/30/2020	5,094.48	5,462.69	5,927.82
9/30/2020	5,041.85	5,528.72	5,921.64
12/31/2020	5,074.19	5,604.63	5,911.91
3/31/2021	5,090.33	5,721.17	6,023.93
6/30/2021	5,224.82	5,923.95	6,289.24
9/30/2021	5,442.29	6,132.54	6,560.41
12/31/2021	5,804.02	6,447.80	6,930.33
3/31/2022	6,007.09	6,692.15	7,229.02
6/30/2022	6,124.52	6,920.40	7,413.16
9/30/2022	6,449.55	7,326.35	7,820.76
12/31/2022	6,603.17	7,581.90	8,068.83

Average Annual Change Using Exponential Fits:

20 point fit:	8.3%	8.9%	8.5%
16 point fit:	9.9%	11.1%	10.6%
12 point fit:	11.7%	13.8%	13.6%

Selected severity trend:	11.0%
Selected frequency trend:	0.0%
Selected pure premium trend:	11.0%

* Multistate data excludes Massachusetts

VERISK

Multistate*
Trucks, Tractors & Trailers
Physical Damage
Vehicle Value Factor Trend Calculation

Companies Not Reporting Age Code X Data

Average Vehicle Value Factor

Year Ending:	Other Than Collision	Collision
6/30/2020	0.923	0.785
12/31/2020	0.935	0.790
6/30/2021	0.933	0.788
12/31/2021	0.924	0.789
6/30/2022	0.927	0.793
12/31/2022	0.941	0.790

Exponential Trend (Average Annual Change)

6 Points	0.3%	0.2%
5 Points	0.1%	0.1%
4 Points	0.5%	0.2%

* Excludes Massachusetts

VERISK

Multistate*
Trucks, Tractors & Trailers
Physical Damage
Vehicle Value Factor Trend Calculation

All Companies
Excluding 11th Preceding Model Year and Older Data

Average Vehicle Value Factor

Year Ending:	Other Than Collision	Collision
6/30/2018	1.006	0.852
12/31/2018	1.018	0.867
6/30/2019	1.031	0.880
12/31/2019	1.042	0.889
6/30/2020	1.052	0.895
12/31/2020	1.058	0.895
6/30/2021	1.062	0.894
12/31/2021	1.066	0.896
6/30/2022	1.070	0.897
12/31/2022	1.076	0.898

Exponential Trend (Average Annual Change)

9 Points	1.3%	0.7%
7 Points	1.0%	0.2%
5 Points	0.8%	0.2%
Selected Annual VVF Trend:	0.8%	0.2%

* Excludes Massachusetts

VERISK

Multistate*
 Private Passenger Types
 Physical Damage
 Vehicle Value Factor Trend Calculation

Companies Not Reporting Age Code X Data

Average Vehicle Value Factor

Year Ending:	Other Than Collision	Collision
6/30/2019	0.959	0.853
12/31/2019	0.978	0.860
6/30/2020	0.981	0.857
12/31/2020	0.982	0.854
6/30/2021	0.986	0.860
12/31/2021	0.999	0.875
6/30/2022	1.014	0.885
12/31/2022	1.022	0.879

Exponential Trend (Average Annual Change)

8 Points	1.6%	1.0%
6 Points	1.8%	1.4%
4 Points	2.5%	1.6%

* Excludes Massachusetts

VERISK

Multistate*
Private Passenger Types
Physical Damage
Vehicle Value Factor Trend Calculation

All Companies
Excluding 11th Preceding Model Year and Older Data

Average Vehicle Value Factor

Year Ending:	Other Than Collision	Collision
6/30/2018	1.033	0.932
12/31/2018	1.046	0.937
6/30/2019	1.056	0.941
12/31/2019	1.066	0.945
6/30/2020	1.080	0.953
12/31/2020	1.094	0.958
6/30/2021	1.110	0.963
12/31/2021	1.126	0.969
6/30/2022	1.137	0.973
12/31/2022	1.147	0.977

Exponential Trend (Average Annual Change)

9 Points	2.5%	1.1%
7 Points	2.5%	1.1%
5 Points	2.4%	1.0%
Selected Annual VVF Trend:	2.5%	1.1%

* Excludes Massachusetts

VERISK

MONTANA
Automobile Liability Insurance - Trucks, Tractors and Trailers
Loss Development
Incurred Losses and Expenses
Bodily Injury

Accident Year Ending	\$100,000 Basic Limit			Loss Development Factors	
	15 Months	27 Months	39 Months	15 to 27 Months	27 to 39 Months
12/31/2011	2,095,438	2,548,544	2,462,650	1.216	0.966
12/31/2012	1,279,428	1,490,044	1,690,375	1.165	1.134
12/31/2013	1,420,808	1,821,667	1,767,926	1.282	0.970
12/31/2014	1,784,087	1,901,950	2,000,432	1.066	1.052
12/31/2015	1,649,520	2,163,739	2,322,827	1.312	1.074
12/31/2016	1,511,845	2,025,969	2,160,387	1.340	1.066
12/31/2017	1,655,349	2,138,296	2,275,859	1.292	1.064
12/31/2018	1,741,701	2,126,876	2,359,071	1.221	1.109
12/31/2019	1,894,918	2,554,989	2,580,144	1.348	1.010
12/31/2020	1,887,981	2,219,067	2,361,000	1.175	1.064
12/31/2021	2,282,294	2,458,519		1.077	
12/31/2022	1,796,853				

(1) Average Factor (Best 3 of 5) :	(A) State	1.229	1.065
	(B) Multistate	1.285	1.130
(2) Credibility		0.710	0.390
(3) Credibility Weighted Factors		1.245	1.105

Property Damage

Accident Year Ending	\$100,000 Basic Limit			Loss Development Factors	
	15 Months	27 Months	39 Months	15 to 27 Months	27 to 39 Months
12/31/2011	2,019,588	2,091,255	2,091,526	1.035	1.000
12/31/2012	2,167,133	2,200,611	2,208,218	1.015	1.003
12/31/2013	2,478,344	2,483,916	2,506,496	1.002	1.009
12/31/2014	2,138,139	2,323,447	2,340,841	1.087	1.007
12/31/2015	1,953,817	2,124,184	2,108,212	1.087	0.992
12/31/2016	2,396,270	2,410,365	2,395,827	1.006	0.994
12/31/2017	2,386,449	2,351,597	2,371,924	0.985	1.009
12/31/2018	2,818,047	2,809,285	2,814,188	0.997	1.002
12/31/2019	2,832,566	2,941,666	2,952,829	1.039	1.004
12/31/2020	2,551,798	2,560,630	2,573,293	1.003	1.005
12/31/2021	3,184,414	3,339,459		1.049	
12/31/2022	3,238,680				

(1) Average Factor (Best 3 of 5) :	(A) State	1.013	1.004
	(B) Multistate	1.051	1.010
(2) Credibility		0.850	0.000
(3) Credibility Weighted Factors		1.019	1.010

Summary of Factors

	Bodily Injury	Property Damage
39 to Ultimate **	1.082	1.006
27 to Ultimate	1.196	1.016
15 to Ultimate	1.489	1.035

** Multistate factors

VERISK

Basic Limits Loss Development
Trucks, Tractors and Trailers - Bodily Injury
Tort States
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit				
	15 Months	27 Months	39 Months	51 Months	63 Months
12/31/2011	332,931,269	409,290,992	462,597,037	480,530,812	490,034,445
12/31/2012	340,430,346	425,157,428	471,323,124	495,956,628	504,570,401
12/31/2013	352,135,729	441,518,891	491,132,101	519,822,575	526,947,708
12/31/2014	374,378,868	467,527,756	531,706,192	560,647,998	570,770,664
12/31/2015	383,164,412	496,790,556	552,624,465	578,722,633	589,703,912
12/31/2016	426,160,213	542,415,475	613,828,759	645,236,054	654,611,434
12/31/2017	442,616,108	561,986,009	633,843,592	668,138,627	682,035,409
12/31/2018	446,526,233	569,377,084	637,681,040	673,605,199	685,330,840
12/31/2019	453,205,266	590,865,440	667,258,990	714,724,504	
12/31/2020	367,812,226	471,505,818	537,759,414		
12/31/2021	416,481,282	541,212,418			
12/31/2022	464,517,986				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2011	1.229	1.130	1.039	1.020
12/31/2012	1.249	1.109	1.052	1.017
12/31/2013	1.254	1.112	1.058	1.014
12/31/2014	1.249	1.137	1.054	1.018
12/31/2015	1.297	1.112	1.047	1.019
12/31/2016	1.273	1.132	1.051	1.015
12/31/2017	1.270	1.128	1.054	1.021
12/31/2018	1.275	1.120	1.056	1.017
12/31/2019	1.304	1.129	1.071	
12/31/2020	1.282	1.141		
12/31/2021	1.299			
Average Factor: (Best 3 of 5)	1.285	1.130	1.054	1.018

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.008
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.026
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.082
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.222
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.570

VERISK

Basic Limits Loss Development
Trucks, Tractors and Trailers - Bodily Injury
Tort States
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit				
	75 Months	87 Months	99 Months	111 Months	123 Months
12/31/2011	493,999,275	494,601,857	493,726,467	493,682,097	493,728,432
12/31/2012	505,911,541	506,747,606	507,228,112	507,156,451	507,045,416
12/31/2013	530,476,122	530,959,848	530,348,859	530,320,968	530,117,658
12/31/2014	571,994,134	571,904,952	572,058,659	572,280,556	
12/31/2015	592,704,961	595,134,651	596,249,050		
12/31/2016	658,132,545	660,010,933			
12/31/2017	688,852,827				

Ratios

Accident Year Ending	75:63	87:75	99:87	111:99	123:111
12/31/2011	1.008	1.001	0.998	1.000	1.000
12/31/2012	1.003	1.002	1.001	1.000	1.000
12/31/2013	1.007	1.001	0.999	1.000	1.000
12/31/2014	1.002	1.000	1.000	1.000	
12/31/2015	1.005	1.004	1.002		
12/31/2016	1.005	1.003			
12/31/2017	1.010				
Average Factor: (Best 3 of 5)	1.006	1.002	1.000	1.000	1.000

Summary of Factors

123 to Ult:	(1.000)	=	1.000
111 to Ult:	(123:111) (123:Ult)	=	1.000
99 to Ult:	(111:99) (123:111) (123:Ult)	=	1.000
87 to Ult:	(99:87) (111:99) (123:111) (123:Ult)	=	1.000
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.002

VERISK

Basic Limits Loss Development
Trucks, Tractors and Trailers - Property Damage
Multistate
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit				
	15 Months	27 Months	39 Months	51 Months	63 Months
12/31/2011	426,724,714	441,170,199	444,166,444	445,358,337	445,203,171
12/31/2012	429,235,406	445,467,908	448,680,598	448,978,249	449,633,040
12/31/2013	448,997,291	465,630,925	470,820,411	471,891,448	473,024,370
12/31/2014	470,406,423	490,770,037	494,843,743	496,442,181	497,204,264
12/31/2015	492,360,397	514,525,331	520,350,084	521,169,240	522,470,058
12/31/2016	516,253,642	540,148,017	545,404,419	547,721,374	548,115,609
12/31/2017	524,772,053	550,971,540	556,143,525	557,434,805	557,750,195
12/31/2018	565,583,092	598,238,295	604,832,466	606,315,778	607,184,628
12/31/2019	584,196,974	609,349,611	612,890,442	618,620,629	
12/31/2020	431,846,076	451,425,730	461,129,416		
12/31/2021	514,925,361	568,007,345			
12/31/2022	611,912,906				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2011	1.034	1.007	1.003	1.000
12/31/2012	1.038	1.007	1.001	1.001
12/31/2013	1.037	1.011	1.002	1.002
12/31/2014	1.043	1.008	1.003	1.002
12/31/2015	1.045	1.011	1.002	1.002
12/31/2016	1.046	1.010	1.004	1.001
12/31/2017	1.050	1.009	1.002	1.001
12/31/2018	1.058	1.011	1.002	1.001
12/31/2019	1.043	1.006	1.009	
12/31/2020	1.045	1.021		
12/31/2021	1.103			
Average Factor: (Best 3 of 5)	1.051	1.010	1.003	1.001

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.002
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.003
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.006
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.016
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.068

VERISK

Basic Limits Loss Development
Trucks, Tractors and Trailers - Property Damage
Multistate
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit			
	75 Months	87 Months	99 Months	111 Months
12/31/2011	445,382,832	445,610,409	445,740,912	445,839,897
12/31/2012	450,497,221	450,869,975	450,937,103	451,043,984
12/31/2013	473,190,928	473,669,689	473,748,612	473,581,606
12/31/2014	497,586,427	497,378,411	497,703,382	498,366,097
12/31/2015	523,045,917	523,620,854	524,184,239	
12/31/2016	548,701,587	549,250,827		
12/31/2017	559,234,136			

Ratios

Accident Year Ending	75:63	87:75	99:87	111:99
12/31/2011	1.000	1.001	1.000	1.000
12/31/2012	1.002	1.001	1.000	1.000
12/31/2013	1.000	1.001	1.000	1.000
12/31/2014	1.001	1.000	1.001	1.001
12/31/2015	1.001	1.001	1.001	
12/31/2016	1.001	1.001		
12/31/2017	1.003			
Average Factor: (Best 3 of 5)	1.001	1.001	1.000	1.000

Summary of Factors

111 to Ult:	(1.000)	=	1.000
99 to Ult:	(111:99) (111:Ult)	=	1.000
87 to Ult:	(99:87) (111:99) (111:Ult)	=	1.000
75 to Ult:	(87:75) (99:87) (111:99) (111:Ult)	=	1.001

VERISK

MONTANA
Automobile Liability Insurance - Private Passenger Types
Loss Development
Incurred Losses and Expenses
Bodily Injury

Accident Year Ending	\$100,000 Basic Limit			Loss Development Factors	
	15 Months	27 Months	39 Months	15 to 27 Months	27 to 39 Months
12/31/2011	587,313	747,910	740,075	1.273	0.990
12/31/2012	782,808	859,050	784,797	1.097	0.914
12/31/2013	353,477	461,063	505,337	1.304	1.096
12/31/2014	515,208	468,153	633,806	0.909	1.354
12/31/2015	658,259	905,330	1,151,095	1.375	1.271
12/31/2016	367,998	627,230	898,125	1.704	1.432
12/31/2017	720,258	845,961	1,042,013	1.175	1.232
12/31/2018	792,951	903,845	1,239,202	1.140	1.371
12/31/2019	281,830	309,910	307,484	1.100	0.992
12/31/2020	242,382	233,740	372,333	0.964	1.593
12/31/2021	163,705	140,765		0.860	
12/31/2022	473,229				
(1) Average Factor (Best 3 of 5) :				(A) State 1.068	1.345
				(B) Multistate 1.256	1.122
(2) Credibility				0.310	0.270
(3) Credibility Weighted Factors				1.198	1.182

Property Damage

Accident Year Ending	\$100,000 Basic Limit			Loss Development Factors	
	15 Months	27 Months	39 Months	15 to 27 Months	27 to 39 Months
12/31/2011	495,101	482,565	483,063	0.975	1.001
12/31/2012	458,706	481,529	486,353	1.050	1.010
12/31/2013	547,086	553,440	553,440	1.012	1.000
12/31/2014	524,382	537,708	547,778	1.025	1.019
12/31/2015	424,940	441,436	443,459	1.039	1.005
12/31/2016	595,439	529,374	530,397	0.889	1.002
12/31/2017	751,674	841,522	816,032	1.120	0.970
12/31/2018	628,446	681,047	681,272	1.084	1.000
12/31/2019	563,592	577,683	577,683	1.025	1.000
12/31/2020	190,123	206,355	213,224	1.085	1.033
12/31/2021	352,374	365,708		1.038	
12/31/2022	349,648				
(1) Average Factor (Best 3 of 5) :				(A) State 1.069	1.001
				(B) Multistate 1.046	1.009
(2) Credibility				0.650	0.000
(3) Credibility Weighted Factors				1.061	1.009

Summary of Factors

	Bodily Injury	Property Damage
39 to Ultimate **	1.083	1.003
27 to Ultimate	1.280	1.012
15 to Ultimate	1.533	1.074

** Multistate factors

VERISK

Basic Limits Loss Development
Private Passenger Types - Bodily Injury
Tort States
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit				
	15 Months	27 Months	39 Months	51 Months	63 Months
12/31/2011	70,208,710	85,448,372	94,194,976	98,375,619	100,114,710
12/31/2012	67,419,988	82,606,456	88,754,262	92,140,342	93,912,234
12/31/2013	66,353,118	78,342,436	87,514,333	92,810,290	93,852,638
12/31/2014	63,030,896	75,624,140	85,458,172	89,919,658	91,920,120
12/31/2015	65,438,771	80,574,182	89,529,443	93,781,861	95,680,250
12/31/2016	67,177,612	82,301,118	92,361,351	95,701,017	97,794,912
12/31/2017	64,717,585	80,158,594	88,846,605	94,563,431	96,150,543
12/31/2018	68,139,708	83,488,666	93,837,701	97,128,443	99,453,873
12/31/2019	66,100,101	82,478,644	92,758,039	97,861,919	
12/31/2020	46,172,598	59,083,725	66,178,540		
12/31/2021	54,575,779	71,753,097			
12/31/2022	59,813,298				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2011	1.217	1.102	1.044	1.018
12/31/2012	1.225	1.074	1.038	1.019
12/31/2013	1.181	1.117	1.061	1.011
12/31/2014	1.200	1.130	1.052	1.022
12/31/2015	1.231	1.111	1.047	1.020
12/31/2016	1.225	1.122	1.036	1.022
12/31/2017	1.239	1.108	1.064	1.017
12/31/2018	1.225	1.124	1.035	1.024
12/31/2019	1.248	1.125	1.055	
12/31/2020	1.280	1.120		
12/31/2021	1.315			
Average Factor: (Best 3 of 5)	1.256	1.122	1.046	1.021

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.014
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.035
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.083
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.215
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.526

VERISK

Basic Limits Loss Development
Private Passenger Types - Bodily Injury
Tort States
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit				
	75 Months	87 Months	99 Months	111 Months	123 Months
12/31/2011	101,025,046	101,339,489	101,852,209	101,895,742	101,917,138
12/31/2012	94,331,160	94,380,078	94,550,327	94,557,998	94,560,272
12/31/2013	94,220,152	94,315,347	94,171,701	94,271,070	94,252,369
12/31/2014	92,856,168	92,979,941	93,257,166	93,458,360	
12/31/2015	95,765,151	96,157,841	96,561,159		
12/31/2016	99,160,812	99,339,567			
12/31/2017	97,538,521				

Ratios

Accident Year Ending	75:63	87:75	99:87	111:99	123:111
12/31/2011	1.009	1.003	1.005	1.000	1.000
12/31/2012	1.004	1.001	1.002	1.000	1.000
12/31/2013	1.004	1.001	0.998	1.001	1.000
12/31/2014	1.010	1.001	1.003	1.002	
12/31/2015	1.001	1.004	1.004		
12/31/2016	1.014	1.002			
12/31/2017	1.014				
Average Factor: (Best 3 of 5)	1.009	1.001	1.003	1.001	1.000

Summary of Factors

123 to Ult:	(1.000)	=	1.000
111 to Ult:	(123:111) (123:Ult)	=	1.000
99 to Ult:	(111:99) (123:111) (123:Ult)	=	1.001
87 to Ult:	(99:87) (111:99) (123:111) (123:Ult)	=	1.004
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.005

VERISK

Basic Limits Loss Development
Private Passenger Types - Property Damage
Multistate
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit				
	15 Months	27 Months	39 Months	51 Months	63 Months
12/31/2011	81,311,086	83,742,169	84,149,788	84,552,438	84,858,982
12/31/2012	81,629,522	84,571,191	85,221,660	85,417,902	85,385,517
12/31/2013	80,235,862	83,394,801	84,019,542	84,185,470	84,212,768
12/31/2014	78,543,546	82,069,473	82,370,491	82,781,457	82,788,125
12/31/2015	82,083,580	85,017,193	85,435,004	85,681,138	85,821,604
12/31/2016	86,964,596	90,309,749	90,953,867	90,885,026	91,038,338
12/31/2017	83,275,613	87,144,277	88,023,559	88,243,376	88,224,636
12/31/2018	87,578,009	91,159,285	91,975,587	92,393,129	92,694,212
12/31/2019	83,192,036	87,246,748	87,681,456	87,848,939	
12/31/2020	49,849,309	52,032,305	52,786,728		
12/31/2021	58,844,953	64,496,317			
12/31/2022	72,166,271				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2011	1.030	1.005	1.005	1.004
12/31/2012	1.036	1.008	1.002	1.000
12/31/2013	1.039	1.007	1.002	1.000
12/31/2014	1.045	1.004	1.005	1.000
12/31/2015	1.036	1.005	1.003	1.002
12/31/2016	1.038	1.007	0.999	1.002
12/31/2017	1.046	1.010	1.002	1.000
12/31/2018	1.041	1.009	1.005	1.003
12/31/2019	1.049	1.005	1.002	
12/31/2020	1.044	1.014		
12/31/2021	1.096			
Average Factor: (Best 3 of 5)	1.046	1.009	1.002	1.001

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.000
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.001
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.003
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.012
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.059

VERISK

Basic Limits Loss Development
Private Passenger Types - Property Damage
Multistate
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit			
	75 Months	87 Months	99 Months	111 Months
12/31/2011	84,943,133	85,007,864	85,007,881	85,007,881
12/31/2012	85,471,584	85,429,540	85,432,773	85,431,505
12/31/2013	84,213,702	84,223,811	84,271,520	84,267,920
12/31/2014	82,807,965	82,840,601	82,876,367	82,924,390
12/31/2015	85,820,574	85,836,793	85,947,505	
12/31/2016	91,156,654	91,336,835		
12/31/2017	88,278,523			

Ratios

Accident Year Ending	75:63	87:75	99:87	111:99
12/31/2011	1.001	1.001	1.000	1.000
12/31/2012	1.001	1.000	1.000	1.000
12/31/2013	1.000	1.000	1.001	1.000
12/31/2014	1.000	1.000	1.000	1.001
12/31/2015	1.000	1.000	1.001	
12/31/2016	1.001	1.002		
12/31/2017	1.001			
Average Factor: (Best 3 of 5)	1.000	1.000	1.000	1.000

Summary of Factors

111 to Ult:	(1.000)	=	1.000
99 to Ult:	(111:99) (111:Ult)	=	1.000
87 to Ult:	(99:87) (111:99) (111:Ult)	=	1.000
75 to Ult:	(87:75) (99:87) (111:99) (111:Ult)	=	1.000

VERISK

Physical Damage Loss Development
Trucks, Tractors and Trailers - Other than Collision
Multistate
Paid Losses

Accident Year Ending	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
12/31/2011	191,963,738	195,490,345	195,640,413	195,749,611	195,718,867
12/31/2012	222,699,468	227,835,586	227,875,753	227,966,614	228,240,157
12/31/2013	182,487,950	186,860,641	187,139,071	187,520,616	187,493,990
12/31/2014	193,729,670	198,378,502	198,593,279	198,519,252	198,490,327
12/31/2015	190,621,163	194,897,117	194,943,394	195,209,707	195,291,696
12/31/2016	244,128,558	249,077,965	249,248,339	249,440,349	249,421,164
12/31/2017	247,809,084	254,545,856	254,761,380	255,168,768	255,094,796
12/31/2018	235,272,944	241,778,337	241,632,942	241,965,060	242,718,787
12/31/2019	247,078,818	254,078,578	254,163,869	254,483,245	
12/31/2020	247,146,834	254,143,533	254,263,108		
12/31/2021	318,376,079	330,933,050			
12/31/2022	349,304,748				

Ratios

Accident Year Ending	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2011	1.018	1.001	1.001	1.000
12/31/2012	1.023	1.000	1.000	1.001
12/31/2013	1.024	1.001	1.002	1.000
12/31/2014	1.024	1.001	1.000	1.000
12/31/2015	1.022	1.000	1.001	1.000
12/31/2016	1.020	1.001	1.001	1.000
12/31/2017	1.027	1.001	1.002	1.000
12/31/2018	1.028	0.999	1.001	1.003
12/31/2019	1.028	1.000	1.001	
12/31/2020	1.028	1.000		
12/31/2021	1.039			
Average Factor: (Best 3 of 5)	1.028	1.000	1.001	1.000

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.000
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.000
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.001
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.001
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.029

VERISK

Physical Damage Loss Development
 Trucks, Tractors and Trailers - Other than Collision
 Multistate
 Paid Losses

Accident Year Ending	75 Months	87 Months	99 Months	111 Months	123 Months
12/31/2011	195,695,383	195,570,044	195,556,271	195,564,861	195,538,896
12/31/2012	228,214,288	228,277,531	228,278,213	228,287,103	228,271,473
12/31/2013	187,546,684	187,577,577	187,565,564	187,543,441	187,538,265
12/31/2014	198,473,454	198,464,070	198,462,294	198,463,042	
12/31/2015	195,208,539	195,227,766	195,226,463		
12/31/2016	249,413,907	249,382,761			
12/31/2017	255,148,981				

Ratios

Accident Year Ending	75:63	87:75	99:87	111:99	123:111
12/31/2011	1.000	0.999	1.000	1.000	1.000
12/31/2012	1.000	1.000	1.000	1.000	1.000
12/31/2013	1.000	1.000	1.000	1.000	1.000
12/31/2014	1.000	1.000	1.000	1.000	
12/31/2015	1.000	1.000	1.000		
12/31/2016	1.000	1.000			
12/31/2017	1.000				
Average Factor: (Best 3 of 5)	1.000	1.000	1.000	1.000	1.000

Summary of Factors

123 to Ult:	(1.000)	=	1.000
111 to Ult:	(123:111) (123:Ult)	=	1.000
99 to Ult:	(111:99) (123:111) (123:Ult)	=	1.000
87 to Ult:	(99:87) (111:99) (123:111) (123:Ult)	=	1.000
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.000

VERISK

Physical Damage Loss Development
Trucks, Tractors and Trailers - Collision
Multistate
Paid Losses

Accident Year Ending	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
12/31/2011	431,040,312	422,425,159	420,594,094	420,479,718	420,571,549
12/31/2012	433,994,982	427,083,000	425,983,359	425,470,779	425,501,053
12/31/2013	467,229,828	458,217,797	456,409,852	457,270,457	456,042,416
12/31/2014	523,470,287	514,349,427	511,199,873	510,768,086	510,448,846
12/31/2015	567,808,301	553,185,875	549,639,462	548,573,840	548,601,109
12/31/2016	606,497,021	591,425,999	586,392,497	585,828,417	585,751,468
12/31/2017	613,390,334	593,445,576	588,727,173	587,556,283	587,381,371
12/31/2018	627,331,255	611,466,271	606,686,482	605,891,000	605,879,468
12/31/2019	651,170,961	630,509,117	627,696,333	627,553,061	
12/31/2020	557,958,830	541,941,293	539,222,164		
12/31/2021	739,661,251	735,838,836			
12/31/2022	871,018,172				

Ratios

Accident Year Ending	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2011	0.980	0.996	1.000	1.000
12/31/2012	0.984	0.997	0.999	1.000
12/31/2013	0.981	0.996	1.002	0.997
12/31/2014	0.983	0.994	0.999	0.999
12/31/2015	0.974	0.994	0.998	1.000
12/31/2016	0.975	0.991	0.999	1.000
12/31/2017	0.967	0.992	0.998	1.000
12/31/2018	0.975	0.992	0.999	1.000
12/31/2019	0.968	0.996	1.000	
12/31/2020	0.971	0.995		
12/31/2021	0.995			
Average Factor: (Best 3 of 5)	0.971	0.993	0.999	1.000

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.000
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.000
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	0.999
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.992
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.963

VERISK

Physical Damage Loss Development
Trucks, Tractors and Trailers - Collision
Multistate
Paid Losses

Accident Year Ending	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2011	420,543,721	420,545,147	420,518,120	420,510,743	420,486,105
12/31/2012	425,465,569	425,391,934	425,122,018	425,094,483	425,073,874
12/31/2013	455,944,239	455,900,535	455,901,219	455,896,594	455,877,276
12/31/2014	510,442,457	510,445,404	510,963,823	510,942,917	
12/31/2015	548,627,941	548,488,959	548,436,197		
12/31/2016	585,706,655	585,655,909			
12/31/2017	587,285,300				

Ratios

Accident Year Ending	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
12/31/2011	1.000	1.000	1.000	1.000	1.000
12/31/2012	1.000	1.000	0.999	1.000	1.000
12/31/2013	1.000	1.000	1.000	1.000	1.000
12/31/2014	1.000	1.000	1.001	1.000	
12/31/2015	1.000	1.000	1.000		
12/31/2016	1.000	1.000			
12/31/2017	1.000				
Average Factor: (Best 3 of 5)	1.000	1.000	1.000	1.000	1.000

Summary of Factors

123 to Ult:	(1.000)	=	1.000
111 to Ult:	(123:111) (123:Ult)	=	1.000
99 to Ult:	(111:99) (123:111) (123:Ult)	=	1.000
87 to Ult:	(99:87) (111:99) (123:111) (123:Ult)	=	1.000
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.000

VERISK

Physical Damage Loss Development
 Private Passenger Types - Other than Collision
 Multistate
 Paid Losses

Accident Year Ending	15 Months	27 Months	39 Months	51 Months	63 Months
12/31/2011	76,549,750	76,589,145	76,433,301	76,475,897	76,475,099
12/31/2012	86,957,450	85,807,560	85,812,956	85,847,774	85,874,453
12/31/2013	63,266,877	63,757,874	63,970,476	64,007,206	63,996,120
12/31/2014	66,795,716	67,742,635	67,873,745	67,840,065	67,878,299
12/31/2015	58,790,911	59,491,078	59,386,508	59,368,234	59,372,820
12/31/2016	72,264,496	73,035,406	73,012,493	72,968,582	72,964,141
12/31/2017	82,320,503	82,881,385	83,065,532	82,706,899	82,805,254
12/31/2018	64,583,617	65,528,498	65,418,519	65,364,406	65,261,006
12/31/2019	66,293,028	67,714,356	67,603,481	67,585,304	
12/31/2020	61,522,688	62,066,999	62,142,172		
12/31/2021	78,212,030	80,306,732			
12/31/2022	86,459,902				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2011	1.001	0.998	1.001	1.000
12/31/2012	0.987	1.000	1.000	1.000
12/31/2013	1.008	1.003	1.001	1.000
12/31/2014	1.014	1.002	1.000	1.001
12/31/2015	1.012	0.998	1.000	1.000
12/31/2016	1.011	1.000	0.999	1.000
12/31/2017	1.007	1.002	0.996	1.001
12/31/2018	1.015	0.998	0.999	0.998
12/31/2019	1.021	0.998	1.000	
12/31/2020	1.009	1.001		
12/31/2021	1.027			
Average Factor: (Best 3 of 5)	1.015	1.000	0.999	1.000

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.000
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.000
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	0.999
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.999
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.014

VERISK

Physical Damage Loss Development
 Private Passenger Types - Other than Collision
 Multistate
 Paid Losses

Accident Year Ending	75 Months	87 Months	99 Months	111 Months	123 Months
12/31/2011	76,487,766	76,487,470	76,476,975	76,481,992	76,481,992
12/31/2012	85,918,669	85,917,183	85,889,409	85,890,636	85,875,023
12/31/2013	64,004,930	64,016,013	64,014,467	64,008,708	64,007,808
12/31/2014	67,883,071	67,884,762	67,883,413	67,882,658	
12/31/2015	59,375,368	59,435,971	59,435,427		
12/31/2016	72,964,115	72,963,731			
12/31/2017	82,813,854				

Ratios

Accident Year Ending	75:63	87:75	99:87	111:99	123:111
12/31/2011	1.000	1.000	1.000	1.000	1.000
12/31/2012	1.001	1.000	1.000	1.000	1.000
12/31/2013	1.000	1.000	1.000	1.000	1.000
12/31/2014	1.000	1.000	1.000	1.000	
12/31/2015	1.000	1.001	1.000		
12/31/2016	1.000	1.000			
12/31/2017	1.000				
Average Factor: (Best 3 of 5)	1.000	1.000	1.000	1.000	1.000

Summary of Factors

123 to Ult:	(1.000)	=	1.000
111 to Ult:	(123:111) (123:Ult)	=	1.000
99 to Ult:	(111:99) (123:111) (123:Ult)	=	1.000
87 to Ult:	(99:87) (111:99) (123:111) (123:Ult)	=	1.000
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.000

VERISK

Physical Damage Loss Development
Private Passenger Types - Collision
Multistate
Paid Losses

Accident Year <u>Ending</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
12/31/2011	170,834,124	163,321,673	162,755,781	162,556,308	162,527,556
12/31/2012	173,506,561	166,662,563	166,001,001	165,842,810	165,780,527
12/31/2013	178,131,016	170,344,335	169,201,124	169,396,425	169,362,944
12/31/2014	187,008,327	178,933,706	178,877,800	178,663,238	178,604,955
12/31/2015	198,862,515	188,775,199	187,250,790	186,822,839	186,718,743
12/31/2016	203,614,578	194,141,708	192,549,814	192,222,790	192,152,505
12/31/2017	192,415,486	183,262,354	181,770,397	181,524,943	181,453,332
12/31/2018	197,366,298	187,117,935	186,094,984	185,934,090	185,815,623
12/31/2019	207,430,315	196,801,291	196,089,925	196,001,281	
12/31/2020	150,475,850	143,090,739	142,049,364		
12/31/2021	196,216,919	189,374,469			
12/31/2022	218,619,427				

Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2011	0.956	0.997	0.999	1.000
12/31/2012	0.961	0.996	0.999	1.000
12/31/2013	0.956	0.993	1.001	1.000
12/31/2014	0.957	1.000	0.999	1.000
12/31/2015	0.949	0.992	0.998	0.999
12/31/2016	0.953	0.992	0.998	1.000
12/31/2017	0.952	0.992	0.999	1.000
12/31/2018	0.948	0.995	0.999	0.999
12/31/2019	0.949	0.996	1.000	
12/31/2020	0.951	0.993		
12/31/2021	0.965			
Average Factor: (Best 3 of 5)	0.951	0.993	0.999	1.000

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.000
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.000
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	0.999
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.992
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.943

VERISK

Physical Damage Loss Development
 Private Passenger Types - Collision
 Multistate
 Paid Losses

Accident Year Ending	75 Months	87 Months	99 Months	111 Months	123 Months
12/31/2011	162,443,284	162,427,165	162,412,639	162,397,504	162,378,834
12/31/2012	165,729,771	165,701,356	165,676,167	165,657,999	165,645,331
12/31/2013	169,315,995	169,292,243	169,225,698	169,211,474	169,195,390
12/31/2014	178,761,841	178,777,764	178,568,653	178,559,607	
12/31/2015	186,756,064	186,689,759	186,656,948		
12/31/2016	192,091,379	192,112,161			
12/31/2017	181,403,380				

Ratios

Accident Year Ending	75:63	87:75	99:87	111:99	123:111
12/31/2011	0.999	1.000	1.000	1.000	1.000
12/31/2012	1.000	1.000	1.000	1.000	1.000
12/31/2013	1.000	1.000	1.000	1.000	1.000
12/31/2014	1.001	1.000	0.999	1.000	
12/31/2015	1.000	1.000	1.000		
12/31/2016	1.000	1.000			
12/31/2017	1.000				
Average Factor: (Best 3 of 5)	1.000	1.000	1.000	1.000	1.000

Summary of Factors

123 to Ult:	(1.000)	=	1.000
111 to Ult:	(123:111) (123:Ult)	=	1.000
99 to Ult:	(111:99) (123:111) (123:Ult)	=	1.000
87 to Ult:	(99:87) (111:99) (123:111) (123:Ult)	=	1.000
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.000

VERISK

(1)	Public Automobiles Liability	Differentials to Base Loss Cost CSL Liab	
	Taxis & Limos		4.02
	School and Church Buses		0.38
	Other Buses		3.16
	Van Pools		0.95
(2)	Public Automobiles Physical Damage		
	Taxis, Limos and Van Pools		
	Other Than Collision:		1.52
	Collision		2.25
	School, Church, and Other Buses		
	Other Than Collision:		0.68
	Collision		0.63
(3)	Medical Payments Relativities	<u>EXHIBIT C19</u>	
(4)	Specified Cause of Loss Relativity		0.576
	This factor is used for Trucks, Tractors, & Trailers and Private Passenger Types.		
(5)	The loss cost for hired autos is set forth in Section D. It applies in all territories and is calculated as 0.25% of the statewide \$100,000 Combined Single Limit average loss cost for all Trucks, Tractors, & Trailers.		

VERISK

(3) Medical Payments Relativities

Class of Business

	Trucks, Tractors, & Trailers	Private Passenger Types	Other Buses	School and Church Buses	Taxicabs and Limousines	Van Pools
Territory	<u>5000</u>	<u>5000</u>	<u>5000</u>	<u>5000</u>	<u>5000</u>	<u>5000</u>
101	0.0231	0.0318	0.0625	0.0842	0.0416	0.0321
105	0.0300	0.0318	0.0696	0.0939	0.0416	0.0321
106	0.0313	0.0318	0.1198	0.1619	0.0416	0.0321
107	0.0204	0.0318	0.0569	0.0762	0.0416	0.0321

**COMMERCIAL LINES MANUAL
DIVISION ONE
AUTOMOBILE
LOSS COST PAGES**

**MONTANA (25)
TERRITORY 101**

LIABILITY	MEDICAL PAYMENTS	PERSONAL INJURY PROTECTION
Limit Of Liab. \$100,000	Limit Per Person \$5000	Basic Limits
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS		
\$ 308	\$ 7	N/A
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS		
\$ 277	\$ 9	N/A
RULE 240. PUBLIC AUTO CLASSIFICATIONS –		
– TAXICABS AND LIMOUSINES		
\$ 1238	\$ 52	N/A
– SCHOOL AND CHURCH BUSES		
\$ 117	\$ 10	N/A
– OTHER BUSES		
\$ 973	\$ 61	N/A
– VAN POOLS		
\$ 293	\$ 9	N/A
RULE 249. AUTO DEALERS – PREMIUM DEVELOPMENT		
\$ 475	Refer to Rule 249.	N/A
<ul style="list-style-type: none"> • For Other Than Zone-rated Trucks, Tractors and Trailers Classifications, refer to Rule 222. for premium development. • For Private Passenger Types Classifications, refer to Rule 232. for premium development. • For Other Than Zone-rated Public Autos, refer to Rule 239. for premium development. • For liability increased limits factors, refer to Rule 300. • Other Than Auto losses for Auto Dealers risks are subject to an aggregate limit equal to three times the liability limit. For additional limits, refer to Rule 249. 		

COMMERCIAL LINES MANUAL
DIVISION ONE
AUTOMOBILE
LOSS COST PAGES

LIABILITY	MEDICAL PAYMENTS	PERSONAL INJURY PROTECTION
Limit Of Liab. \$100,000	Limit Per Person \$5000	Basic Limits
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS		
\$ 294	\$ 9	N/A
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS		
\$ 237	\$ 8	N/A
RULE 240. PUBLIC AUTO CLASSIFICATIONS –		
– TAXICABS AND LIMOUSINES		
\$ 1182	\$ 49	N/A
– SCHOOL AND CHURCH BUSES		
\$ 112	\$ 11	N/A
– OTHER BUSES		
\$ 929	\$ 65	N/A
– VAN POOLS		
\$ 279	\$ 9	N/A
RULE 249. AUTO DEALERS – PREMIUM DEVELOPMENT		
\$ 371	Refer to Rule 249.	N/A
<ul style="list-style-type: none"> • For Other Than Zone-rated Trucks, Tractors and Trailers Classifications, refer to Rule 222. for premium development. • For Private Passenger Types Classifications, refer to Rule 232. for premium development. • For Other Than Zone-rated Public Autos, refer to Rule 239. for premium development. • For liability increased limits factors, refer to Rule 300. • Other Than Auto losses for Auto Dealers risks are subject to an aggregate limit equal to three times the liability limit. For additional limits, refer to Rule 249. 		

**COMMERCIAL LINES MANUAL
DIVISION ONE
AUTOMOBILE
LOSS COST PAGES**

**MONTANA (25)
TERRITORY 106**

LIABILITY	MEDICAL PAYMENTS	PERSONAL INJURY PROTECTION
Limit Of Liab. \$100,000	Limit Per Person \$5000	Basic Limits
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS		
\$ 162	\$ 5	N/A
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS		
\$ 178	\$ 6	N/A
RULE 240. PUBLIC AUTO CLASSIFICATIONS –		
– TAXICABS AND LIMOUSINES		
\$ 651	\$ 27	N/A
– SCHOOL AND CHURCH BUSES		
\$ 62	\$ 10	N/A
– OTHER BUSES		
\$ 512	\$ 61	N/A
– VAN POOLS		
\$ 154	\$ 5	N/A
RULE 249. AUTO DEALERS – PREMIUM DEVELOPMENT		
\$ 196	Refer to Rule 249.	N/A
<ul style="list-style-type: none"> • For Other Than Zone-rated Trucks, Tractors and Trailers Classifications, refer to Rule 222. for premium development. • For Private Passenger Types Classifications, refer to Rule 232. for premium development. • For Other Than Zone-rated Public Autos, refer to Rule 239. for premium development. • For liability increased limits factors, refer to Rule 300. • Other Than Auto losses for Auto Dealers risks are subject to an aggregate limit equal to three times the liability limit. For additional limits, refer to Rule 249. 		

COMMERCIAL LINES MANUAL
DIVISION ONE
AUTOMOBILE
LOSS COST PAGES

LIABILITY	MEDICAL PAYMENTS	PERSONAL INJURY PROTECTION
Limit Of Liab. \$100,000	Limit Per Person \$5000	Basic Limits
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS		
\$ 436	\$ 9	N/A
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS		
\$ 420	\$ 13	N/A
RULE 240. PUBLIC AUTO CLASSIFICATIONS –		
– TAXICABS AND LIMOUSINES		
\$ 1753	\$ 73	N/A
– SCHOOL AND CHURCH BUSES		
\$ 166	\$ 13	N/A
– OTHER BUSES		
\$ 1378	\$ 78	N/A
– VAN POOLS		
\$ 414	\$ 13	N/A
RULE 249. AUTO DEALERS – PREMIUM DEVELOPMENT		
\$ 574	Refer to Rule 249.	N/A
<ul style="list-style-type: none"> • For Other Than Zone-rated Trucks, Tractors and Trailers Classifications, refer to Rule 222. for premium development. • For Private Passenger Types Classifications, refer to Rule 232. for premium development. • For Other Than Zone-rated Public Autos, refer to Rule 239. for premium development. • For liability increased limits factors, refer to Rule 300. • Other Than Auto losses for Auto Dealers risks are subject to an aggregate limit equal to three times the liability limit. For additional limits, refer to Rule 249. 		

**COMMERCIAL LINES MANUAL
DIVISION ONE
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LOSS COST PAGES**

**MONTANA (25)
TERRITORY 101**

PHYSICAL DAMAGE Original Cost New Range \$25,000 – 29,999			
	Specified Causes Of Loss	Comp.	\$500 Ded. Coll.
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS			
– Local And Intermediate – All Vehicles			
– Long Distance – Light Trucks And Trailers Used With Light Trucks			
	\$ 132	\$ 229	\$ 405
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS			
	\$ 179	\$ 310	\$ 310
RULE 240. PUBLIC AUTO CLASSIFICATIONS			
– TAXICABS AND LIMOUSINES			
	\$ 201	\$ 348	\$ 911
– SCHOOL AND CHURCH BUSES			
	\$ 90	\$ 156	\$ 255
– OTHER BUSES			
	\$ 90	\$ 156	\$ 255
– VAN POOLS			
	\$ 201	\$ 348	\$ 911
<ul style="list-style-type: none"> • For Other Than Zone-rated Trucks, Tractors and Trailers Classifications, refer to Rule 222. for premium development. • For Private Passenger Types Classifications, refer to Rule 232. for premium development. • For Other Than Zone-rated Publics Autos, refer to Rule 239. for premium development. • For Deductible factors, refer to Rule 298. • For Vehicle Value factors, refer to Rule 301. 			

COMMERCIAL LINES MANUAL
DIVISION ONE
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LOSS COST PAGES

PHYSICAL DAMAGE Original Cost New Range \$25,000 – 29,999			
	Specified Causes Of Loss	Comp.	\$500 Ded. Coll.
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS			
– Local And Intermediate – All Vehicles			
– Long Distance – Light Trucks And Trailers Used With Light Trucks			
	\$ 137	\$ 237	\$ 439
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS			
	\$ 177	\$ 307	\$ 417
RULE 240. PUBLIC AUTO CLASSIFICATIONS			
– TAXICABS AND LIMOUSINES			
	\$ 208	\$ 360	\$ 988
– SCHOOL AND CHURCH BUSES			
	\$ 93	\$ 161	\$ 277
– OTHER BUSES			
	\$ 93	\$ 161	\$ 277
– VAN POOLS			
	\$ 208	\$ 360	\$ 988
<ul style="list-style-type: none"> • For Other Than Zone-rated Trucks, Tractors and Trailers Classifications, refer to Rule 222. for premium development. • For Private Passenger Types Classifications, refer to Rule 232. for premium development. • For Other Than Zone-rated Publics Autos, refer to Rule 239. for premium development. • For Deductible factors, refer to Rule 298. • For Vehicle Value factors, refer to Rule 301. 			

**COMMERCIAL LINES MANUAL
DIVISION ONE
AUTOMOBILE
LOSS COST PAGES**

**MONTANA (25)
TERRITORY 106**

PHYSICAL DAMAGE Original Cost New Range \$25,000 – 29,999			
	Specified Causes Of Loss	Comp.	\$500 Ded. Coll.
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS			
– Local And Intermediate – All Vehicles			
– Long Distance – Light Trucks And Trailers Used With Light Trucks			
	\$ 251	\$ 435	\$ 414
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS			
	\$ 298	\$ 518	\$ 354
RULE 240. PUBLIC AUTO CLASSIFICATIONS			
– TAXICABS AND LIMOUSINES			
	\$ 382	\$ 661	\$ 932
– SCHOOL AND CHURCH BUSES			
	\$ 171	\$ 296	\$ 261
– OTHER BUSES			
	\$ 171	\$ 296	\$ 261
– VAN POOLS			
	\$ 382	\$ 661	\$ 932
<ul style="list-style-type: none"> • For Other Than Zone-rated Trucks, Tractors and Trailers Classifications, refer to Rule 222. for premium development. • For Private Passenger Types Classifications, refer to Rule 232. for premium development. • For Other Than Zone-rated Publics Autos, refer to Rule 239. for premium development. • For Deductible factors, refer to Rule 298. • For Vehicle Value factors, refer to Rule 301. 			

COMMERCIAL LINES MANUAL
DIVISION ONE
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PHYSICAL DAMAGE Original Cost New Range \$25,000 – 29,999			
	Specified Causes Of Loss	Comp.	\$500 Ded. Coll.
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS			
– Local And Intermediate – All Vehicles			
– Long Distance – Light Trucks And Trailers Used With Light Trucks			
	\$ 188	\$ 327	\$ 471
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS			
	\$ 224	\$ 389	\$ 483
RULE 240. PUBLIC AUTO CLASSIFICATIONS			
– TAXICABS AND LIMOUSINES			
	\$ 286	\$ 497	\$ 1060
– SCHOOL AND CHURCH BUSES			
	\$ 128	\$ 222	\$ 297
– OTHER BUSES			
	\$ 128	\$ 222	\$ 297
– VAN POOLS			
	\$ 286	\$ 497	\$ 1060
<ul style="list-style-type: none"> • For Other Than Zone-rated Trucks, Tractors and Trailers Classifications, refer to Rule 222. for premium development. • For Private Passenger Types Classifications, refer to Rule 232. for premium development. • For Other Than Zone-rated Publics Autos, refer to Rule 239. for premium development. • For Deductible factors, refer to Rule 298. • For Vehicle Value factors, refer to Rule 301. 			

290. HIRED AUTOS

Cost Of Hire Basis – All Territories Liability Base Loss Cost
\$ 0.48

Table 290.B.3.a.(1)(LC) Cost Of Hire Basis Liability Loss Cost

Coverage	All Perils Deductible	Loss Cost Per Each \$100 Annual Cost Of Hire
Comprehensive	No Deductible	\$ 0.45
	\$ 50 Deductible	0.44
	100 Deductible	0.43
	250 Deductible	0.41
	500 Deductible	0.39
	1,000 Deductible	0.36
	2,000 Deductible	0.31
	3,000 Deductible	0.27
Collision	\$ 100 Deductible	1.41
	250 Deductible	1.36
	500 Deductible	1.28
	1,000 Deductible	1.13
	2,000 Deductible	0.96
	3,000 Deductible	0.84
Specified Causes Of Loss	5,000 Deductible	0.67
	No Deductible	0.22

Table 290.C.3.a.(1)(LC) Hired Autos Physical Damage Loss Costs

Supplementary Information – Montana

Introduction

This document provides additional information on the attached loss cost level experience review, including:

- A summary of recent trends in Liability claim costs
- A summary of significant factors used in the development of loss cost indications and a comparison to the factors used in the prior filing that underlie the loss costs currently in effect
- A discussion of the experience underlying the loss cost level evaluation, and how it compares to the prior review
- Issues related to Commercial Auto in Montana

Statistical plan data reported to ISO is first processed through a system of rigorous automated data verification processes so that only data that would be valid is used for ratemaking. Subsequent to this initial data submission review, additional analyses involving an even more customized data review for this line was performed by staff. During these processes, various data records were excluded from the review, corrected or adjusted. Specifically, various reported exposure amounts have been adjusted prior to their use in the calculations. The ISO staff responsible for this loss cost review also reviewed the data for reasonableness.

Trends in Liability Claim Costs

The table below shows the latest sixteen evaluations of 12-pt. paid claim cost trends.

Multistate Paid Claim Cost Trends

<u>Data Through</u>	<u>\$100,000 Bodily Injury</u>	<u>\$100,000 Property Damage</u>
03/31/2019	+5.7%	+4.6%
06/30/2019	+5.7%	+5.1%
09/30/2019	+5.7%	+5.5%
12/31/2019	+5.9%	+5.9%
03/31/2020	+6.0%	+6.2%
06/30/2020	+5.9%	+6.8%
09/30/2020	+5.7%	+7.3%
12/31/2020	+5.6%	+7.8%
03/31/2021	+5.3%	+8.0%
06/30/2021	+5.7%	+8.0%
09/30/2021	+6.3%	+8.2%
12/31/2021	+7.1%	+8.2%
03/31/2022	+7.8%	+8.5%
06/30/2022	+8.1%	+9.5%
09/30/2022	+8.4%	+10.6%
12/31/2022	+8.6%	+11.7%

ISO believes that bodily injury claim cost trends will primarily be driven by changes in the costs of providing medical care. At times, other factors serve to reduce (or exacerbate) the claim cost trends.

Supplementary Information – Montana

Trends in Medical Care Costs

The table below shows the last twelve annual rates of change, based upon the CPI, for Medical Care and Hospital & Other Related Services, separately.

<u>Period</u>	<u>CPI – Medical Care Annual Rate of Change¹</u>	<u>CPI – Hospital & Other Related Services Annual Rate of Change</u>
October 2011 - September 2012	+4.1%	+4.7%
October 2012 - September 2013	+2.4%	+5.4%
October 2013 - September 2014	+2.0%	+3.5%
October 2014 - September 2015	+2.5%	+3.3%
October 2015 - September 2016	+4.9%	+5.6%
October 2016 - September 2017	+1.6%	+4.3%
October 2017 - September 2018	+1.7%	+3.7%
October 2018 - September 2019	+3.5%	+2.1%
October 2019 - September 2020	+4.2%	+4.5%
October 2020 - September 2021	+0.4%	+3.3%
October 2021 - September 2022	+6.0%	+3.9%
October 2022 - September 2023	-2.6%	+4.7%

Claim Frequencies

Historically, frequency trends for Commercial Auto liability have been quite variable, have differed between Trucks, Tractors, and Trailers (TTT) and Private Passenger Types (PPT) liability classes, and have often displayed cyclical patterns. As a result, an exponential curve of the form $Y=A(B^X)$ does not fit the data well over the long term. To reflect these characteristics and the difficulty in predicting turning points and rates of change, frequency trend is being selected to be 0% for TTT and PPT for both the Bodily Injury and Property Damage coverages.

Claim Counts

Claim counts are now being estimated from information on the individual loss records reported to ISO, rather than the claim counts that have been reported to ISO via the statistical plans. This is being done to address company inconsistencies in interpreting ISO's claim count reporting rules.

¹ Annual Rate of Change for a particular year is calculated as the CPI index for September of that year divided by the same index for September for the previous year, minus one.

Supplementary Information – Montana**Montana Trends****Liability Loss Trend**

	<u>Current Trends</u> <u>Data through</u> <u>12/31/2022</u>	<u>Previous Trends</u> <u>Data through</u> <u>12/31/2021</u>
Montana Claim Cost Trends		
Bodily Injury (\$100,000 Limit)	-6.4%	+12.1%
Property Damage (\$100,000 Limit)	+9.5%	+3.4%
Credibility-Weighted Claim Cost Trends		
Bodily Injury (\$100,000 Limit)	+8.6%	+7.1%
Property Damage (\$100,000 Limit)	+11.6%	+7.9%
Selected Claim Frequency Trends		
Trucks, Tractors & Trailers		
Bodily Injury	0.0%	0.0%
Property Damage	0.0%	0.0%
Private Passenger Types		
Bodily Injury	0.0%	0.0%
Property Damage	0.0%	0.0%
Selected Pure Premium Trends		
Trucks, Tractors & Trailers		
Bodily Injury (\$100,000 Limit)	+8.6%	+7.1%
Property Damage (\$100,000 Limit)	+11.6%	+7.9%
Private Passenger Types*		
Bodily Injury (\$100,000 Limit)	+8.6%	+7.1%
Property Damage (\$100,000 Limit)	+11.6%	+7.9%

Liability Premium Trend

	<u>Current Trends</u> <u>Data through 12/31/2022</u>	<u>Previous Trends</u> <u>Data through 12/31/2021</u>
Trucks, Tractors & Trailers	0.0%	0.4%
Private Passenger Types	-0.2%	0.0%

Montana bodily injury severity trend receives 0% weight when combined with multistate trend in the filing, property damage trend receives 5% weight.

If the prior trends were used to calculate the indicated changes in this document, the Truck, Tractors & Trailers Liability indication would have been 6.9% instead of 17.6%. For the Private Passenger Types coverage, the indication would have been 3.8% instead of 9.0%.

Supplementary Information – Montana

Physical Damage Loss Trend

	<u>Coverage</u>	<u>Current Trends</u> <u>Data through 12/31/2022</u>	<u>Previous Trends</u> <u>Data through 12/31/2021</u>
Trucks, Tractors & Trailers	OTC	+8.5%	+6.0%
	Collision	+11.5%	+7.0%
Private Passenger Types	OTC	+8.0%	+6.5%
	Collision	+11.0%	+7.0%

Physical Damage Premium Trend

	<u>Coverage</u>	<u>Current VVF Trends</u> <u>Data through 12/31/2022</u>	<u>Previous VVF Trends</u> <u>Data through 12/31/2021</u>
Trucks, Tractors & Trailers	OTC	+0.8%	+1.5%
	Collision	+0.2%	+2.5%
Private Passenger Types	OTC	+2.5%	+2.2%
	Collision	+1.1%	+1.0%

The loss trend has increased by 2.5 points for Trucks, Tractors & Trailers OTC and has increased by 1.5 points for Private Passenger Types OTC. The premium trend has decreased by 0.7 points for Trucks, Tractors & Trailers OTC and has increased by 0.3 points for Private Passenger Types OTC. If the prior loss and premium trends were used, the Trucks, Tractors and Trailers and Private Passenger Types OTC indications in this document would have 9.9%, instead of 22.1%, and 6.5%, instead of 9.6%, respectively.

The loss trend has increased by 4.5 points for Trucks, Tractors & Trailers Collision and has increased by 4.0 points for Private Passenger Types Collision. The premium trend has decreased by 2.3 points for Trucks, Tractors, & Trailers Collision and has increased by 0.1 points for Private Passenger Types Collision. If the prior loss and premium trends were used, the Trucks, Tractors & Trailers and Private Passenger Types Collision indications in this document would have been 10.8%, instead of 34.3%, and 5.0%, instead of 15.3%, respectively.

Supplementary Information – Montana

Loss Development

Methodology

For the Trucks, Tractors & Trailers and Private Passenger Types Liability coverages, we continue to employ a credibility-weighted combination of Montana and multistate factors for the 15 to 27 month link ratios for BI and PD, and the 27 to 39 month link ratios for BI only. For all coverages, the "best three of five" link ratios have been used. Specifically, the highest and lowest link ratios from the latest five years of the experience have been removed from the calculation and the remaining three ratios are used to calculate the three-year average.

Factors

	<u>Current (100K)</u>	<u>Previous (100K)</u>
Trucks, Tractors and Trailers BI		
39 to Ultimate	1.082	1.080
27 to Ultimate	1.196	1.189
15 to Ultimate	1.489	1.508
Trucks, Tractors and Trailers PD		
39 to Ultimate	1.006	1.005
27 to Ultimate	1.016	1.015
15 to Ultimate	1.035	1.024
Private Passenger Types BI		
39 to Ultimate	1.083	1.079
27 to Ultimate	1.280	1.267
15 to Ultimate	1.533	1.506
Private Passenger Types PD		
39 to Ultimate	1.003	1.004
27 to Ultimate	1.012	1.012
15 to Ultimate	1.074	1.069

Supplementary Information – Montana

Other Factors

Unallocated Loss Adjustment Expense factors:

	<u>Data through 12/31/2021</u>	<u>Data through 12/31/2020</u>
Bodily Injury	1.065	1.070
Property Damage	1.105	1.100
Physical Damage	1.125	1.130

Indicated vs. Filed Changes

An overall change of 20.2% is indicated when each of the coverage indications is weighted by its respective loss cost volume. Staff will file the indications, which reflect a 9/1/2024 proposed effective date, with the following exceptions:

Notes

- The Auto Dealers Liability coverage and the Auto Dealers and Garagekeepers Physical Damage coverages are not being reviewed this year.
- The high indication for Trucks, Tractors and Trailers Liability (17.6%) is due to the poor overall experience.
- The high indication for Trucks, Tractors and Trailers OTC (22.1%) is due to the poor overall experience.
- The high indication for Trucks, Tractors and Trailers Collision (34.3%) is due to the poor overall experience.
- The high indication for Private Passenger Types Liability (9.0%) is due to the poor experience in three out of five years in the review.
- The high indication for Private Passenger Types OTC (9.6%) is due to the poor experience in four out of five years in the review.
- The high indication for Private Passenger Types Collision (15.3%) is due to the poor experience in four out of five years in the review.