

LOSS COSTS – IMPLEMENTATION

MARCH 23, 2023

COMMERCIAL AUTOMOBILE

LI-CA-2023-098

SOUTH DAKOTA REVISED COMMERCIAL AUTO ADVISORY PROSPECTIVE LOSS COSTS TO BE IMPLEMENTED

KEY MESSAGE

Loss costs representing a **5.3%** statewide change to be implemented.

BACKGROUND

In circular [LI-CA-2023-001](#), 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 expect that the sharpest economic disruptions are behind us, but the effects may persist in muted form for some time. In response to this, we are taking the effects of COVID-19 into account when we make our trend selections in the loss cost filings. Additionally, due to the impact that the COVID-19 pandemic had on experience from March 2020 and beyond, we have decided to adjust the year weights for liability, PIP, and collision to give less weight to the most recent year. 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-2023-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 South Dakota, 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 July 1, 2023.

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 July 1, 2023, 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.

WE WILL SUBMIT OUR REFERENCE FILING TO THE INSURANCE DEPARTMENT ON MAY 17, 2023. ANY SUBMISSION YOU MAY MAKE WITH THE INSURANCE DEPARTMENT WITH RESPECT TO THIS FILING SHOULD NOT BE SUBMITTED PRIOR TO THIS DATE.

In all correspondence with the Insurance Department on this revision, you should refer to ISO Filing Number CA-2023-BRLA1 and SERFF Tracking Number ISOF-133597530, 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-2023-005](#) contains the ISO Guide To Renewals With Changed Conditions For Commercial Lines, which is available only as a guide to assist participating companies in complying with various conditional renewal statutes or regulations, for the major commercial lines of insurance serviced by ISO. The information in the Guide does not necessarily reflect all requirements or exceptions that may apply, and it is not intended as a substitute for your review of all applicable statutes and regulations concerning policyholder notification.

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 7-23 (or the earliest possible subsequent date), along with any new and/or revised manual pages.

REFERENCE(S)

- [LI-CL-2023-005](#) (02/21/2023) Commercial Lines Revised Lead Time Requirements Listing
- [LI-CA-2023-001](#) (01/03/2023) Commercial Auto Experience Level Indications Reviewed By Staff

ATTACHMENT(S)

- Filing [CA-2023-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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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.

SOUTH DAKOTA
BASIC LIMITS PROSPECTIVE LOSS COST LEVEL – COMMERCIAL AUTOMOBILE
FILING CA-2023-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 5.3% 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>
IMPACTS OF COVID-19 ON ADVISORY PROSPECTIVE LOSS COSTS	<p>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.</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 D-4, the exhibits are labeled EXHIBIT A1 through EXHIBIT D9, and the revised prospective loss cost pages are numbered E-1 through E-11.</p>
HIRED AUTOS LOSS COSTS	<p>The loss costs for hired autos physical damage have been revised in this filing. Details of the analysis are in Section D.</p>
AUTO DEALERS AND GARAGEKEEPERS	<p>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>	<u>Adjusted**</u>
Liability			
Single Limit Liability	5.4%	5.4%	3.0%
Physical Damage			
Other than Collision	8.4%	8.4%	3.1%
Collision	11.0%	11.0%	-7.6%
Total Trucks, Tractors & Trailers	7.2%	7.2%	0.8%
 <u>Private Passenger Types</u>			
Liability			
Single Limit Liability	4.2%	N.C.	-1.3%
Physical Damage			
Other than Collision	0.4%	N.C.	-16.1%
Collision	3.0%	N.C.	-5.1%
Total Private Passenger Types	3.1%	N.C.	-5.5%
 <u>Auto Dealers</u>			
Liability			
Single Limit Liability	20.5%	-10.0%	-10.0%
Total Auto Dealers	20.5%	-10.0%	-10.0%
 <u>Hired Autos</u>			
Physical Damage			
Other Than Collision	38.6%	38.6%	38.6%
Collision	165.5%	165.5%	165.5%
Total Hired Autos	121.6%	121.6%	121.6%
 <u>Grand Total</u>	7.1%	5.3%	-0.6%

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

* Due to the simultaneous implementation of filing CA-2022-RLC1, the FILED column displays the impact for companies already using the optional class plan prior to the effective date of the CA-2022-RLC1 filing.

** The ADJUSTED changes display the impact of the filed loss costs on companies not using the optional class plan prior to the effective date of the CA-2022-RLC1 filing.

INDICATED VS.
FILED

Indicated changes are based on standard ISO methodology, utilizing a 7/1/2023 trend effective date. The filed loss cost level changes are the same as the indicated with the following exceptions: For Private Passenger Types liability and Private Passenger Types collision, No Change (N.C.) was selected to better reflect the favorable state experience. For Private Passenger Types OTC, No Change (N.C.) was selected due to the modest indication. For Auto Dealers liability, -10.0% was selected to better reflect the favorable state experience.

PRIOR ISO
REVISIONS

The latest selected revisions in this state are:

<u>Filing</u>	CA-2022-BRLA1	CA-2021-BRLA1	CA-2020-BRLA1
Rate Level/ Loss Costs	Loss Costs	Loss Costs	Loss Costs
Effective Date	7/1/2022	7/1/2021	7/1/2020
<u>Changes</u>			
Indicated	2.6%	7.5%	3.9%
Filed	2.1%	7.2%	3.7%
Approved	2.1%	7.2%	3.7%

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 12/31/2021 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 2021 and claim frequency trend data through third quarter 2021 were used in selecting the following annual liability trend factors:

	<u>Coverage</u>	<u>Annual Trend Factor</u>
ADJUSTMENTS TO REPORTED EXPERIENCE (CONT'D)	Trucks, Tractors, and Trailers Liability:	
	Bodily Injury	+7.1%
	Property Damage	+8.1%
	Private Passenger Types Liability:	
	Bodily Injury	+7.1%
	Property Damage	+8.1%
	Trucks, Tractors & Trailers OTC	+6.0%
	Trucks, Tractors & Trailers Collision	+7.0%
	Private Passenger Types OTC	+6.5%
	Private Passenger Types Collision	+7.0%
	<u>Liability Premium Trend</u>	

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 +0.4% for Trucks, Tractors & Trailers and 0.0% 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 +1.5% and +2.5% for OTC and Collision respectively. For Private Passenger Types, the VVF trend factors are +2.2% and +1.0% 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. Employers Mutual Casualty Co.
2. Travelers Indemnity Co.
3. Nationwide Mutual Insurance Co.
4. United Fire & Casualty Co.
5. Zurich American Insurance Co.
6. Western National Mutual Ins. Co.
7. Federated Mutual Insurance Co.
8. Cincinnati Insurance Co.
9. Tokio Marine Cos.
10. Insurance Co. of North America

PHYSICAL DAMAGE (ASLOB 21.2)

1. United Fire & Casualty Co.
2. Travelers Indemnity Co.
3. Motors Insurance Corp.
4. Employers Mutual Casualty Co.
5. Western National Mutual Ins. Co.
6. Federated Mutual Insurance Co.
7. Nationwide Mutual Insurance Co.
8. Cincinnati Insurance Co.
9. Columbia Insurance Group
10. Tokio Marine Cos.

Insurers are listed in descending order based on the percent of statewide written premium volume from Annual Statement Page 15 for the year ending 12/31/2021 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 12/31/2021 is:

Liability (ASLOB 19.3 & 19.4)
35.6%

Physical Damage (ASLOB 21.2)
24.0%

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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**SOUTH DAKOTA
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-B5 .
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 B6-B12 .
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 E.

OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

STEP 1 – DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGE

OBJECTIVE	<p>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?</p>
DESCRIPTION	<p>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-B5.</p>
EXPERIENCE BASE	<p>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.</p>
AGGREGATE LOSS COSTS (Item 1)	<p>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.</p> <p>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.</p>

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?
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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 B6-B12 .
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AUTO DEALERS LIABILITY	Because Auto Dealers Statistics by territory lack sufficient credibility to be used meaningfully in developing revised loss costs, it is appropriate to utilize a body of statistics which can be expected to reflect the Auto Dealers hazard differences by territory. Consequently, the development of indicated Auto Dealers base loss costs is based upon a relationship to the corresponding Trucks, Tractors & Trailers \$100,000 revised base loss costs by territory. The revised Trucks, Tractors & Trailers base loss costs are compared to the revised statewide average Trucks, Tractors & Trailers base loss cost to produce the indicated territorial indices to the statewide average base loss costs for Auto Dealers. The relationship between these Trucks, Tractors & Trailers indicated territorial indices and the current Auto Dealers territorial indices yields the change in the Auto Dealers index.
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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	<p>The formula experience ratio is a credibility weighted average of the territory group experience ratio and statewide experience ratio. The formula is as follows:</p> $\frac{[\text{Terr. Group Col. (4)} \times \text{Terr. Group Col. (5)}] + [\text{SW Total Col. (4)} \times (1.0 - \text{Terr. Group Col. (5)})]}{[\text{Terr. Group Col. (4)} + (\text{SW Total Col. (4)} \times (1.0 - \text{Terr. Group Col. (5)})]}$

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 \$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 AUTO DEALERS LIABILITY

COLUMN (1) EARNED CAR YEARS	Number of car-years, or exposures (Trucks, Tractors and Trailers), earned in the latest year. These exposures are used to calculate the weighted averages for column (3) and column (4).
COLUMN (2) AUTO DEALERS AGGREGATE LOSS COST AT CURRENT LEVEL	The Auto Dealers aggregate loss cost at current level. This column is used to calculate the weighted average for column (7).
COLUMN (3) REVISED TRUCKS, TRACTORS & TRAILERS \$100,000 LOSS COST	These are the revised Trucks, Tractors & Trailers \$100,000 base loss costs.
COLUMN (4) AUTO DEALERS PRESENT \$100,000 LOSS COST	Current Auto Dealers \$100,000 base loss cost.
COLUMN (5) & (6) RATIOS TO STATEWIDE AVERAGE	Are derived by dividing each base loss cost by the statewide average loss cost for Trucks, Tractors & Trailers and Auto Dealers, respectively.
COLUMN (7) TERRITORY RELATIVITY	Is derived by dividing the Trucks, Tractors & Trailers indices (column (5)) by the Auto Dealers indices (column (6)).
COLUMN (8) ADJUSTED TERRITORY RELATIVITY	Is derived by multiplying the territory relativity (column (7)) by the adjustment, which is one divided by the statewide average territory relativity (SW column (7)). This yields the required change in the Auto Dealers index in column (7).
COLUMN (9) INDICATED BASE LOSS COST	Indicated base loss cost for a particular territory. It is calculated by applying the product of the adjusted territory relativity (column (8)) and the statewide Auto Dealers loss cost level indication to the present Auto Dealers base loss cost.

COLUMN (10)
REVISED
BASE LOSS COST

Revised \$100,000 base loss cost.

COLUMN (11)
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	<p>The formula experience ratio is a credibility weighted average of the territory group experience ratio and statewide experience ratio. The formula is as follows:</p> $\begin{aligned} &[\text{Terr. Group Col. (4) x Terr. Group Col. (5)}] \\ &+ [\text{SW Total Col.(4) x (1.0 - Terr. Group Col. (5))}] \end{aligned}$

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

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

(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:
 $[\text{Col. (10)} / \text{Col. (8)}]$

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	<p>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.</p>
DETERMINATION OF HISTORICAL AVERAGE CLAIM COST TREND	<p>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.</p>
LIABILITY LOSS TREND	<p>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.</p>
TREND CREDIBILITY FOR LIABILITY CLAIM SEVERITY	<p>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:</p> $A = C/(C+K)$ <p>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.</p>

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:

	Year 1		Year 2	
	Glass	Fire	Glass	Fire
Type of Loss				
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:

	Year 1		Year 2	
	Glass	Fire	Glass	Fire
Type of Loss				
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:

	Year 1		Year 2	
Type of Loss	Glass	Fire	Glass	Fire
	$76\% \times 13 =$	$24\% \times 13 =$	$76\% \times 20 =$	$24\% \times 20 =$
Claims	9.88	3.12	15.2	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:	+6.0%	+6.5%
COLL:	+7.0%	+7.0%

COMMERCIAL AUTOMOBILE PHYSICAL DAMAGE
SUPPLEMENTARY EXHIBIT

Quarterly Values <u>Ending</u>	Consumer Price Index for Bodywork	
	<u>Actual</u>	<u>Exponential Fit</u>
3/31/2019	3.074	3.000
6/30/2019	3.118	3.051
9/30/2019	3.158	3.103
12/31/2019	3.189	3.156
3/31/2020	3.194	3.210
6/30/2020	3.248	3.265
9/30/2020	3.263	3.321
12/31/2020	3.283	3.377
3/31/2021	3.315	3.435
6/30/2021	3.384	3.494
9/30/2021	3.458	3.554
12/31/2021	3.561	3.614
3/31/2022	3.703	3.676
6/30/2022	3.848	3.739
9/30/2022	3.903	3.803
12/31/2022	3.984	3.868
		Average
		Annual
		<u>Change</u>
16 Point Fit	<u>R-Squared</u>	
	0.9214	7.0%
12 Point Fit	0.9453	8.9%

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>
12/31/2017	0.0%	0.0%
12/31/2018	0.1%	2.7%
12/31/2019	0.6%	3.1%
12/31/2020	21.8%	6.6%
12/31/2021	39.7%	26.9%

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 three years ending 12/31/2021 for Private Passenger Types, and the two 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 0.4% 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:

Earned Year Ending	Trucks, Tractors and Trailers	Private Passenger Types
12/31/2017	0.0%	0.0%
12/31/2018	0.1%	3.0%
12/31/2019	0.6%	3.3%
12/31/2020	16.8%	6.8%
12/31/2021	39.2%	27.5%

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 three years ending 12/31/2021 for Private Passenger Types, and the two 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 1.5% and 2.5% for Trucks, Tractors & Trailers OTC and Collision coverages respectively. For Private Passenger Types, VVF trends of 2.2% and 1.0% 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, Private Passenger Types, and Auto Dealers 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, 2022. In other words, accident year ended December 31, 2021 includes all losses and allocated loss adjustment expenses paid through March 31, 2022 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, 2022, 15 months after the inception of the accident year. Similarly, the incurred losses and allocated loss adjustment expenses for accident year ended December 31, 2020 include all loss and loss adjustment expenses paid through March 31, 2022 on accidents occurring from January 1, 2020 to December 31, 2020 and all losses and allocated loss adjustment expenses outstanding on these accidents as of March 31, 2022, 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-C16 .
DESCRIPTION OF LOSS DEVELOPMENT METHODOLOGY	<p>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, Private Passenger Types, and Auto Dealers 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.</p> <p>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, Private Passenger Types, and Auto Dealers 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.</p>

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.

AUTO DEALERS

For the Auto Dealers Bodily Injury coverage, development is based upon \$100,000 CSL multistate tort or no-fault data. For the Auto Dealers Property Damage coverage, basic limits multistate experience is used.

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, 2022. In other words, accident year ended December 31, 2021 includes all losses paid through March 31, 2022 on accidents occurring from January 1, 2021 to December 31, 2021. Similarly, the paid losses for accident year ended December 31, 2020 include all losses paid through March 31, 2022 on accidents occurring from January 1, 2020 to December 31, 2020. 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 C17-C18 .
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	<p>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.</p>
METHODOLOGY	<p>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.</p>
CREDIBILITY FOR EXPERIENCE LOSS RATIO	<p>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:</p> $Z = \sqrt{\frac{\text{Claims}}{X}}$ <p>Where X equals the full credibility standard, by line and coverage, as shown on the following pages of this section.</p>
YEAR WEIGHTS	<p>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.</p>

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

<u>Cred</u>	<u>Trucks, Tractors & Trailers</u>			<u>Private Passenger Types</u>		
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

<u>Cred</u>	<u>Trucks, Tractors & Trailers</u>			<u>Private Passenger Types</u>		
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.

SOUTH DAKOTA
CLAIMS PER TERRITORY
LIABILITY

Territory	Trucks, Tractors & Trailers	Private Passenger Types
	Incurred Claims 5 Years Ending 12/31/2021 Combined BI and PD	Incurred Claims 5 Years Ending 12/31/2021 Combined BI and PD
101	331	59
104	852	163
106	173	26
108	130	12
109	207	37
SW Total	1,693	297

Claims for Trend

BI	PD
<u>52</u>	<u>332</u>

SOUTH DAKOTA
CLAIMS PER TERRITORY
PHYSICAL DAMAGE

Territory	Trucks, Tractors & Trailers Paid Claims 5 Years Ending 12/31/2021		Private Passenger Types Paid Claims 5 Years Ending 12/31/2021	
	OTC	Coll	OTC	Coll
101	364	237	174	110
104	1,439	639	508	170
106	344	135	89	28
108	194	70	64	21
109	552	204	257	59
SW Total	2,893	1,285	1,092	388

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
SOUTH DAKOTA

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 ADJUSTMENT	ADJ OTC TOTAL LOSSES
1987	64,465	233,348	168,883	0.382	0.338	57,082	290,430
1988	70,761	338,685	267,924	0.264	0.456	122,173	460,858
1989	86,392	402,091	315,699	0.274	0.446	140,802	542,893
1990	195,045	526,217	331,172	0.589	0.131	43,384	569,601
1991	322,582	772,362	449,780	0.717	0.003	1,349	773,711
1992	134,200	449,737	315,537	0.425	0.295	93,083	542,820
1993	307,408	704,865	397,457	0.773	-0.053	-21,065	683,800
1994	177,810	621,627	443,817	0.401	0.319	141,578	763,205
1995	148,118	546,080	397,962	0.372	0.348	138,491	684,571
1996	308,318	878,478	570,160	0.541	0.179	102,059	980,537
1997	331,788	925,123	593,335	0.559	0.161	95,527	1,020,650
1998	381,194	1,117,211	736,017	0.518	0.202	148,675	1,265,886
1999	370,092	1,333,064	962,972	0.384	0.336	323,559	1,656,623
2000	543,884	1,696,628	1,152,744	0.472	0.248	285,881	1,982,509
2001	539,349	1,571,195	1,031,846	0.523	0.197	203,274	1,774,469
2002	540,892	1,262,574	721,682	0.749	-0.029	-20,929	1,241,645
2003	182,367	845,346	662,979	0.275	0.445	295,026	1,140,372
2004	79,417	385,095	305,678	0.260	0.460	140,612	525,707
2005	75,947	434,004	358,057	0.212	0.508	181,893	615,897
2006	85,039	562,965	477,926	0.178	0.542	259,036	822,001
2007	347,152	715,001	367,849	0.944	-0.224	-82,398	632,603
2008	255,827	690,686	434,859	0.588	0.132	57,401	748,087
2009	295,628	807,430	511,802	0.578	0.142	72,676	880,106
2010	433,194	893,627	460,433	0.941	-0.221	-101,756	791,871
2011	665,919	1,254,388	588,469	1.132	-0.412	-242,449	1,011,939
2012	614,220	1,179,793	565,573	1.086	-0.366	-207,000	972,793
2013	941,515	1,363,488	421,973	2.231	-1.511	-637,601	725,887
2014	1,145,491	1,863,538	718,047	1.595	-0.875	-628,291	1,235,247
2015	863,847	1,698,834	834,987	1.035	-0.315	-263,021	1,435,813
2016	491,324	1,475,306	983,982	0.499	0.221	217,460	1,692,766
2017	1,079,415	1,874,381	794,966	1.358	-0.638	-507,188	1,367,193
2018	1,324,230	2,344,588	1,020,358	1.298	-0.578	-589,767	1,754,821
2019	667,246	1,875,279	1,208,033	0.552	0.168	202,950	2,078,229
2020	2,298,464	3,452,137	1,153,673	1.992	-1.272	-1,467,472	1,984,665
2021	622,244	1,895,209	1,272,965	0.489	0.231	294,055	2,189,264

(8) NORMAL WIND TO NON W&W RATIO= AVG. (4) 0.720

WIND AND WATER PROCEDURE
OTHER THAN COLLISION
SOUTH DAKOTA

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	27,905	125,187	97,282	0.287	0.572	55,645	180,832
1988	42,491	148,749	106,258	0.400	0.459	48,772	197,521
1989	38,429	183,344	144,915	0.265	0.594	86,080	269,424
1990	121,059	278,917	157,858	0.767	0.092	14,523	293,440
1991	153,722	324,796	171,074	0.899	-0.040	-6,843	317,953
1992	96,778	261,080	164,302	0.589	0.270	44,362	305,442
1993	161,693	361,653	199,960	0.809	0.050	9,998	371,651
1994	95,027	300,489	205,462	0.463	0.396	81,363	381,852
1995	52,128	244,641	192,513	0.271	0.588	113,198	357,839
1996	200,649	470,390	269,741	0.744	0.115	31,020	501,410
1997	153,661	460,088	306,427	0.501	0.358	109,701	569,789
1998	155,478	379,074	223,596	0.695	0.164	36,670	415,744
1999	54,786	371,433	316,647	0.173	0.686	217,220	588,653
2000	158,752	503,919	345,167	0.460	0.399	137,722	641,641
2001	202,525	621,745	419,220	0.483	0.376	157,627	779,372
2002	182,025	503,222	321,197	0.567	0.292	93,790	597,012
2003	110,325	304,365	194,040	0.569	0.290	56,272	360,637
2004	26,516	234,249	207,733	0.128	0.731	151,853	386,102
2005	18,954	106,309	87,355	0.217	0.642	56,082	162,391
2006	28,681	218,729	190,048	0.151	0.708	134,554	353,283
2007	163,869	329,993	166,124	0.986	-0.127	-21,098	308,895
2008	144,199	241,144	96,945	1.487	-0.628	-60,881	180,263
2009	134,047	323,049	189,002	0.709	0.150	28,350	351,399
2010	134,447	301,264	166,817	0.806	0.053	8,841	310,105
2011	234,787	371,480	136,693	1.718	-0.859	-117,419	254,061
2012	263,165	490,004	226,839	1.160	-0.301	-68,279	421,725
2013	664,475	983,434	318,959	2.083	-1.224	-390,406	593,028
2014	902,532	1,170,708	268,176	3.365	-2.506	-672,049	498,659
2015	364,477	689,376	324,899	1.122	-0.263	-85,448	603,928
2016	201,121	554,694	353,573	0.569	0.290	102,536	657,230
2017	472,267	772,428	300,161	1.573	-0.714	-214,315	558,113
2018	438,496	680,752	242,256	1.810	-0.951	-230,385	450,367
2019	240,451	579,959	339,508	0.708	0.151	51,266	631,225
2020	397,695	644,642	246,947	1.610	-0.751	-185,457	459,185
2021	186,405	385,784	199,379	0.935	-0.076	-15,153	370,631

(8) NORMAL WIND TO NON W&W RATIO= AVG. (4) 0.859

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. $\text{Column (2)} - \text{Column (1)}$.
COLUMN (4) WIND AND WATER TO NON-WIND AND WATER RATIO	Ratio of Wind and Water losses to Non-Wind and Water losses. $\text{Column (1)} \div \text{Column (3)}$
COLUMN (5) VARIATION FROM AVERAGE WIND RATIO	Variation from the long term average Wind and Water to non-Wind and Water ratio. $\text{Avg (4)} - \text{Column (4)}$.
COLUMN (6) WIND AND WATER ADJUSTMENT	Wind and Water loss adjustment to bring experience to average Wind and Water level. $\text{Column (3)} * \text{Column (5)}$.
COLUMN (7) ADJUSTED OTC TOTAL LOSSES	$\text{Column (2)} + \text{Column (6)}$.

TERRITORIAL WIND AND WATER PROCEDURE OTHER THAN COLLISION

OBJECTIVE	<p>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.</p>
DESCRIPTION OF TERRITORIAL WIND AND WATER PROCEDURE	<p>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.</p> <p>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.)</p> <p>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.</p> <p>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.</p> <p>$\text{Territorial adjusted total losses} = \text{territorial Wind and Water provision} + \text{territorial non-Wind and Water losses}$</p> <p>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.</p> <p>A sample of the territory Wind and Water procedure is shown on the following page.</p>

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		50,000	150,000	200,000
B		30,000	50,000	80,000
C		20,000	80,000	100,000
	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

OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

PHYSICAL DAMAGE LOSS COSTS FOR RULE 290. - HIRED AUTOS

OBJECTIVE	The objective of this procedure is to determine the indicated advisory prospective physical damage loss costs for Rule 290. - Hired Autos. Advisory prospective physical damage loss costs for additional deductible amounts are also being introduced.
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STEP 1: DETERMINATION OF MULTISTATE LOSS COST INDICATION	The first step in this process is the determination of the multistate loss cost indications for Hired Autos OTC and Collision. 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 exhibit labeled "Determination of Statewide Advisory Loss Cost Level Change." See the calculations in Exhibit D1 .
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STEP 2: CALCULATION OF DEDUCTIBLE DISCOUNT FACTORS	In order to examine the relationship between the loss costs by deductible, we calculated deductible discount factors. This analysis also allows us to introduce loss costs for additional deductibles of \$250, \$500, \$1000, \$2000, \$3000, and \$5000 for OTC and \$2000, \$3000, and \$5000 for Collision.
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STEP 3: REVISED MULTISTATE BASE LOSS COSTS	The multistate OTC and Collision loss costs appearing in this section are calculated by multiplying the current multistate base loss cost by the filed change (from Exhibit D1) and by an off-balance factor. The Deductible Discount Factor changes in this filing will be introduced on a "revenue neutral" basis. That is, an off-balance factor (OBF) will be applied to the base loss costs so that, on average, there is no change to the aggregate loss costs. The off-balance factors are calculated on Exhibit D7 . See the calculation of the revised multistate base loss costs in Exhibit D8 .
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STEP 4:
REVISED
LOSS COSTS BY
DEDUCTIBLE

The revised indicated OTC and Collision loss costs by deductible are determined by multiplying the revised multistate base loss cost (**Exhibit D8**) by one minus the appropriate deductible discount factor (**Exhibit D6**).

For specified perils, the revised loss cost was determined by multiplying the current loss cost by the OTC filed change from **Exhibit D1**.

The OTC full coverage loss cost was selected to be higher than the OTC \$50 deductible loss cost. For all other deductibles, the selected loss cost is the same as the indicated loss cost.

The OTC loss costs are appropriate for deductibles applicable to All Perils. Loss costs for deductibles applicable to Theft, Mischief and Vandalism Only are refer to company.

See **Exhibit D9** for the revised loss costs.

EXPERIENCE
PERIOD DATA

The review is being conducted on a multistate basis and the data is aggregated on an accident year basis.

The incurred losses and allocated loss adjustment expenses are on an accident year basis and were evaluated as of June 30, 2021. In other words, accident year ended March 31, 2021 includes all losses and allocated loss adjustment expenses paid through June 30, 2021 on accidents occurring from April 1, 2020 to March 31, 2021 and all losses and allocated loss adjustment expenses outstanding on these accidents as of June 30, 2021, 15 months after the inception of the accident year. Similarly, the incurred losses and allocated loss adjustment expenses for accident year ended March 31, 2020 include all loss and loss adjustment expenses paid through June 30, 2021 on accidents occurring from April 1, 2019 to March 31, 2020 and all losses and allocated loss adjustment expenses outstanding on these accidents as of June 30, 2021, 27 months after the inception of the accident year.

OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

STEP 1 - DETERMINATION OF MULTISTATE ADVISORY LOSS COST LEVEL CHANGE

OBJECTIVE	<p>The objective of this procedure is to determine the indicated multistate advisory loss cost level change for Hired Autos OTC and Collision. 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 exhibit labeled "Determination of Statewide Advisory Loss Cost Level Change." See the calculations in Exhibit D1.</p>
DESCRIPTION	<p>This procedure compares the developed incurred losses and allocated loss adjustment expenses with the aggregate loss costs.</p>
AGGREGATE LOSS COSTS (Item 1)	<p>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 dividing the annual cost of hire by one hundred and multiplying the result by the current loss cost for the coverage and deductible.</p>
INCURRED LOSSES & LAE (Item 2)	<p>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.</p> <p>For the physical damage coverages, the reported paid (accident year) losses are subject to the following adjustments:</p> <ul style="list-style-type: none">• Developed to an ultimate settlement basis by the application of loss development factors (see Exhibit D2);• Loaded for all loss adjustment expenses (see Section C);• Placed on the prospective cost/frequency levels by the application of trend factors (see Exhibits D3 and D4).
EXPERIENCE RATIO (Item 3)	<p>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 experience period.</p>

OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

STEP 2 - CALCULATION OF DEDUCTIBLE DISCOUNTS FACTORS

In order to examine the relationship between the loss costs by deductible, we calculated deductible discount factors. This analysis also allows us to introduce loss costs for additional deductibles of \$250, \$500, \$1000, \$2000, \$3000, and \$5000 for OTC and \$2000, \$3000, and \$5000 for Collision.

We begin developing Deductible Discount Factors by restating each claim in our database at higher deductible amounts and summarizing the results in a traditional deductible triangle. The rows contain loss data originally written at a given deductible amount, and the columns indicate to what deductible amount the data has been adjusted.

Following each deductible triangle is a Relative Loss Ratio triangle comparing adjacent deductible amounts. A weighted average of these values is developed, and they are accumulated to produce a Relative Loss Level curve showing the impact of deductible amount. The deductible and Relative Loss Ratio triangles are shown in **Exhibit D5**.

To derive the indicated percentage discounts, we divide the relative loss level for each deductible by the relative loss level for the base deductible and subtract the result from one. The base deductibles are \$100 for OTC and \$500 for Collision. The indicated percentage discounts are shown in **Exhibit D6**.

VERISK

SOUTH DAKOTA
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	\$ 7,850,085	5.4%
Physical Damage		
Other Than Collision	2,468,093	8.4%
Collision	2,773,518	11.0%
Combined	5,241,611	9.8%
Total Trucks, Tractors & Trailers	13,091,696	7.2%
PRIVATE PASSENGER TYPES		
Liability		
Single Limit Liability	1,669,740	N.C.
Physical Damage		
Other Than Collision	668,425	N.C.
Collision	407,060	N.C.
Combined	1,075,485	N.C.
Total Private Passenger Types	2,745,225	N.C.
AUTO DEALERS		
Liability		
Single Limit Liability	678,419	-10.0%
Total Auto Dealers	678,419	-10.0%
HIRED AUTOS		
Physical Damage		
Other Than Collision	2,753	38.6%
Collision	5,206	165.5%
Combined	7,959	121.6%
Total Hired Autos	7,959	121.6%
GRAND TOTAL ALL COVERAGES	16,523,299	5.3%
TOTAL LIABILITY	10,198,244	3.5%
TOTAL PHYSICAL DAMAGE	6,325,055	8.3%

(A) An implementation date of 07/01/2023 is assumed for purposes of trending.

(B) Accident Year ending 12/31/2021 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

SOUTH DAKOTA
COMMERCIAL AUTOMOBILE INSURANCE

REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES

FOR TRUCKS, TRACTORS, AND TRAILERS POLICY COVERAGES

Territory	\$100,000 CSL	\$5,000
Code	Liability	Med Pay
101	1.5%	0.0%
104	5.6%	0.0%
106	9.4%	0.0%
108	12.0%	20.0%
109	7.6%	0.0%

VERISK

SOUTH DAKOTA
 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	10.8%	15.1%	9.7%
104	5.2%	8.3%	5.1%
106	7.9%	10.0%	8.4%
108	13.4%	13.1%	13.1%
109	13.7%	15.7%	13.9%

VERISK

SOUTH DAKOTA
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	272	6	175	290	113
104	151	4	224	275	145
106	93	3	258	209	167
108	234	6	305	233	198
109	198	5	431	405	279

(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 C20](#).

(b) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible 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 0.648 to the Trucks, Tractors, and Trailers Comprehensive base loss costs.

VERISK

SOUTH DAKOTA
COMMERCIAL AUTOMOBILE INSURANCE

REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES

FOR PRIVATE PASSENGER TYPES POLICY COVERAGES

Territory	\$100,000 CSL	\$5,000
Code	Liability ^(a)	Med Pay ^(a)
101		
104		
106		
108		
109		

(a) For Private Passenger Types Liability, No Change (N.C.) was selected to better reflect the favorable state experience.

VERISK

SOUTH DAKOTA
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 ^(a)
	Comprehensive ^(a)	Collision ^(b)	
101			
104			
106			
108			
109			

(a) For Private Passenger Types Comprehensive, No Change (N.C.) was selected due to the modest indication.

(b) For Private Passenger Types Collision, No Change (N.C.) was selected to better reflect the favorable state experience.

VERISK

SOUTH DAKOTA
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	257	8	248	251	161
104	154	5	264	216	171
106	130	4	520	246	337
108	194	6	384	258	249
109	160	5	718	256	465

(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 C20](#).

(b) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible 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 0.648 to the Private Passenger Types Comprehensive base loss costs.

VERISK

SOUTH DAKOTA
 COMMERCIAL AUTOMOBILE INSURANCE
 REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
 TERRITORY LOSS COST LEVEL CHANGES
 FOR AUTO DEALERS POLICY COVERAGES

Territory	\$100,000 CSL
Code	Liability
101	-13.9%
104	-9.3%
106	0.0%
108	-1.3%
109	-9.4%

- (a) For Auto Dealers Liability, -10.0% was selected to better reflect the favorable state experience.

VERISK

SOUTH DAKOTA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
REVISED BASE LOSS COSTS BY TERRITORY
FOR AUTO DEALERS POLICY COVERAGES

Territory	Liability
Code	\$100,000 CSL
101	438
104	243
106	150
108	378
109	319

VERISK

SOUTH DAKOTA
COMMERCIAL AUTOMOBILE INSURANCE

REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES

FOR VAN POOLS POLICY COVERAGES

Territory	\$100,000 CSL	\$5,000
Code	Liability	Med Pay
101	1.2%	0.0%
104	5.1%	25.0%
106	8.6%	0.0%
108	11.6%	16.7%
109	7.4%	0.0%

VERISK

SOUTH DAKOTA
 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	10.8%	15.2%	9.6%
104	4.9%	8.2%	4.8%
106	8.0%	9.8%	8.5%
108	13.4%	12.9%	13.2%
109	13.7%	15.6%	14.0%

VERISK

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

FOR VAN POOLS 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	258	8	266	653	172
104	143	5	340	619	220
106	88	3	392	470	254
108	222	7	464	524	301
109	188	6	655	911	424

- (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 C20](#).
- (c) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible 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

SOUTH DAKOTA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES

FOR TAXIS AND LIMOUSINES POLICY COVERAGES

Territory	\$100,000 CSL	\$5,000
Code	Liability	Med Pay
101	1.5%	0.0%
104	5.6%	4.2%
106	9.4%	14.3%
108	12.0%	11.4%
109	7.6%	6.5%

VERISK

SOUTH DAKOTA
 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	10.8%	15.2%	9.6%
104	4.9%	8.2%	4.8%
106	8.0%	9.8%	8.5%
108	13.4%	12.9%	13.2%
109	13.7%	15.6%	14.0%

VERISK

SOUTH DAKOTA
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	1093	45	266	653	172
104	607	25	340	619	220
106	374	16	392	470	254
108	941	39	464	524	301
109	796	33	655	911	424

- (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 C20](#).
- (c) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible 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

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

Territory	\$100,000 CSL	\$5,000
Code	Liability	Med Pay
101	1.0%	12.5%
104	5.6%	0.0%
106	9.4%	0.0%
108	12.7%	22.2%
109	7.1%	14.3%

VERISK

SOUTH DAKOTA
 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	11.2%	15.1%	10.0%
104	4.8%	8.1%	5.3%
106	7.4%	10.0%	8.6%
108	13.1%	13.1%	13.4%
109	13.6%	15.4%	13.8%

VERISK

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

FOR SCHOOL AND CHURCH BUSES 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	103	9	119	183	77
104	57	7	152	173	99
106	35	6	175	132	114
108	89	11	207	147	135
109	75	8	293	255	190

- (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 C20](#).
- (c) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible 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

SOUTH DAKOTA
COMMERCIAL AUTOMOBILE INSURANCE

REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
TERRITORY LOSS COST LEVEL CHANGES

FOR ALL OTHER BUSES POLICY COVERAGES

Territory	\$100,000 CSL	\$5,000
Code	Liability	Med Pay
101	1.5%	1.9%
104	5.5%	4.8%
106	9.3%	8.3%
108	12.0%	12.3%
109	7.7%	8.7%

VERISK

SOUTH DAKOTA
 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
	Comprehensive	Collision	of Loss
101	11.2%	15.1%	10.0%
104	4.8%	8.1%	5.3%
106	7.4%	10.0%	8.6%
108	13.1%	13.1%	13.4%
109	13.6%	15.4%	13.8%

VERISK

SOUTH DAKOTA
COMMERCIAL AUTOMOBILE INSURANCE
REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES
REVISED BASE LOSS COSTS BY TERRITORY
FOR ALL OTHER BUSES 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	860	53	119	183	77
104	477	44	152	173	99
106	294	39	175	132	114
108	739	64	207	147	135
109	626	50	293	255	190

- (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 C20](#).
- (c) Comprehensive base loss cost is the \$25,000-29,999 OCN, age 1, \$500 deductible 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

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

	(1)	(2)	(3)	(4)	(5)
ACCIDENT	AGGREGATE	\$100,000	EXPERIENCE	ACCIDENT YEAR	NUMBER OF
YEAR	LOSS COST AT	INCURRED	RATIO	WEIGHTS	INCURRED
ENDING	LEVEL (B)	(C)	(2) / (1)		CLAIMS
12/31/17	\$3,943,891	\$4,857,608	1.232	10%	366
12/31/18	\$4,043,691	\$3,950,126	0.977	15%	375
12/31/19	\$4,092,763	\$5,057,090	1.236	20%	387
12/31/20	\$4,090,454	\$4,103,132	1.003	25%	293
12/31/21	\$4,171,140	\$3,479,002	0.834	30%	272
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3) * (4)).				1.018
(7)	EXPECTED EXPERIENCE RATIO (D).				1.073
(8)	CREDIBILITY (E).				0.35
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ((6) * (8)) + ((7) * (1.000 - (8))).				1.054
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ((9) - 1.000).				5.4%
(11)	FILED CHANGE.				5.4%
(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 07/01/23 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 1.000 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

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

	ACC. YEAR ENDING	BODILY INJURY	PROPERTY DAMAGE	COMBINED
(1) INCURRED LOSSES AND	12/31/17	\$1,321,844	\$1,344,337	
ALLOCATED LOSS	12/31/18	\$844,546	\$1,449,517	
ADJUSTMENT EXPENSES	12/31/19	\$1,492,719	\$1,609,705	
	12/31/20	\$1,193,099	\$1,377,278	
	12/31/21	\$725,687	\$1,503,142	
(2) DEVELOPED LOSSES AND	12/31/17	\$1,424,274	\$1,481,728	
ALL LOSS ADJUSTMENT	12/31/18	\$926,256	\$1,599,252	
EXPENSES (A)	12/31/19	\$1,724,986	\$1,779,529	
	12/31/20	\$1,521,726	\$1,537,731	
	12/31/21	\$1,110,374	\$1,674,951	
(3) SELECTED ANNUAL LOSS				
TREND (SEE TREND		7.1%	8.1%	7.7%
EXHIBIT IN SECTION C)				
(4) TRENDED LOSSES AND	12/31/17	\$2,301,627	\$2,555,981	\$4,857,608
ALL LOSS ADJUSTMENT	12/31/18	\$1,397,720	\$2,552,406	\$3,950,126
EXPENSES (B)	12/31/19	\$2,430,505	\$2,626,585	\$5,057,090
	12/31/20	\$2,002,591	\$2,100,541	\$4,103,132
	12/31/21	\$1,363,539	\$2,115,463	\$3,479,002

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

- 1 - UNALLOCATED LOSS ADJUSTMENT FACTORS: B.I. 1.070 P.D. 1.100
2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	B.I.	P.D.
12/31/17	1.007	1.002
12/31/18	1.025	1.003
12/31/19	1.080	1.005
12/31/20	1.192	1.015
12/31/21	1.430	1.013

(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 07/01/23
WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
12/31/17	7/1/17	7.000
12/31/18	7/1/18	6.000
12/31/19	7/1/19	5.000
12/31/20	7/1/20	4.000
12/31/21	7/1/21	3.000

VERISK

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

	ACC. YEAR ENDING	AGGREGATE LOSS COSTS
(1) AGGREGATE LOSS COSTS	12/31/17	\$3,836,470
AT CURRENT LEVEL	12/31/18	\$3,948,917
	12/31/19	\$4,012,513
	12/31/20	\$4,026,037
	12/31/21	\$4,121,680
(2) SELECTED ANNUAL PREMIUM		
TREND (SEE TREND		0.4%
EXHIBIT IN SECTION C)		
(3) TRENDED AGGREGATE	12/31/17	\$3,943,891
LOSS COSTS AT	12/31/18	\$4,043,691
CURRENT LEVEL (A)	12/31/19	\$4,092,763
	12/31/20	\$4,090,454
	12/31/21	\$4,171,140

(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
07/01/23 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD
12/31/17	1/1/17	7.000
12/31/18	1/1/18	6.000
12/31/19	1/1/19	5.000
12/31/20	1/1/20	4.000
12/31/21	1/1/21	3.000

VERISK

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

COVERAGE	ACCIDENT YEAR	(1) AGGREGATE LOSS COST AT CURRENT LEVEL (B)	(2) INCURRED LOSSES (C)	(3) EXPERIENCE RATIO (2) / (1)	(4) ACCIDENT YEAR WEIGHTS	(5) NUMBER OF PAID CLAIMS
O.T.C.	ENDING					
	12/31/17	\$2,677,450	\$2,323,572	0.868	10%	545
	12/31/18	\$2,630,489	\$2,813,803	1.070	15%	589
	12/31/19	\$2,629,148	\$3,145,299	1.196	20%	586
	12/31/20	\$2,631,388	\$2,833,081	1.077	25%	602
	12/31/21	\$2,468,093	\$3,025,930	1.226	30%	571
COLL.	12/31/17	\$2,676,943	\$2,861,018	1.069	10%	225
	12/31/18	\$2,679,187	\$3,619,193	1.351	15%	285
	12/31/19	\$2,670,214	\$4,603,852	1.724	20%	322
	12/31/20	\$2,552,721	\$2,419,858	0.948	25%	222
	12/31/21	\$2,773,518	\$2,627,273	0.947	30%	231
					O.T.C.	COLLISION
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				1.124	1.176
(7)	EXPECTED EXPERIENCE RATIO (D).				1.044	1.044
(8)	CREDIBILITY (E).				0.50	0.50
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ((6) * (8)) + ((7) * (1.000 - (8))).				1.084	1.110
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ((9) - 1.000).				8.4%	11.0%
(11)	FILED CHANGE.				8.4%	11.0%
(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 07/01/23 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 1.000 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 11,000 CLAIMS FOR O.T.C. AND 4,500 CLAIMS FOR COLLISION (SEE CREDIBILITY TABLES IN SECTION C).					

VERISK

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

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) PAID LOSSES	12/31/17	\$1,367,193	\$1,576,510
	12/31/18	\$1,754,821	\$2,133,795
	12/31/19	\$2,078,229	\$2,906,831
	12/31/20	\$1,984,665	\$1,646,634
	12/31/21	\$2,189,264	\$1,970,899
(2) DEVELOPED LOSSES AND	12/31/17	\$1,544,928	\$1,781,456
ALL LOSS ADJUSTMENT	12/31/18	\$1,982,948	\$2,411,188
EXPENSES (A)	12/31/19	\$2,350,747	\$3,281,434
	12/31/20	\$2,244,914	\$1,845,811
	12/31/21	\$2,540,663	\$2,144,713
(3) SELECTED ANNUAL LOSS TREND (SEE TREND EXHIBIT IN SECTION C)		6.0%	7.0%
(4) TRENDED LOSSES AND	12/31/17	\$2,323,572	\$2,861,018
ALL LOSS ADJUSTMENT	12/31/18	\$2,813,803	\$3,619,193
EXPENSES (B)	12/31/19	\$3,145,299	\$4,603,852
	12/31/20	\$2,833,081	\$2,419,858
	12/31/21	\$3,025,930	\$2,627,273

(A) PAID LOSSES ARE ADJUSTED BY THE FOLLOWING:

1 - LOSS ADJUSTMENT EXPENSE FACTORS:

	O.T.C	COLL.
	1.130	1.130

2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	O.T.C.	COLL.
12/31/17	1.000	1.000
12/31/18	1.000	1.000
12/31/19	1.001	0.999
12/31/20	1.001	0.992
12/31/21	1.027	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 07/01/23 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/17	7/1/17	7.000	7.000
12/31/18	7/1/18	6.000	6.000
12/31/19	7/1/19	5.000	5.000
12/31/20	7/1/20	4.000	4.000
12/31/21	7/1/21	3.000	3.000

VERISK

SOUTH DAKOTA
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	12/31/17	\$2,412,117	\$2,251,424
AT CURRENT LEVEL	12/31/18	\$2,406,669	\$2,309,644
	12/31/19	\$2,441,177	\$2,360,932
	12/31/20	\$2,480,102	\$2,312,247
	12/31/21	\$2,359,554	\$2,575,226
(2) SELECTED ANNUAL VVF			
TREND (SEE TREND		1.5%	2.5%
EXHIBIT IN SECTION C)			
(3) TRENDED AGGREGATE	12/31/17	\$2,677,450	\$2,676,943
LOSS COSTS AT	12/31/18	\$2,630,489	\$2,679,187
CURRENT LEVEL (A)	12/31/19	\$2,629,148	\$2,670,214
	12/31/20	\$2,631,388	\$2,552,721
	12/31/21	\$2,468,093	\$2,773,518

(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 07/01/23 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/17	1/1/17	7.000	7.000
12/31/18	1/1/18	6.000	6.000
12/31/19	1/1/19	5.000	5.000
12/31/20	1/1/20	4.000	4.000
12/31/21	1/1/21	3.000	3.000

VERISK

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

	(1)	(2)	(3)	(4)	(5)
ACCIDENT	AGGREGATE	\$100,000			
YEAR	LOSS COST AT	INCURRED	EXPERIENCE	ACCIDENT YEAR	NUMBER OF
ENDING	CURRENT	LOSSES	RATIO	WEIGHTS	INCURRED
	LEVEL (B)	(C)	(2) / (1)		CLAIMS
12/31/17	\$770,888	\$1,152,058	1.494	10%	75
12/31/18	\$823,214	\$743,266	0.903	15%	70
12/31/19	\$829,570	\$826,531	0.996	20%	66
12/31/20	\$814,655	\$412,834	0.507	25%	47
12/31/21	\$920,982	\$774,580	0.841	30%	39
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				0.862
(7)	EXPECTED EXPERIENCE RATIO (D).				1.074
(8)	CREDIBILITY (E).				0.15
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ((6) * (8)) + ((7) * (1.000- (8))).				1.042
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ((9) - 1.000).				4.2%
(11)	FILED CHANGE.				N.C.
(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 07/01/23 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 1.000 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

SOUTH DAKOTA
PRIVATE PASSENGER TYPES
AUTOMOBILE LIABILITY INSURANCE
DETERMINATION OF SINGLE LIMIT LOSSES

	ACC. YEAR ENDING	BODILY INJURY	PROPERTY DAMAGE	COMBINED
(1) INCURRED LOSSES AND	12/31/17	\$482,416	\$163,581	
ALLOCATED LOSS	12/31/18	\$206,495	\$227,909	
ADJUSTMENT EXPENSES	12/31/19	\$319,531	\$188,173	
	12/31/20	\$98,262	\$162,026	
	12/31/21	\$281,348	\$140,521	
(2) DEVELOPED LOSSES AND	12/31/17	\$520,831	\$179,939	
ALL LOSS ADJUSTMENT	12/31/18	\$227,136	\$250,951	
EXPENSES (A)	12/31/19	\$368,908	\$207,818	
	12/31/20	\$126,484	\$180,367	
	12/31/21	\$465,110	\$161,065	
(3) SELECTED ANNUAL LOSS TREND (SEE TREND EXHIBIT IN SECTION C)		7.1%	8.1%	7.4%
(4) TRENDED LOSSES AND	12/31/17	\$841,663	\$310,395	\$1,152,058
ALL LOSS ADJUSTMENT	12/31/18	\$342,748	\$400,518	\$743,266
EXPENSES (B)	12/31/19	\$519,791	\$306,739	\$826,531
	12/31/20	\$166,453	\$246,381	\$412,834
	12/31/21	\$571,155	\$203,425	\$774,580
(A) INCURRED LOSSES AND ALLOCATED LOSS ADJUSTMENT EXPENSES ARE ADJUSTED BY THE FOLLOWING FACTORS:				
1 - UNALLOCATED LOSS ADJUSTMENT FACTORS:		B.I. 1.070	P.D. 1.100	
2 - LOSS DEVELOPMENT FACTORS:				
	YEAR ENDING	B.I.	P.D.	
	12/31/17	1.009	1.000	
	12/31/18	1.028	1.001	
	12/31/19	1.079	1.004	
	12/31/20	1.203	1.012	
	12/31/21	1.545	1.042	

(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 07/01/23
WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
12/31/17	7/1/17	7.000
12/31/18	7/1/18	6.000
12/31/19	7/1/19	5.000
12/31/20	7/1/20	4.000
12/31/21	7/1/21	3.000

VERISK

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

	ACC. YEAR ENDING	AGGREGATE LOSS COSTS
(1) AGGREGATE LOSS COSTS	12/31/17	\$770,888
AT CURRENT LEVEL	12/31/18	\$823,214
	12/31/19	\$829,570
	12/31/20	\$814,655
	12/31/21	\$920,982
(2) SELECTED ANNUAL PREMIUM		
TREND (SEE TREND		0.0%
EXHIBIT IN SECTION C)		
(3) TRENDED AGGREGATE	12/31/17	\$770,888
LOSS COSTS AT	12/31/18	\$823,214
CURRENT LEVEL (A)	12/31/19	\$829,570
	12/31/20	\$814,655
	12/31/21	\$920,982

(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
07/01/23 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD
12/31/17	1/1/17	7.000
12/31/18	1/1/18	6.000
12/31/19	1/1/19	5.000
12/31/20	1/1/20	4.000
12/31/21	1/1/21	3.000

VERISK

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

COVERAGE	ACCIDENT YEAR	(1) AGGREGATE LOSS COST AT CURRENT LEVEL (B)	(2) INCURRED LOSSES (C)	(3) EXPERIENCE RATIO (2) / (1)	(4) ACCIDENT YEAR WEIGHTS	(5) NUMBER OF PAID CLAIMS
O.T.C	ENDING					
	12/31/17	\$931,371	\$980,058	1.052	10%	262
	12/31/18	\$863,021	\$742,507	0.860	15%	208
	12/31/19	\$818,245	\$976,222	1.193	20%	255
	12/31/20	\$718,225	\$665,944	0.927	25%	189
	12/31/21	\$668,425	\$510,479	0.764	30%	178
COLL.	12/31/17	\$511,781	\$782,719	1.529	10%	102
	12/31/18	\$479,402	\$652,905	1.362	15%	86
	12/31/19	\$462,474	\$469,057	1.014	20%	86
	12/31/20	\$447,232	\$212,791	0.476	25%	47
	12/31/21	\$407,060	\$382,979	0.941	30%	67
					O.T.C.	COLLISION
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				0.934	0.961
(7)	EXPECTED EXPERIENCE RATIO (D).				1.042	1.059
(8)	CREDIBILITY (E).				0.35	0.30
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ((6) * (8)) + ((7) * (1.000 - (8))).				1.004	1.030
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ((9) - 1.000).				0.4%	3.0%
(11)	FILED CHANGE.				N.C.	N.C.
(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 07/01/23 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 1.000 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

SOUTH DAKOTA
PRIVATE PASSENGER TYPES
AUTOMOBILE PHYSICAL DAMAGE INSURANCE
DETERMINATION OF PHYSICAL DAMAGE LOSSES

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) PAID LOSSES	12/31/17	\$558,113	\$431,303
	12/31/18	\$450,367	\$384,938
	12/31/19	\$631,225	\$296,158
	12/31/20	\$459,185	\$144,797
	12/31/21	\$370,631	\$294,016
(2) DEVELOPED LOSSES AND	12/31/17	\$630,668	\$487,372
ALL LOSS ADJUSTMENT	12/31/18	\$508,915	\$434,980
EXPENSES (A)	12/31/19	\$712,571	\$334,324
	12/31/20	\$517,841	\$162,312
	12/31/21	\$422,582	\$312,636
(3) SELECTED ANNUAL LOSS			
TREND (SEE TREND		6.5%	7.0%
EXHIBIT IN SECTION C)			
(4) TRENDED LOSSES AND	12/31/17	\$980,058	\$782,719
ALL LOSS ADJUSTMENT	12/31/18	\$742,507	\$652,905
EXPENSES (B)	12/31/19	\$976,222	\$469,057
	12/31/20	\$665,944	\$212,791
	12/31/21	\$510,479	\$382,979

(A) PAID LOSSES ARE ADJUSTED BY THE FOLLOWING:

1 - LOSS ADJUSTMENT EXPENSE FACTORS:

	O.T.C	COLL.
	1.130	1.130

2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	O.T.C.	COLL.
12/31/17	1.000	1.000
12/31/18	1.000	1.000
12/31/19	0.999	0.999
12/31/20	0.998	0.992
12/31/21	1.009	0.941

(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 07/01/23 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/17	7/1/17	7.000	7.000
12/31/18	7/1/18	6.000	6.000
12/31/19	7/1/19	5.000	5.000
12/31/20	7/1/20	4.000	4.000
12/31/21	7/1/21	3.000	3.000

VERISK

SOUTH DAKOTA
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	12/31/17	\$799,460	\$477,408
AT CURRENT LEVEL	12/31/18	\$757,701	\$451,414
	12/31/19	\$733,852	\$440,032
	12/31/20	\$658,318	\$429,618
	12/31/21	\$626,453	\$395,204
(2) SELECTED ANNUAL VVF TREND (SEE TREND EXHIBIT IN SECTION C)		2.2%	1.0%
(3) TRENDED AGGREGATE	12/31/17	\$931,371	\$511,781
LOSS COSTS AT	12/31/18	\$863,021	\$479,402
CURRENT LEVEL (A)	12/31/19	\$818,245	\$462,474
	12/31/20	\$718,225	\$447,232
	12/31/21	\$668,425	\$407,060

(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
07/01/23 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC
AND COLLISION.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/17	1/1/17	7.000	7.000
12/31/18	1/1/18	6.000	6.000
12/31/19	1/1/19	5.000	5.000
12/31/20	1/1/20	4.000	4.000
12/31/21	1/1/21	3.000	3.000

VERISK

SOUTH DAKOTA
 AUTOMOBILE LIABILITY INSURANCE - AUTO DEALERS (A)
 DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGES
 SINGLE LIMIT LIABILITY COVERAGE

	(1)	(2)	(3)	(4)	(5)
ACCIDENT YEAR ENDING	AGGREGATE LOSS COST AT CURRENT LEVEL (B)	\$100,000 INCURRED LOSSES (C)	EXPERIENCE RATIO (2) / (1)	ACCIDENT YEAR WEIGHTS	NUMBER OF INCURRED CLAIMS
12/31/17	\$694,169	\$31,235	0.045	10%	6
12/31/18	\$808,760	\$33,206	0.041	15%	4
12/31/19	\$488,838	\$88,795	0.182	20%	8
12/31/20	\$297,169	\$43,533	0.146	25%	5
12/31/21	\$374,197	\$31,631	0.085	30%	8
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				0.110
(7)	EXPECTED EXPERIENCE RATIO (D).				1.263
(8)	CREDIBILITY (E).				0.05
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ((6) * (8)) + ((7) * (1.000- (8))) .				1.205
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ((9) - 1.000) .				20.5%
(11)	FILED CHANGE.				-10.0%
(A)	AUTO DEALERS EXPERIENCE IS FOR ALL AUTO DEALERS RISKS WRITTEN IN ACCORDANCE WITH RULE 248 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, 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 07/01/23 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 3.000 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

SOUTH DAKOTA
AUTO DEALERS
AUTOMOBILE LIABILITY INSURANCE
DETERMINATION OF SINGLE LIMIT LOSSES

	ACC. YEAR ENDING	BODILY INJURY	PROPERTY DAMAGE	COMBINED
(1) INCURRED LOSSES AND	12/31/17	\$0	\$16,428	
ALLOCATED LOSS	12/31/18	\$0	\$18,727	
ADJUSTMENT EXPENSES	12/31/19	\$1,409	\$51,388	
	12/31/20	\$8,630	\$17,157	
	12/31/21	\$0	\$19,393	
(2) DEVELOPED LOSSES AND	12/31/17	\$0	\$18,107	
ALL LOSS ADJUSTMENT	12/31/18	\$0	\$20,806	
EXPENSES (A)	12/31/19	\$1,673	\$58,562	
	12/31/20	\$12,041	\$20,269	
	12/31/21	\$0	\$25,044	
(3) SELECTED ANNUAL LOSS TREND (SEE TREND EXHIBIT IN SECTION C)		7.1%	8.1%	8.1%
(4) TRENDED LOSSES AND	12/31/17	\$0	\$31,235	\$31,235
ALL LOSS ADJUSTMENT	12/31/18	\$0	\$33,206	\$33,206
EXPENSES (B)	12/31/19	\$2,357	\$86,438	\$88,795
	12/31/20	\$15,846	\$27,687	\$43,533
	12/31/21	\$0	\$31,631	\$31,631
(A) INCURRED LOSSES AND ALLOCATED LOSS ADJUSTMENT EXPENSES ARE ADJUSTED BY THE FOLLOWING FACTORS:				
1 - UNALLOCATED LOSS ADJUSTMENT FACTORS:		B.I. 1.070	P.D. 1.100	
2 - LOSS DEVELOPMENT FACTORS:				
	YEAR ENDING	B.I.	P.D.	
	12/31/17	1.014	1.002	
	12/31/18	1.037	1.010	
	12/31/19	1.110	1.036	
	12/31/20	1.304	1.074	
	12/31/21	1.977	1.174	

(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 07/01/23
WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
12/31/17	7/1/17	7.000
12/31/18	7/1/18	6.000
12/31/19	7/1/19	5.000
12/31/20	7/1/20	4.000
12/31/21	7/1/21	3.000

VERISK

SOUTH DAKOTA
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)
								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	12/31/2021	COST	12/31/2021	RATIO	CRED	RATIO	STATE	PRES	IND*	REV	CHG**
101	4346	257.76	192.27	0.746	0.15	0.989	0.963	268	272	272	1.5%
104	17885	109.52	111.37	1.017	0.25	1.028	1.001	143	151	151	5.6%
106	6533	56.84	79.27	1.395	0.10	1.068	1.040	85	93	93	9.4%
108	1230	176.53	288.22	1.633	0.10	1.092	1.063	209	234	234	12.0%
109	3433	146.71	175.72	1.198	0.10	1.049	1.021	184	198	198	7.6%
SW	33427	124.78	128.73	1.032		1.027					

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 5.4 PERCENT.

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

VERISK

SOUTH DAKOTA
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)
								BASE	BASE
T	EARNED CAR	\$100000	EXPER LOSS					CLASS	CLASS
E	YRS YR	UND	COST 5 YRS				INDEX	LOSS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	COST	COST
R	12/31/2021	COST	12/31/2021	RATIO	CRED	RATIO	STATE	PRES	IND*
101	617	243.85	185.66	0.761	0.05	0.979	0.984	257	263
104	4150	142.70	154.84	1.085	0.10	1.000	1.005	154	161
106	629	123.16	85.52	0.694	0.00	0.990	0.995	130	135
108	134	184.13	92.32	0.501	0.00	0.990	0.995	194	201
109	524	145.40	169.43	1.165	0.05	0.999	1.004	160	167
SW	6054	152.13	150.66	0.990		0.995			

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 4.2 PERCENT.

** DUE TO THE FAVORABLE STATE EXPERIENCE, WE WILL NOT BE FILING THESE INDICATED LOSS COSTS. THE LOSS COSTS IN COLUMN (8) REMAIN IN EFFECT.

VERISK

SOUTH DAKOTA
COMMERCIAL AUTOMOBILE INSURANCE
SINGLE LIMIT LIABILITY

DETERMINATION OF LOSS COST LEVEL CHANGES BY TERRITORY
AUTO DEALERS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
			REV				CHANGES IN		BASE	BASE	
T	TTT ACC-YR		TTT	PRES AUTO			TERRITORY		CLASS	CLASS	ADV
E	12/31/2021	AGG LCCL	BASE	DEALERS			RELATIVITY		LOSS	LOSS	LOSS
R	EARNED	YR ENDED	LOSS	BASE LOSS	AVERAGE	COLUMNS	REQ	ADJ	COST	COST	COST
R	EXPOS	12/31/2021	COST	COST	(3)	(4)	(5) / (6)	1.01	IND*	REV**	CHG***
101	4346	103818	272	509	1.669	1.761	0.948	0.957	587	438	-13.9%
104	17885	178771	151	268	0.926	0.927	0.999	1.009	326	243	-9.3%
106	6533	7422	93	150	0.571	0.519	1.100	1.111	201	150	0.0%
108	1230	13678	234	383	1.436	1.325	1.084	1.095	505	378	-1.3%
109	3433	70508	198	352	1.215	1.218	0.998	1.008	428	319	-9.4%
SW	33427	374197	163	289			0.990				

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 20.5 PERCENT.

** KEYED TO A STATEWIDE LOSS COST CHANGE OF -10.0 PERCENT.

*** PERCENTAGE CHANGE IN LOSS COST IS (COL 10/COL 4)

VERISK

SOUTH DAKOTA
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)
								BASE	BASE	BASE	
T	EARNED CAR		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	12/31/2021	COST	12/31/2021	RATIO	CRED	RATIO	STATE	PRES	IND*	REV	CHG**
101	2365	103.46	124.89	1.207	0.15	1.120	1.024	158	175	175	10.8%
104	8176	145.27	142.18	0.979	0.35	1.061	0.970	213	224	224	5.2%
106	2164	166.60	166.18	0.997	0.15	1.089	0.995	239	258	258	7.9%
108	746	192.17	282.50	1.470	0.10	1.142	1.044	269	305	305	13.4%
109	1953	272.33	357.40	1.312	0.20	1.146	1.048	379	431	431	13.7%
SW	15404	160.23	176.98	1.105		1.094					

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 8.4 PERCENT.

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

VERISK

SOUTH DAKOTA
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)
								BASE	BASE	BASE	
T	EARNED CAR		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	12/31/2021	COST	12/31/2021	RATIO	CRED	RATIO	STATE	PRES	IND*	REV	CHG**
101	2454	160.61	222.75	1.387	0.20	1.245	1.037	252	290	290	15.1%
104	9212	159.93	176.92	1.106	0.35	1.173	0.977	254	275	275	8.3%
106	2443	118.20	127.53	1.079	0.15	1.190	0.991	190	209	209	10.0%
108	1067	131.28	177.14	1.349	0.10	1.223	1.018	206	233	233	13.1%
109	2106	226.60	321.23	1.418	0.20	1.251	1.042	350	405	405	15.7%
SW	17282	160.48	194.05	1.209		1.201					

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 11.0 PERCENT.

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

VERISK

SOUTH DAKOTA
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)
								BASE	BASE
T	EARNED CAR		EXPER LOSS					CLASS	CLASS
E	YRS YR	UND	COST 5 YRS				INDEX	LOSS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	COST	COST
R	12/31/2021	COST	12/31/2021	RATIO	CRED	RATIO	STATE	PRES	IND*
101	556	205.08	194.79	0.950	0.10	1.008	0.995	248	248
104	1299	194.56	192.32	0.988	0.20	1.009	0.996	264	264
106	250	353.33	224.87	0.636	0.10	0.976	0.963	520	503
108	85	307.08	608.10	1.980	0.05	1.062	1.048	384	404
109	376	497.98	563.79	1.132	0.15	1.032	1.019	718	735
SW	2566	260.50	264.23	1.014		1.013			

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 0.4 PERCENT.

** DUE TO THE MODEST INDICATION, WE WILL NOT BE FILING THESE
INDICATED LOSS COSTS. THE LOSS COSTS IN COLUMN (8) REMAIN IN EFFECT.

VERISK

SOUTH DAKOTA
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)
								BASE	BASE
T	EARNED CAR		EXPER LOSS					CLASS	CLASS
E	YRS YR	UND	COST 5 YRS				INDEX	LOSS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	COST	COST
R	12/31/2021	COST	12/31/2021	RATIO	CRED	RATIO	STATE	PRES	IND*
101	581	189.14	219.81	1.162	0.15	1.114	1.010	251	261
104	1348	135.63	142.47	1.050	0.20	1.094	0.992	216	221
106	261	140.77	148.52	1.055	0.05	1.103	1.000	246	253
108	118	152.53	198.35	1.300	0.05	1.115	1.011	258	269
109	392	152.03	173.07	1.138	0.10	1.108	1.005	256	265
SW	2700	150.76	166.58	1.105		1.103			

* KEYED TO A STATEWIDE LOSS COST CHANGE OF 3.0 PERCENT.

** DUE TO THE FAVORABLE STATE EXPERIENCE, WE WILL NOT BE FILING THESE
INDICATED LOSS COSTS. THE LOSS COSTS IN COLUMN (8) REMAIN IN EFFECT.

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>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>		
(1)	Direct Losses Incurred	6,019,685	6,699,508	7,148,263	7,814,080	7,857,734		
(2)	Allocated Loss Adjustment Expenses Incurred	685,049	706,434	689,741	788,804	848,374		
(3)	Unallocated Loss Adjustment Expense Incurred	506,748	528,552	547,902	583,052	567,364		
(4)	Unallocated LAE as a Ratio to Losses + Allocated LAE (3)/[(1)+(2)]	7.6%	7.1%	7.0%	6.8%	6.5%	6.8%	7.0%
(5)	Selected Factor							7.0%

		<u>Property Damage</u> (000's)					3 YR. <u>AVG</u>	5 YR. <u>AVG</u>
	<u>ITEM</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>		
(1)	Direct Losses Incurred	1,199,502	1,195,132	1,312,867	1,213,303	1,087,320		
(2)	Allocated Loss Adjustment Expenses Incurred	60,189	65,065	69,121	54,802	49,307		
(3)	Unallocated Loss Adjustment Expense Incurred	129,564	135,456	141,467	122,670	111,251		
(4)	Unallocated LAE as a Ratio to Losses + Allocated LAE (3)/[(1)+(2)]	10.3%	10.7%	10.2%	9.7%	9.8%	9.9%	10.1%
(5)	Selected Factor							10.0%

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.	5 YR.
		<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>AVG</u>	<u>AVG</u>
(1)	ITEM Direct Losses Incurred	4,809,253	5,444,825	5,515,995	5,746,395	5,199,621		
(2)	Loss Adjustment Expenses Incurred	622,246	702,163	714,081	736,491	662,516		
(3)	Losses + LAE Incurred as Ratio to Losses Incurred [(1)+(2)]/(1)	1.129	1.129	1.129	1.128	1.127	1.128	1.129
(4)	Selected							1.130

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	SOUTH DAKOTA				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)
	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT
3/31/2019	22885.87	18950.53	4418.46	4311.10	25376.34	24788.50	4649.58	4622.24
6/30/2019	24113.32	19570.50	4594.16	4376.47	25378.01	25217.15	4731.27	4713.97
9/30/2019	17404.13	20210.75	4549.94	4442.82	25548.37	25653.22	4794.91	4807.52
12/31/2019	17834.43	20871.95	4700.84	4510.18	25952.73	26096.83	4855.43	4902.92
3/31/2020	20327.91	21554.78	4325.88	4578.57	26255.17	26548.11	4938.27	5000.22
6/30/2020	18668.88	22259.95	4165.32	4647.99	26661.33	27007.19	5113.20	5099.44
9/30/2020	21279.27	22988.19	4474.44	4718.46	27167.70	27474.21	5220.85	5200.64
12/31/2020	25556.71	23740.25	4546.80	4790.00	27696.07	27949.31	5360.14	5303.85
3/31/2021	23150.89	24516.92	4928.03	4862.63	28334.16	28432.62	5490.90	5409.10
6/30/2021	26092.57	25319.00	5380.28	4936.35	29086.01	28924.29	5435.24	5516.44
9/30/2021	29179.59	26147.31	5087.97	5011.20	29616.84	29424.46	5592.86	5625.91
12/31/2021	28813.87	27002.73	5182.54	5087.18	30401.42	29933.28	5759.68	5737.56

BODILY INJURY

PROPERTY DAMAGE

(9) AVERAGE ANNUAL PERCENT CHANGE IN PAID
CLAIM COST (12TH POINT / 8TH POINT)

(A) SOUTH DAKOTA

13.7%

6.2%

(B) MULTISTATE

7.1%

8.2%

(10) CREDIBILITY

0.00

0.05

(11) WEIGHTED AVERAGE ANNUAL PERCENT CHANGE
IN PAID CLAIM COSTS

{ (10) * (9A) } + { (1.0 - (10)) * (9B) }

7.1%

8.1%

(12) SELECTED ANNUAL PERCENT CHANGE IN
CLAIM FREQUENCY

0.0%

0.0%

(13) AVERAGE ANNUAL PERCENT CHANGE IN LIABILITY
LOSS RATIO (11) * (12)

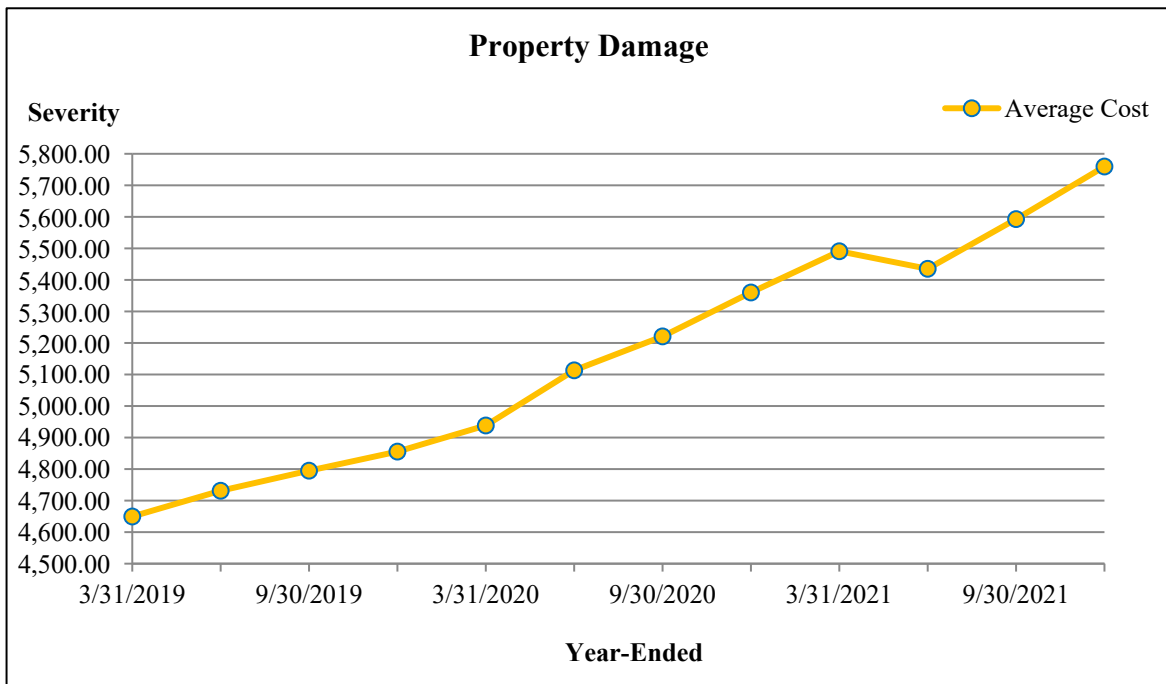
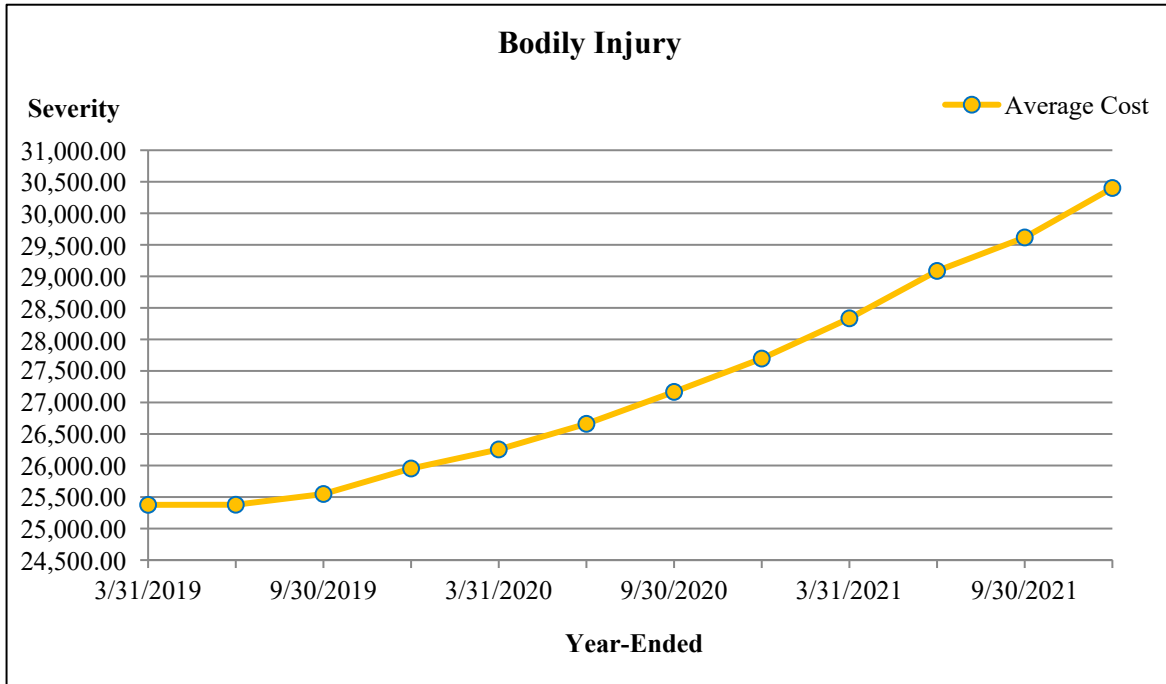
7.1%

8.1%

* 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>BODILY INJURY</u>	<u>BODILY INJURY</u>	<u>PROPERTY DAMAGE</u>	<u>PROPERTY DAMAGE</u>
<u>ENDING</u>	<u>ACTUAL</u>	<u>ACTUAL CHANGE@</u>	<u>ACTUAL</u>	<u>ACTUAL CHANGE@</u>
12/31/2015	0.7726		2.8416	
3/31/2016	0.7860		2.8118	
6/30/2016	0.7947		2.8096	
9/30/2016	0.8010		2.8030	
12/31/2016	0.8005	3.6% &	2.7911	-1.8% &
3/31/2017	0.8020		2.7671	
6/30/2017	0.8096		2.7603	
9/30/2017	0.8063	0.7%	2.7320	-2.5%
12/31/2017	0.8074		2.7272	
3/31/2018	0.8080		2.7408	
6/30/2018	0.8037		2.7474	
9/30/2018	0.8018	-0.6%	2.7491	0.6%
12/31/2018	0.7990		2.7511	
3/31/2019	0.7946		2.7424	
6/30/2019	0.7886		2.7048	
9/30/2019	0.7874	-1.8%	2.6948	-2.0%
12/31/2019	0.7842		2.6632	
3/31/2020	0.7579		2.5418	
6/30/2020	0.6783		2.2916	
9/30/2020	0.6322	-19.7%	2.1286	-21.0%
12/31/2020	0.5837		1.9960	
3/31/2021	0.5642		1.9558	
6/30/2021	0.6059		2.0736	
9/30/2021	0.6025	-4.7%	2.0740	-2.6%

* EXCLUDES MASSACHUSETTS

@ CHANGE BASED ON YEARS ENDING 9/30/XXXX

& CHANGE BASED ON YEAR ENDING 12/31/2016 divided by 12/31/2015

VERISK

COMMERCIAL AUTO LIABILITY
INCURRED CLAIM FREQUENCY

MULTISTATE*

PRIVATE PASSENGER TYPES

<u>YEAR</u>	<u>BODILY INJURY</u>	<u>BODILY INJURY</u>	<u>PROPERTY DAMAGE</u>	<u>PROPERTY DAMAGE</u>
<u>ENDING</u>	<u>ACTUAL</u>	<u>ACTUAL CHANGE@</u>	<u>ACTUAL</u>	<u>ACTUAL CHANGE@</u>
12/31/2015	0.7971		3.0425	
3/31/2016	0.8054		3.0237	
6/30/2016	0.8085		3.0347	
9/30/2016	0.8231		3.0219	
12/31/2016	0.8073	1.3% &	2.9986	-1.4% &
3/31/2017	0.8032		2.9358	
6/30/2017	0.8047		2.9004	
9/30/2017	0.7854	-4.6%	2.8196	-6.7%
12/31/2017	0.7858		2.7929	
3/31/2018	0.7956		2.8126	
6/30/2018	0.7989		2.7637	
9/30/2018	0.7873	0.2%	2.7445	-2.7%
12/31/2018	0.7861		2.7044	
3/31/2019	0.7639		2.6544	
6/30/2019	0.7447		2.6195	
9/30/2019	0.7280	-7.5%	2.5663	-6.5%
12/31/2019	0.7206		2.5080	
3/31/2020	0.6883		2.3878	
6/30/2020	0.5917		2.0635	
9/30/2020	0.5495	-24.5%	1.8644	-27.4%
12/31/2020	0.4835		1.6413	
3/31/2021	0.4647		1.5227	
6/30/2021	0.5190		1.6886	
9/30/2021	0.5341	-2.8%	1.7189	-7.8%

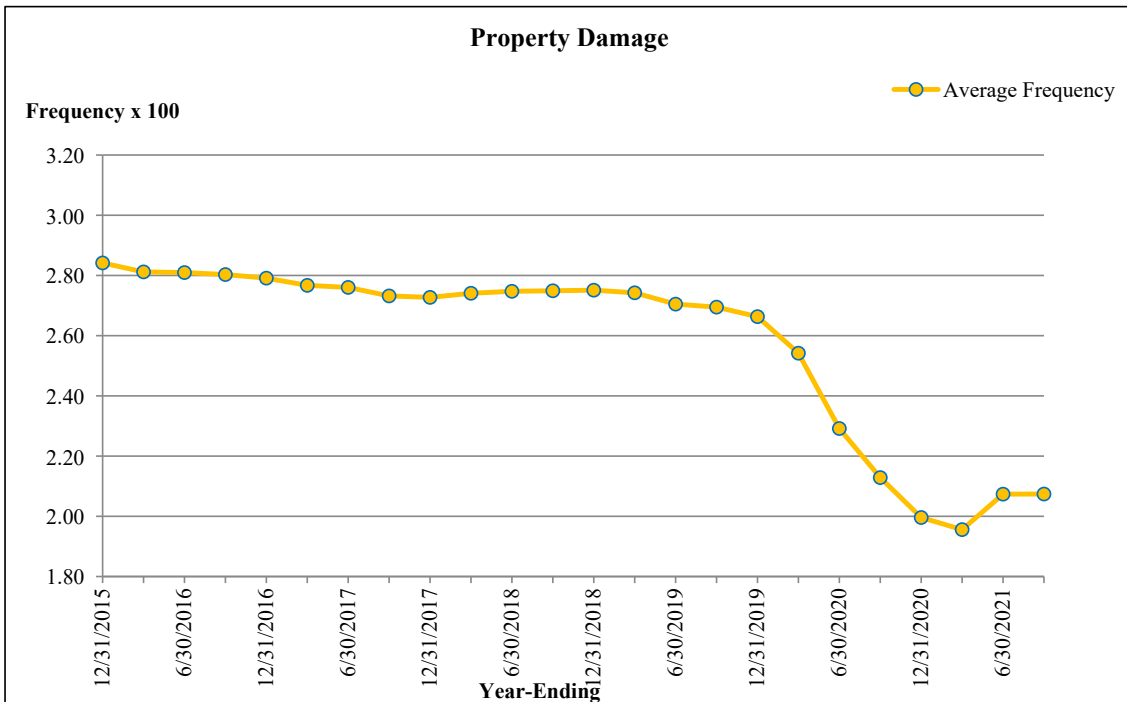
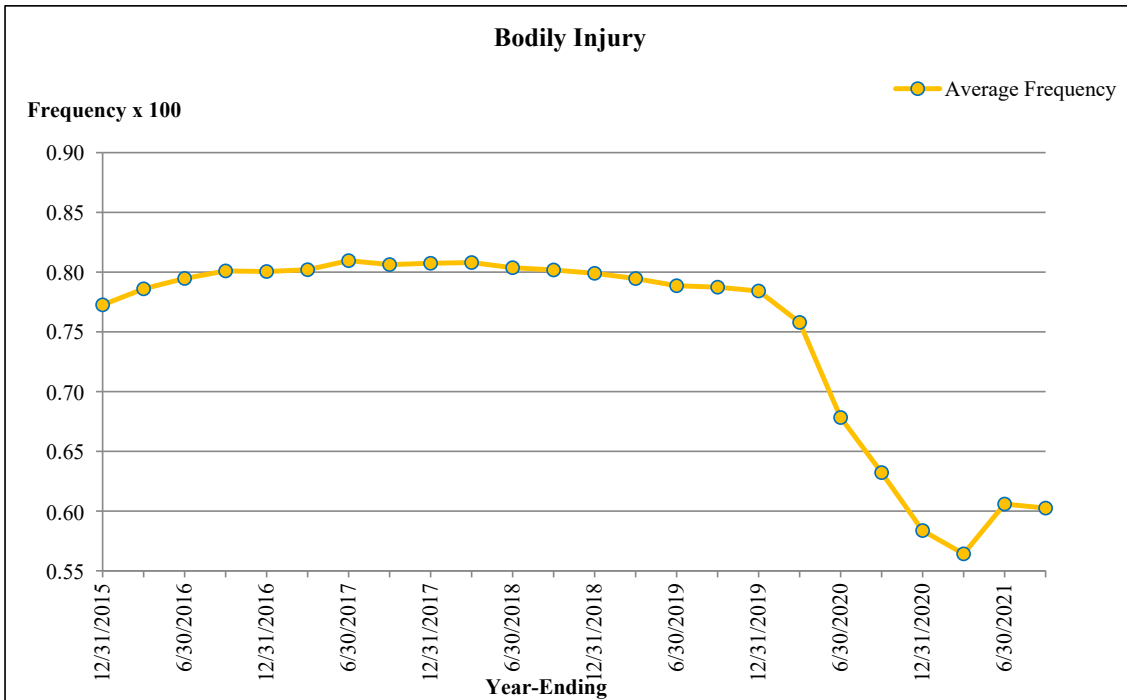
* EXCLUDES MASSACHUSETTS

@ CHANGE BASED ON YEARS ENDING 9/30/XXXX

& CHANGE BASED ON YEAR ENDING 12/31/2016 divided by 12/31/2015

VERISK

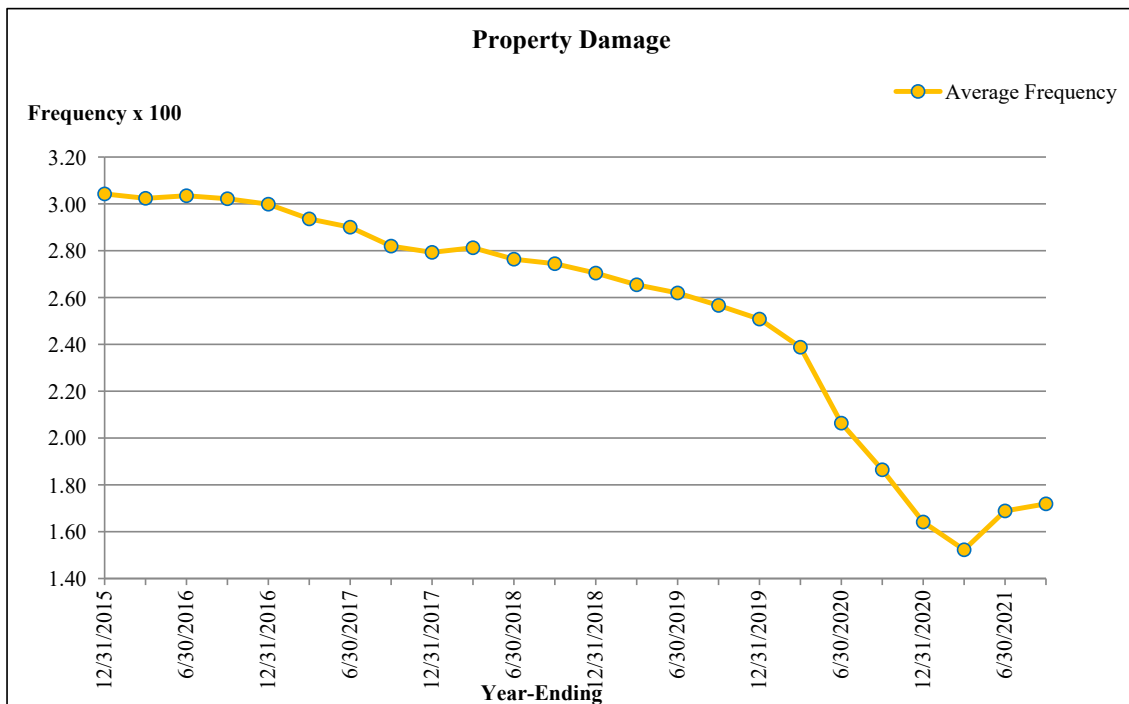
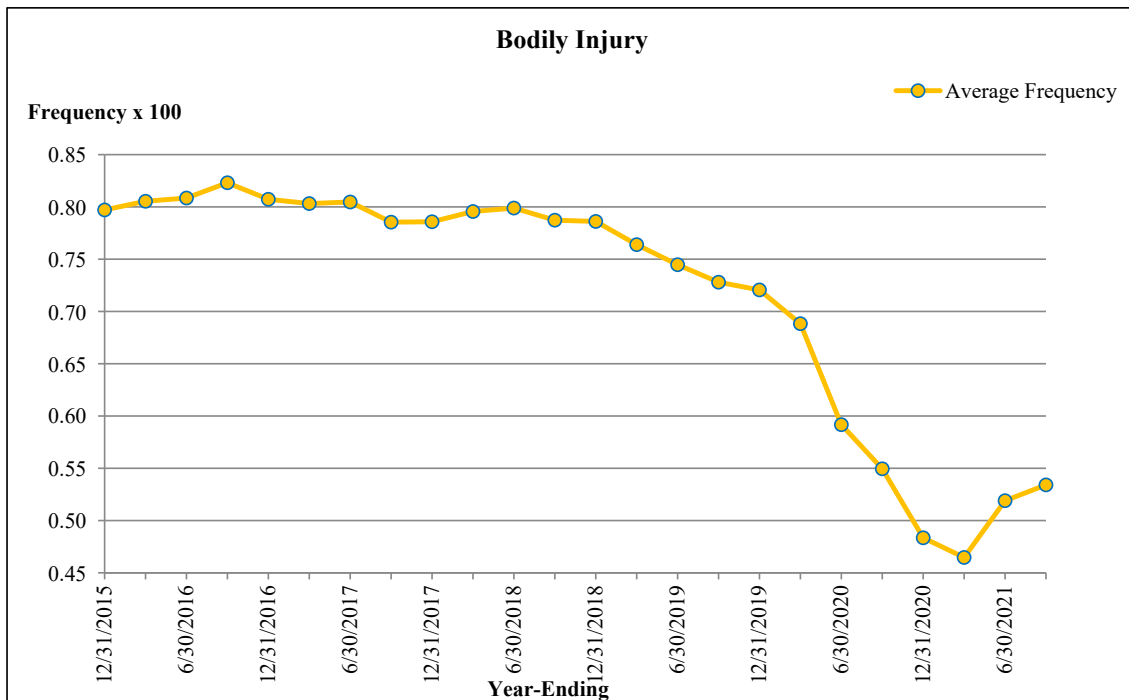
Commercial Automobile Liability
Incurred Claim Frequency Experience
Trucks, Tractors, and Trailers
Multistate*



*Excludes Massachusetts

VERISK

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



*Excludes Massachusetts

VERISK

State Group Data*
Trucks, Tractors & Trailers
Liability
Premium Trend Calculation

Companies Not Reporting Age Code X Data

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

6/30/2020	0.980
12/31/2020	0.979
6/30/2021	0.976
12/31/2021	0.983

Exponential Trend (Average Annual Change)

4 Points	0.1%
3 Points	0.4%

* Includes Alaska, Arkansas, California, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Mississippi, Montana, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, South Carolina, South Dakota, Texas, Virginia, and Wyoming

VERISK

State Group Data*
Trucks, Tractors & Trailers
Liability
Premium Trend Calculation

All Companies
Excluding 11th Preceding Model Year and Older Data

Year Ending:	Average Rating Factor
6/30/2017	1.084
12/31/2017	1.090
6/30/2018	1.097
12/31/2018	1.104
6/30/2019	1.110
12/31/2019	1.114
6/30/2020	1.117
12/31/2020	1.120
6/30/2021	1.121
12/31/2021	1.122

Exponential Trend (Average Annual Change)

9 Points	0.7%
7 Points	0.5%
5 Points	0.4%

Selected Annual Premium Trend: 0.4%

* Includes Alaska, Arkansas, California, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Mississippi, Montana, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, South Carolina, South Dakota, Texas, Virginia, and Wyoming

VERISK

State Group Data*
Private Passenger Types
Liability
Premium Trend Calculation

Companies Not Reporting Age Code X Data

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

6/30/2019	0.985
12/31/2019	0.982
6/30/2020	0.981
12/31/2020	0.979
6/30/2021	0.977
12/31/2021	0.977

Exponential Trend (Average Annual Change)

6 Points	-0.3%
5 Points	-0.3%
4 Points	-0.3%

* Includes Alaska, Arkansas, California, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Mississippi, Montana, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, South Carolina, South Dakota, Texas, Virginia, and Wyoming

VERISK

State Group Data*
Private Passenger Types
Liability
Premium Trend Calculation

All Companies
Excluding 11th Preceding Model Year and Older Data

Year Ending:	Average Rating Factor
6/30/2017	0.999
12/31/2017	1.000
6/30/2018	1.001
12/31/2018	1.002
6/30/2019	1.002
12/31/2019	1.003
6/30/2020	1.004
12/31/2020	1.004
6/30/2021	1.002
12/31/2021	1.000

Exponential Trend (Average Annual Change)

9 Points	0.0%
7 Points	0.0%
5 Points	-0.1%

Selected Annual Premium Trend: 0.0%

* Includes Alaska, Arkansas, California, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Mississippi, Montana, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, South Carolina, South Dakota, Texas, Virginia, and Wyoming

VERISK

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

Frequency (expressed as claims per 100 exposures)

	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
Year Ending:	Value	Change**	Value	Change**	Value	Change**
3/31/2017	1.15		0.72		0.54	
6/30/2017	1.16		0.72		0.54	
9/30/2017	1.17		0.72		0.54	
12/31/2017	1.20		0.75		0.57	
3/31/2018	1.25		0.77		0.58	
6/30/2018	1.28	10.3%	0.79	9.7%	0.59	9.3%
9/30/2018	1.32		0.81		0.60	
12/31/2018	1.36	13.3%	0.83	10.7%	0.61	7.0%
3/31/2019	1.39		0.85		0.63	
6/30/2019	1.41	10.2%	0.86	8.9%	0.63	6.8%
9/30/2019	1.44		0.87		0.64	
12/31/2019	1.44	5.9%	0.87	4.8%	0.63	3.3%
3/31/2020	1.42		0.86		0.63	
6/30/2020	1.38	-2.1%	0.84	-2.3%	0.61	-3.2%
9/30/2020	1.38		0.84		0.61	
12/31/2020	1.38	-4.2%	0.85	-2.3%	0.61	-3.2%
3/31/2021	1.43		0.87		0.61	
6/30/2021	1.49	8.0%	0.89	6.0%	0.62	1.6%
9/30/2021	1.49		0.89		0.62	
12/31/2021	1.47	6.5%	0.86	1.2%	0.60	-1.6%

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

Deductible:	Percent of Losses
Full	0.6%
\$50	0.3%
\$100	2.0%
\$200	0.3%
\$250	7.3%
\$500	29.2%
\$1,000	48.8%
\$2,000	5.8%
\$3,000	2.2%
\$5,000	3.4%

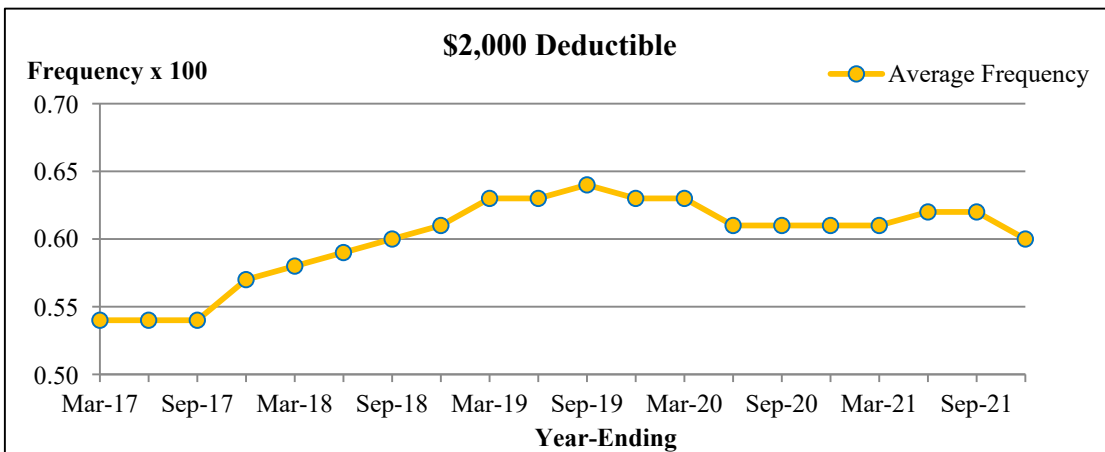
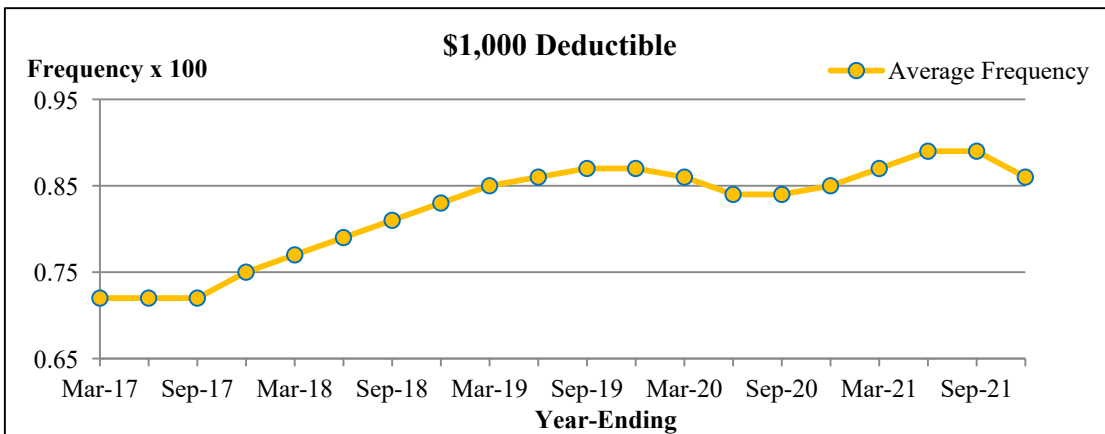
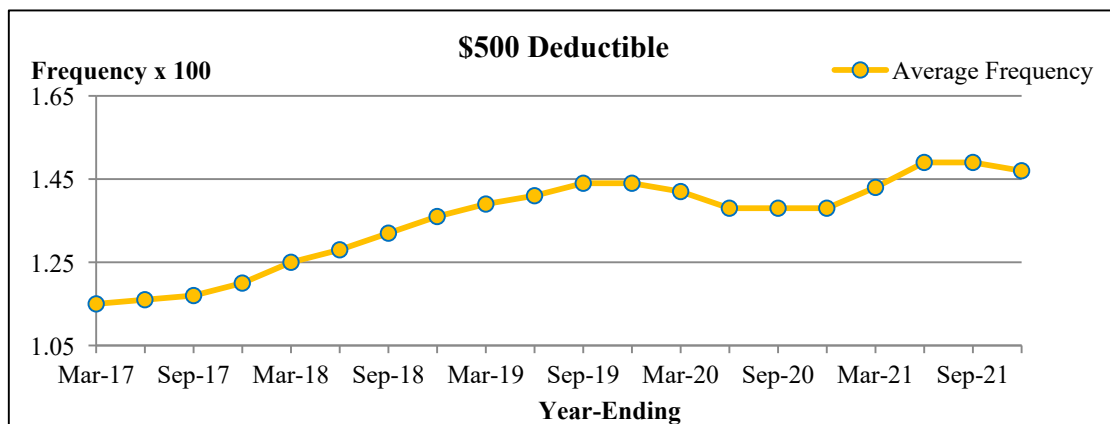
* Multistate data excludes Massachusetts

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

*** Deductibles above \$2,000, totaling 5.6% 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
3/31/2017	2,383.15	3,651.66	4,268.31
6/30/2017	2,497.11	3,777.28	4,394.46
9/30/2017	2,628.01	3,974.99	4,634.89
12/31/2017	2,717.77	4,048.19	4,706.41
3/31/2018	2,745.52	4,102.60	4,781.84
6/30/2018	2,749.41	4,189.10	4,960.92
9/30/2018	2,719.00	4,185.34	5,016.07
12/31/2018	2,796.56	4,343.74	5,226.72
3/31/2019	2,811.24	4,382.33	5,337.76
6/30/2019	2,852.20	4,444.37	5,387.19
9/30/2019	2,885.27	4,524.08	5,446.03
12/31/2019	2,886.20	4,601.90	5,590.19
3/31/2020	2,914.21	4,560.49	5,468.39
6/30/2020	2,941.78	4,597.29	5,549.01
9/30/2020	2,967.00	4,600.35	5,560.94
12/31/2020	3,049.43	4,649.51	5,617.49
3/31/2021	3,094.63	4,731.66	5,794.58
6/30/2021	3,165.67	4,806.30	5,865.04
9/30/2021	3,383.47	5,037.47	6,180.46
12/31/2021	3,501.67	5,207.23	6,375.24

Average Annual Change Using Exponential Fits:

20 point fit:	6.1%	6.1%	7.3%
16 point fit:	5.9%	5.4%	6.3%
12 point fit:	7.4%	5.2%	5.7%

Selected severity trend:	6.0%
Selected frequency trend:	0.0%
Selected pure premium trend:	6.0%

* Multistate data excludes Massachusetts

VERISK

Multistate*
Trucks, Tractors & Trailers Physical Damage
Collision

Frequency (expressed as claims per 100 exposures)

	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
Year Ending:	Value	Change**	Value	Change**	Value	Change**
3/31/2017	2.22		1.96		1.61	
6/30/2017	2.23		1.95		1.60	
9/30/2017	2.21		1.94		1.59	
12/31/2017	2.21		1.94		1.60	
3/31/2018	2.24		1.97		1.63	
6/30/2018	2.24	0.4%	2.01	3.1%	1.66	3.7%
9/30/2018	2.27		2.03		1.68	
12/31/2018	2.27	2.7%	2.03	4.6%	1.68	5.0%
3/31/2019	2.27		2.03		1.67	
6/30/2019	2.28	1.8%	2.04	1.5%	1.68	1.2%
9/30/2019	2.29		2.04		1.68	
12/31/2019	2.29	0.9%	2.05	1.0%	1.69	0.6%
3/31/2020	2.20		1.96		1.62	
6/30/2020	2.05	-10.1%	1.81	-11.3%	1.50	-10.7%
9/30/2020	1.97		1.72		1.44	
12/31/2020	1.89	-17.5%	1.66	-19.0%	1.39	-17.8%
3/31/2021	1.92		1.67		1.41	
6/30/2021	2.02	-1.5%	1.77	-2.2%	1.49	-0.7%
9/30/2021	2.04		1.81		1.53	
12/31/2021	2.03	7.4%	1.81	9.0%	1.55	11.5%

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

Deductible:	Percent of Losses
\$100	0.1%
\$200	0.0%
\$250	0.9%
\$500	26.5%
\$1,000	57.4%
\$2,000	7.4%
\$3,000	2.4%
\$5,000	5.3%

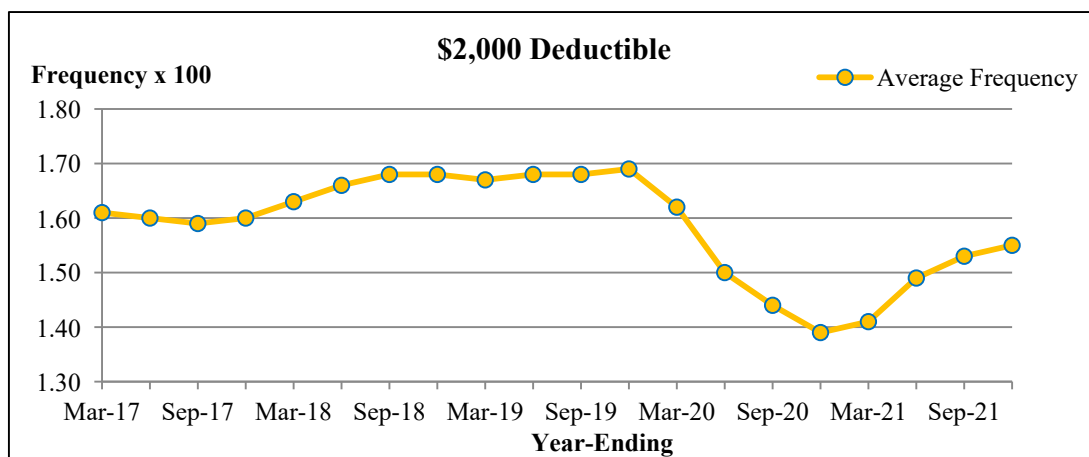
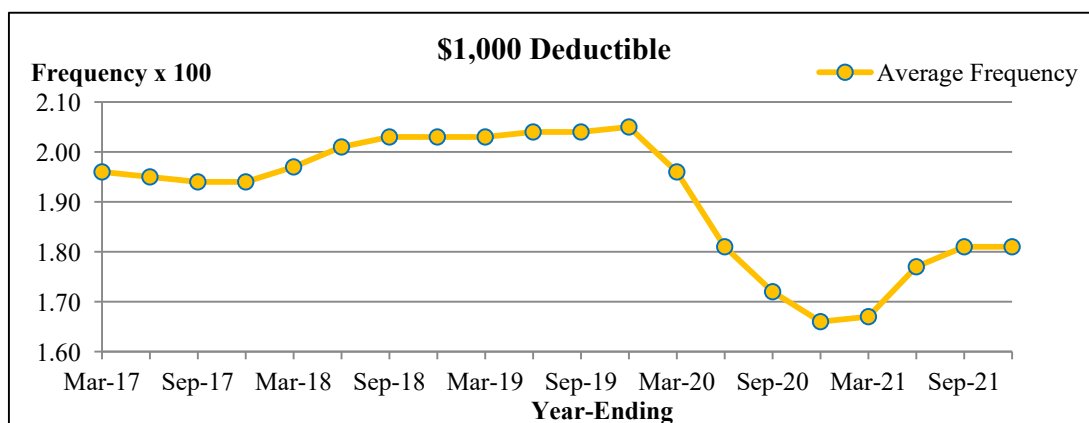
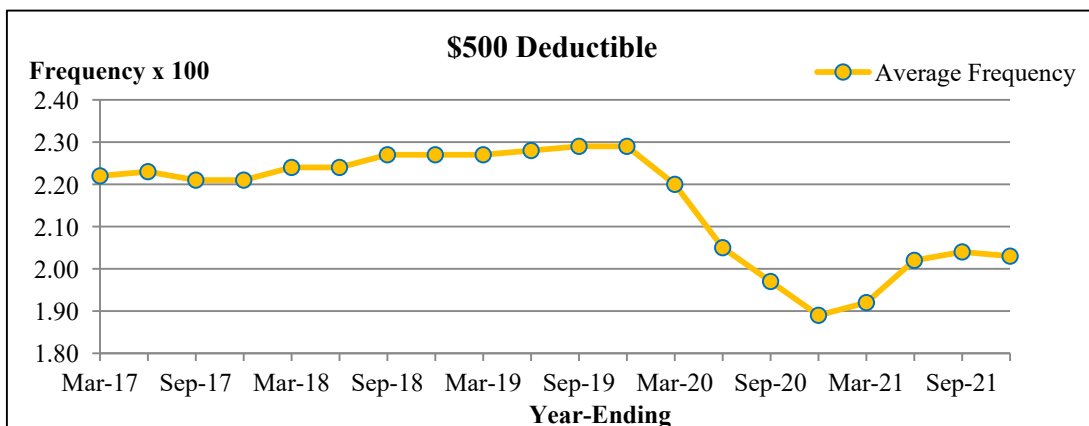
* Multistate data excludes Massachusetts

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

*** Deductibles above \$2,000, totaling 7.7% 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
3/31/2017	5,193.66	5,912.46	6,255.39
6/30/2017	5,188.58	5,962.06	6,329.55
9/30/2017	5,269.29	6,004.87	6,394.77
12/31/2017	5,329.78	6,054.25	6,435.18
3/31/2018	5,389.62	6,147.89	6,527.62
6/30/2018	5,442.13	6,190.27	6,586.05
9/30/2018	5,522.87	6,276.75	6,666.12
12/31/2018	5,549.22	6,358.84	6,769.38
3/31/2019	5,646.74	6,441.51	6,890.35
6/30/2019	5,728.65	6,583.23	7,051.94
9/30/2019	5,741.87	6,617.55	7,101.47
12/31/2019	5,802.93	6,673.84	7,157.00
3/31/2020	5,825.10	6,752.87	7,239.63
6/30/2020	5,861.40	6,791.80	7,254.75
9/30/2020	5,905.94	6,940.04	7,403.06
12/31/2020	6,001.81	7,101.45	7,587.12
3/31/2021	6,138.25	7,254.75	7,715.65
6/30/2021	6,387.42	7,522.49	8,003.51
9/30/2021	6,780.52	7,911.27	8,404.25
12/31/2021	7,262.74	8,382.00	8,855.80

Average Annual Change Using Exponential Fits:

20 point fit:	5.7%	6.4%	6.5%
16 point fit:	6.4%	7.3%	7.3%
12 point fit:	7.9%	8.8%	8.3%

Selected severity trend:	7.0%
Selected frequency trend:	0.0%
Selected pure premium trend:	7.0%

* Multistate data excludes Massachusetts

VERISK

Multistate*
Private Passenger Types Physical Damage
Other Than Collision

Frequency (expressed as claims per 100 exposures)

	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
Year Ending:	Value	Change**	Value	Change**	Value	Change**
3/31/2017	2.88		1.77		1.17	
6/30/2017	2.84		1.75		1.15	
9/30/2017	2.85		1.77		1.16	
12/31/2017	2.91		1.82		1.19	
3/31/2018	2.97		1.85		1.21	
6/30/2018	3.07	8.1%	1.90	8.6%	1.24	7.8%
9/30/2018	3.17		1.94		1.25	
12/31/2018	3.26	12.0%	1.98	8.8%	1.27	6.7%
3/31/2019	3.37		2.05		1.31	
6/30/2019	3.45	12.4%	2.11	11.1%	1.35	8.9%
9/30/2019	3.50		2.16		1.37	
12/31/2019	3.51	7.7%	2.16	9.1%	1.36	7.1%
3/31/2020	3.39		2.09		1.33	
6/30/2020	3.12	-9.6%	1.94	-8.1%	1.24	-8.1%
9/30/2020	3.05		1.91		1.24	
12/31/2020	2.96	-15.7%	1.86	-13.9%	1.21	-11.0%
3/31/2021	3.05		1.91		1.21	
6/30/2021	3.36	7.7%	2.07	6.7%	1.29	4.0%
9/30/2021	3.44		2.12		1.31	
12/31/2021	3.48	17.6%	2.11	13.4%	1.31	8.3%

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

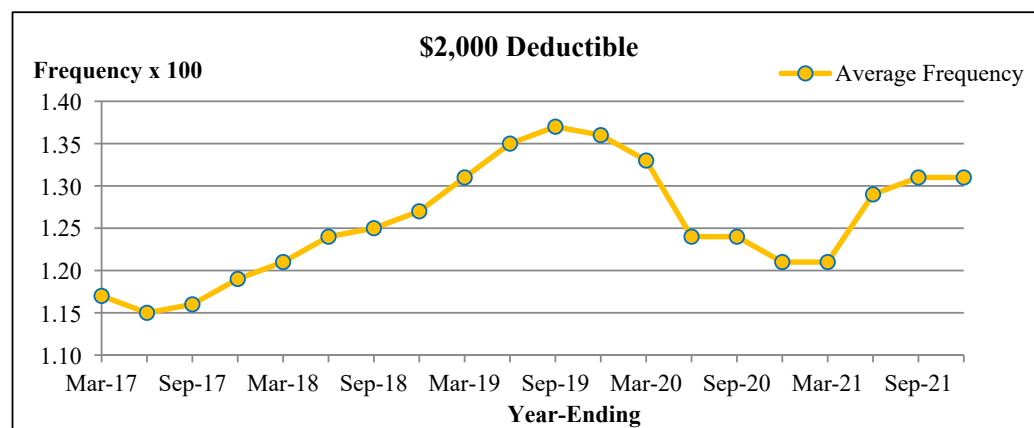
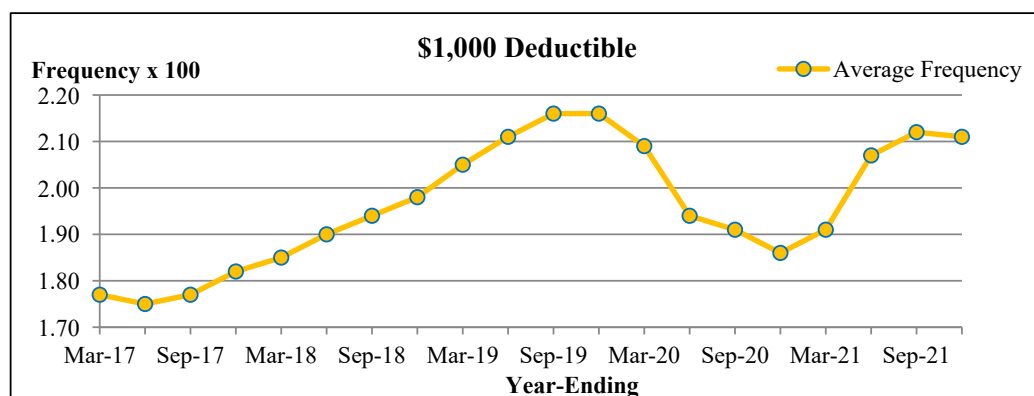
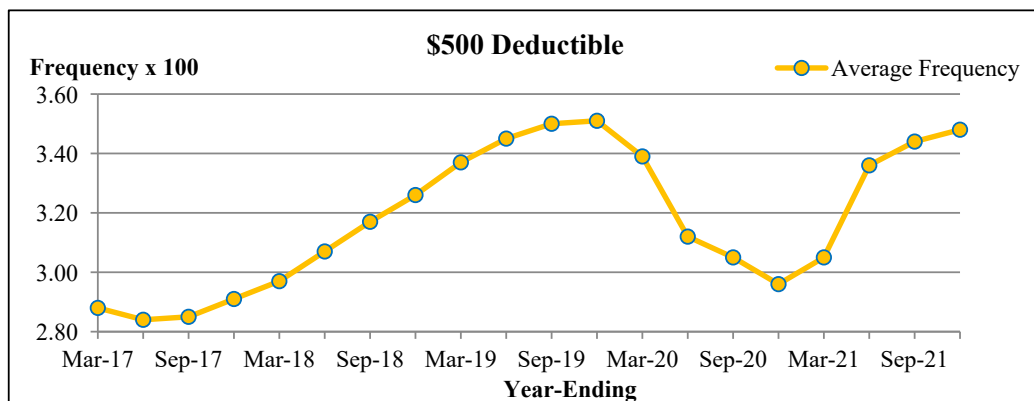
Deductible:	Percent of Losses
Full	0.6%
\$50	0.4%
\$100	2.9%
\$200	0.5%
\$250	11.0%
\$500	37.4%
\$1,000	42.3%
\$2,000	3.1%
\$3,000	0.7%
\$5,000	1.0%

* 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
3/31/2017	1,770.95	2,261.95	2,702.16
6/30/2017	1,774.10	2,292.05	2,766.70
9/30/2017	1,821.13	2,389.13	2,887.63
12/31/2017	1,848.07	2,453.48	2,971.02
3/31/2018	1,836.50	2,432.22	2,949.25
6/30/2018	1,860.38	2,471.82	2,996.65
9/30/2018	1,861.26	2,447.56	2,981.21
12/31/2018	1,908.45	2,530.39	3,116.06
3/31/2019	1,936.30	2,577.88	3,178.58
6/30/2019	1,947.17	2,605.46	3,199.88
9/30/2019	1,946.70	2,646.76	3,243.78
12/31/2019	1,958.24	2,680.91	3,280.47
3/31/2020	2,015.02	2,776.78	3,384.51
6/30/2020	2,094.01	2,821.09	3,456.20
9/30/2020	2,179.49	2,877.59	3,521.47
12/31/2020	2,248.34	2,896.07	3,536.12
3/31/2021	2,238.00	2,854.19	3,521.34
6/30/2021	2,245.35	2,899.21	3,594.81
9/30/2021	2,299.96	2,974.85	3,689.05
12/31/2021	2,327.25	3,044.31	3,804.73

Average Annual Change Using Exponential Fits:

20 point fit:	6.2%	6.1%	6.8%
16 point fit:	7.1%	6.2%	6.8%
12 point fit:	8.1%	5.9%	6.5%

Selected severity trend:	6.5%
Selected frequency trend:	0.0%
Selected pure premium trend:	6.5%

* Multistate data excludes Massachusetts

VERISK

Multistate*
Private Passenger Types Physical Damage
Collision

Frequency (expressed as claims per 100 exposures)

	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
Year Ending:	Value	Change**	Value	Change**	Value	Change**
3/31/2017	4.71		4.13		3.10	
6/30/2017	4.74		4.13		3.11	
9/30/2017	4.68		4.08		3.08	
12/31/2017	4.70		4.10		3.10	
3/31/2018	4.80		4.18		3.18	
6/30/2018	4.78	0.8%	4.19	1.5%	3.19	2.6%
9/30/2018	4.83		4.25		3.24	
12/31/2018	4.80	2.1%	4.24	3.4%	3.24	4.5%
3/31/2019	4.76		4.24		3.24	
6/30/2019	4.75	-0.6%	4.25	1.4%	3.28	2.8%
9/30/2019	4.75		4.24		3.26	
12/31/2019	4.69	-2.3%	4.25	0.2%	3.26	0.6%
3/31/2020	4.45		4.03		3.10	
6/30/2020	3.95	-16.8%	3.52	-17.2%	2.73	-16.8%
9/30/2020	3.66		3.24		2.55	
12/31/2020	3.34	-28.8%	2.90	-31.8%	2.33	-28.5%
3/31/2021	3.23		2.80		2.28	
6/30/2021	3.53	-10.6%	3.08	-12.5%	2.51	-8.1%
9/30/2021	3.56		3.15		2.58	
12/31/2021	3.57	6.9%	3.21	10.7%	2.66	14.2%

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

Deductible:	Percent of Losses
\$100	0.2%
\$200	0.0%
\$250	1.3%
\$500	34.3%
\$1,000	57.9%
\$2,000	4.3%
\$3,000	0.7%
\$5,000	1.3%

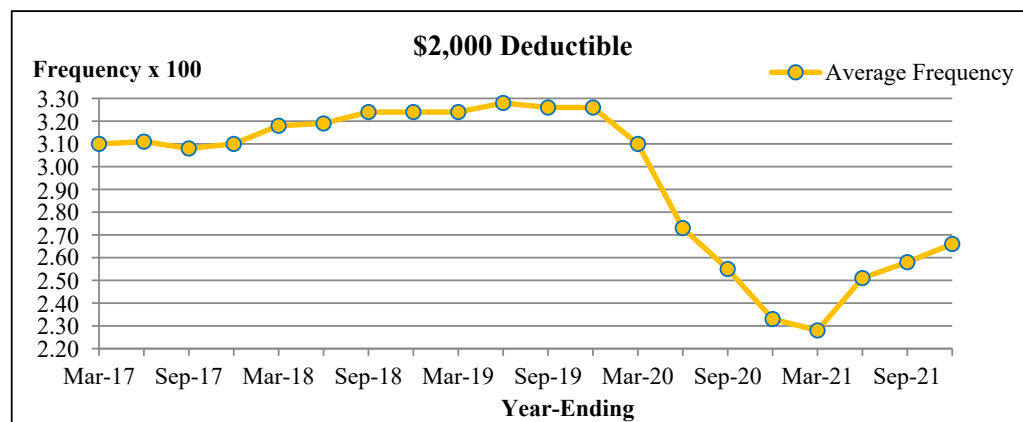
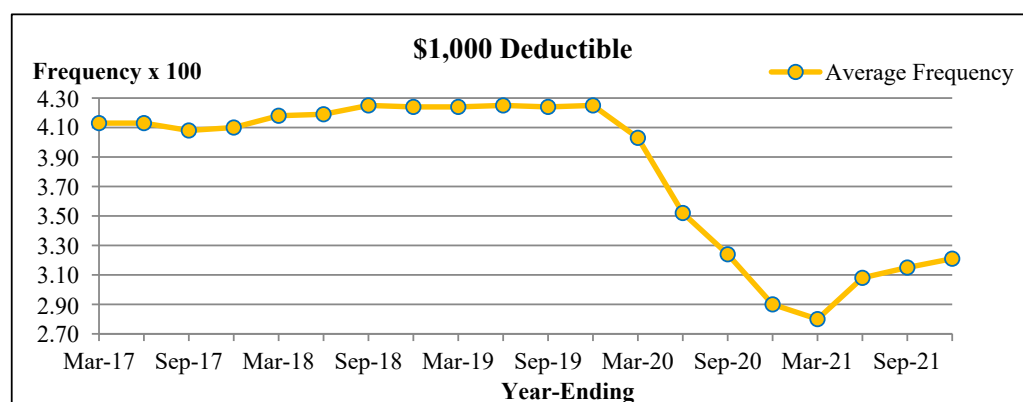
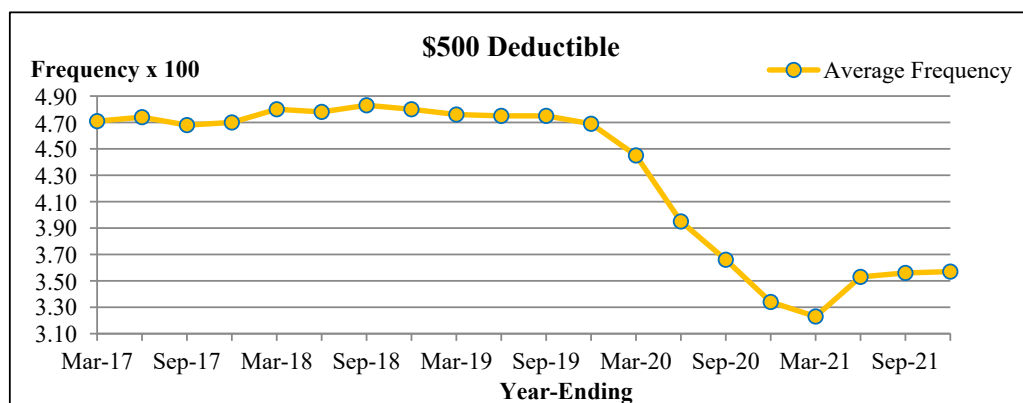
* Multistate data excludes Massachusetts

** 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
3/31/2017	4,318.08	4,732.68	5,165.13
6/30/2017	4,348.34	4,756.19	5,189.39
9/30/2017	4,354.11	4,801.22	5,237.39
12/31/2017	4,434.24	4,881.47	5,332.25
3/31/2018	4,502.37	4,929.23	5,357.69
6/30/2018	4,628.25	5,014.85	5,449.64
9/30/2018	4,641.31	5,041.66	5,489.78
12/31/2018	4,570.36	5,015.12	5,441.35
3/31/2019	4,653.15	5,099.24	5,544.43
6/30/2019	4,609.01	5,121.12	5,542.18
9/30/2019	4,760.34	5,166.30	5,597.15
12/31/2019	4,917.24	5,294.78	5,767.38
3/31/2020	4,980.26	5,362.73	5,841.96
6/30/2020	5,126.63	5,460.16	5,937.86
9/30/2020	5,097.52	5,560.22	5,957.28
12/31/2020	5,183.19	5,723.86	6,043.48
3/31/2021	5,256.19	5,866.37	6,174.73
6/30/2021	5,457.91	6,100.90	6,449.45
9/30/2021	5,796.27	6,409.98	6,828.12
12/31/2021	6,206.69	6,784.81	7,248.56

Average Annual Change Using Exponential Fits:

20 point fit:	6.6%	6.7%	6.0%
16 point fit:	7.5%	7.9%	7.0%
12 point fit:	9.7%	10.4%	9.2%

Selected severity trend: **7.0%**
 Selected frequency trend: **0.0%**
 Selected pure premium trend: **7.0%**

* Multistate data excludes Massachusetts

VERISK

State Group Data*
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	1.080	0.780
12/31/2020	1.091	0.805
6/30/2021	1.066	0.847
12/31/2021	1.090	0.891

Exponential Trend (Average Annual Change)

4 Points	0.1%	9.5%
3 Points	-0.1%	10.7%

* Includes Alaska, Arkansas, California, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Mississippi, Montana, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, South Carolina, South Dakota, Texas, Virginia, and Wyoming

VERISK

State Group Data*
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
6/30/2017	0.978	0.819
12/31/2017	0.994	0.837
6/30/2018	1.009	0.853
12/31/2018	1.022	0.867
6/30/2019	1.035	0.880
12/31/2019	1.046	0.890
6/30/2020	1.055	0.896
12/31/2020	1.060	0.896
6/30/2021	1.064	0.893
12/31/2021	1.069	0.892

Exponential Trend (Average Annual Change)

9 Points	1.8%	1.6%
7 Points	1.5%	0.9%
5 Points	1.0%	0.0%
Selected Annual VVF Trend:	1.5%	2.5%

* Includes Alaska, Arkansas, California, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Mississippi, Montana, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, South Carolina, South Dakota, Texas, Virginia, and Wyoming

VERISK

State Group Data*
 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	0.956	0.835
12/31/2019	0.973	0.829
6/30/2020	0.975	0.822
12/31/2020	0.980	0.812
6/30/2021	0.986	0.815
12/31/2021	1.007	0.852

Exponential Trend (Average Annual Change)

6 Points	1.7%	0.2%
5 Points	1.6%	1.0%
4 Points	2.0%	2.3%

* Includes Alaska, Arkansas, California, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Mississippi, Montana, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, South Carolina, South Dakota, Texas, Virginia, and Wyoming

VERISK

State Group Data*
 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
6/30/2017	1.019	0.926
12/31/2017	1.026	0.930
6/30/2018	1.036	0.935
12/31/2018	1.051	0.941
6/30/2019	1.062	0.943
12/31/2019	1.073	0.949
6/30/2020	1.087	0.957
12/31/2020	1.102	0.962
6/30/2021	1.117	0.966
12/31/2021	1.131	0.972

Exponential Trend (Average Annual Change)

9 Points	2.5%	1.1%
7 Points	2.5%	1.2%
5 Points	2.7%	1.2%
Selected Annual VVF Trend:	2.2%	1.0%

* Includes Alaska, Arkansas, California, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Mississippi, Montana, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, South Carolina, South Dakota, Texas, Virginia, and Wyoming

VERISK

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

Accident	\$100,000 Basic Limit			Loss Development Factors	
Year				15 to 27	27 to 39
Ending	15 Months	27 Months	39 Months	Months	Months
12/31/2010	663,151	680,173	698,247	1.026	1.027
12/31/2011	1,083,779	1,566,200	1,620,830	1.445	1.035
12/31/2012	606,588	863,463	981,178	1.423	1.136
12/31/2013	1,045,532	1,082,079	928,292	1.035	0.858
12/31/2014	360,365	591,272	577,601	1.641	0.977
12/31/2015	1,202,114	1,453,882	1,458,130	1.209	1.003
12/31/2016	981,285	1,176,352	1,345,102	1.199	1.143
12/31/2017	934,399	983,922	1,105,214	1.053	1.123
12/31/2018	731,855	894,885	827,356	1.223	0.925
12/31/2019	1,419,254	1,668,999	1,640,608	1.176	0.983
12/31/2020	1,229,984	1,191,265		0.969	
12/31/2021	750,588				
(1) Average Factor (Best 3 of 5) :			(A) State	1.143	1.036
			(B) Multistate	1.276	1.126
(2) Credibility				0.570	0.240
(3) Credibility Weighted Factors				1.200	1.104

Property Damage

Accident	\$100,000 Basic Limit			Loss Development Factors	
Year				15 to 27	27 to 39
<u>Ending</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>Months</u>	<u>Months</u>
12/31/2010	826,084	827,004	833,174	1.001	1.007
12/31/2011	1,183,536	1,267,659	1,262,937	1.071	0.996
12/31/2012	1,058,985	1,132,171	1,178,097	1.069	1.041
12/31/2013	1,152,807	1,143,863	1,138,962	0.992	0.996
12/31/2014	1,383,390	1,409,312	1,374,391	1.019	0.975
12/31/2015	1,309,780	1,357,869	1,370,919	1.037	1.010
12/31/2016	1,286,450	1,343,787	1,381,652	1.045	1.028
12/31/2017	1,383,791	1,356,439	1,359,907	0.980	1.003
12/31/2018	1,500,579	1,511,007	1,512,595	1.007	1.001
12/31/2019	1,693,933	1,618,878	1,627,766	0.956	1.005
12/31/2020	1,568,361	1,440,226		0.918	
12/31/2021	1,437,298				
(1) Average Factor (Best 3 of 5) :			(A) State	0.981	1.006
			(B) Multistate	1.050	1.010
(2) Credibility				0.760	0.000
(3) Credibility Weighted Factors				0.998	1.010

Summary of Factors

	Bodily Injury	Property Damage
39 to Ultimate **	1.080	1.005
27 to Ultimate	1.192	1.015
15 to Ultimate	1.430	1.013

** 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
12/31/2010	297,682,010	362,196,271	400,981,995	424,657,793	432,487,366
12/31/2011	314,803,407	387,309,761	438,921,977	455,222,000	463,902,615
12/31/2012	319,954,043	401,239,123	445,432,859	468,198,315	477,155,759
12/31/2013	334,747,164	420,813,557	469,638,445	497,497,936	505,981,213
12/31/2014	368,214,589	456,494,235	522,176,451	554,887,210	565,057,343
12/31/2015	392,499,109	510,652,445	570,011,277	596,718,967	608,801,196
12/31/2016	443,444,500	566,157,636	639,755,130	673,182,003	682,230,528
12/31/2017	465,220,761	584,757,833	659,185,283	694,741,690	709,303,506
12/31/2018	467,489,288	594,021,916	665,674,491	703,850,242	
12/31/2019	476,179,394	620,282,896	701,378,048		
12/31/2020	392,428,257	502,425,204			
12/31/2021	443,643,915				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2010	1.217	1.107	1.059	1.018
12/31/2011	1.230	1.133	1.037	1.019
12/31/2012	1.254	1.110	1.051	1.019
12/31/2013	1.257	1.116	1.059	1.017
12/31/2014	1.240	1.144	1.063	1.018
12/31/2015	1.301	1.116	1.047	1.020
12/31/2016	1.277	1.130	1.052	1.013
12/31/2017	1.257	1.127	1.054	1.021
12/31/2018	1.271	1.121	1.057	
12/31/2019	1.303	1.131		
12/31/2020	1.280			
Average Factor: (Best 3 of 5)	1.276	1.126	1.054	1.018

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.007
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.025
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.080
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.217
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.552

VERISK

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

Accident Year Ending	\$100,000 Basic Limit				
	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2010	435,277,584	434,678,999	434,880,104	435,200,915	435,329,373
12/31/2011	467,908,874	468,228,276	467,368,919	467,248,580	467,295,627
12/31/2012	478,107,209	478,786,872	479,588,986	479,495,606	479,341,657
12/31/2013	509,656,463	511,064,040	510,482,749	510,452,821	
12/31/2014	566,886,017	567,688,369	567,886,138		
12/31/2015	612,679,264	615,213,446			
12/31/2016	685,515,646				

Ratios

Accident Year Ending	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
12/31/2010	1.006	0.999	1.000	1.001	1.000
12/31/2011	1.009	1.001	0.998	1.000	1.000
12/31/2012	1.002	1.001	1.002	1.000	1.000
12/31/2013	1.007	1.003	0.999	1.000	
12/31/2014	1.003	1.001	1.000		
12/31/2015	1.006	1.004			
12/31/2016	1.005				
Average Factor: (Best 3 of 5)	1.005	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
12/31/2010	363,253,090	375,128,801	377,852,210	378,963,847	378,633,196
12/31/2011	395,390,670	408,662,563	411,171,067	412,286,856	412,936,177
12/31/2012	397,054,819	411,062,404	414,151,229	414,582,426	414,858,860
12/31/2013	417,462,389	431,704,647	436,616,901	437,033,758	437,931,610
12/31/2014	446,412,826	466,855,938	469,278,939	470,587,268	471,191,087
12/31/2015	487,125,018	506,508,333	512,212,794	513,071,465	514,477,002
12/31/2016	514,805,927	538,460,263	543,187,935	545,364,372	545,682,165
12/31/2017	531,750,871	557,582,237	562,649,144	563,836,456	564,015,921
12/31/2018	571,569,455	604,559,095	611,451,182	612,732,031	
12/31/2019	594,742,524	621,130,358	624,748,578		
12/31/2020	451,943,038	476,238,541			
12/31/2021	543,209,758				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2010	1.033	1.007	1.003	0.999
12/31/2011	1.034	1.006	1.003	1.002
12/31/2012	1.035	1.008	1.001	1.001
12/31/2013	1.034	1.011	1.001	1.002
12/31/2014	1.046	1.005	1.003	1.001
12/31/2015	1.040	1.011	1.002	1.003
12/31/2016	1.046	1.009	1.004	1.001
12/31/2017	1.049	1.009	1.002	1.000
12/31/2018	1.058	1.011	1.002	
12/31/2019	1.044	1.006		
12/31/2020	1.054			
Average Factor: (Best 3 of 5)	1.050	1.010	1.002	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) =	1.005
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.015
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.066

VERISK

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

Accident Year Ending	\$100,000 Basic Limit			
	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>
12/31/2010	380,294,286	380,368,666	380,511,017	380,717,685
12/31/2011	412,759,335	412,987,897	413,118,800	413,217,811
12/31/2012	415,671,996	416,143,788	416,264,695	416,371,584
12/31/2013	437,998,115	438,325,423	438,382,258	438,204,304
12/31/2014	471,684,770	471,466,334	471,790,710	
12/31/2015	515,059,715	515,640,156		
12/31/2016	546,287,067			

Ratios

Accident Year Ending	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>
12/31/2010	1.004	1.000	1.000	1.001
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	
12/31/2015	1.001	1.001		
12/31/2016	1.001			
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

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

Accident	\$100,000 Basic Limit			Loss Development Factors	
Year				15 to 27	27 to 39
<u>Ending</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>Months</u>	<u>Months</u>
12/31/2010	198,376	231,747	229,199	1.168	0.989
12/31/2011	378,183	403,039	396,342	1.066	0.983
12/31/2012	255,495	275,434	275,645	1.078	1.001
12/31/2013	350,054	395,624	444,602	1.130	1.124
12/31/2014	284,222	273,910	284,441	0.964	1.038
12/31/2015	442,615	652,700	629,049	1.475	0.964
12/31/2016	227,217	438,982	456,418	1.932	1.040
12/31/2017	222,208	276,838	336,686	1.246	1.216
12/31/2018	112,820	200,520	232,587	1.777	1.160
12/31/2019	301,667	344,969	384,391	1.144	1.114
12/31/2020	95,513	99,012		1.037	
12/31/2021	299,186				
(1) Average Factor (Best 3 of 5) :			(A) State	1.389	1.105
			(B) Multistate	1.249	1.117
(2) Credibility				0.250	0.170
(3) Credibility Weighted Factors				1.284	1.115

Property Damage

Accident	\$100,000 Basic Limit			Loss Development Factors	
Year				15 to 27	27 to 39
Ending	15 Months	27 Months	39 Months	Months	Months
12/31/2010	239,323	242,082	243,527	1.012	1.006
12/31/2011	224,148	222,929	222,929	0.995	1.000
12/31/2012	213,679	210,989	210,989	0.987	1.000
12/31/2013	221,284	245,257	245,257	1.108	1.000
12/31/2014	295,300	296,466	294,859	1.004	0.995
12/31/2015	312,037	288,225	288,225	0.924	1.000
12/31/2016	394,782	398,956	398,956	1.011	1.000
12/31/2017	245,260	227,031	227,031	0.926	1.000
12/31/2018	295,557	302,841	302,841	1.025	1.000
12/31/2019	263,375	265,463	265,463	1.008	1.000
12/31/2020	191,181	202,788		1.061	
12/31/2021	136,119				
(1) Average Factor (Best 3 of 5) :			(A) State	1.015	1.000
			(B) Multistate	1.048	1.008
(2) Credibility				0.560	0.000
(3) Credibility Weighted Factors				1.030	1.008

Summary of Factors

	Bodily Injury	Property Damage
39 to Ultimate **	1.079	1.004
27 to Ultimate	1.203	1.012
15 to Ultimate	1.545	1.042

** 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
12/31/2010	71,868,630	84,356,731	92,579,666	97,303,630	98,869,515
12/31/2011	76,369,478	93,523,574	103,258,442	107,498,826	108,977,532
12/31/2012	75,402,313	93,602,770	101,160,896	105,373,556	107,356,438
12/31/2013	78,419,840	94,350,838	104,862,489	110,557,723	112,312,377
12/31/2014	72,682,846	88,781,711	101,015,878	106,411,078	108,494,745
12/31/2015	74,804,791	93,617,110	104,187,703	109,511,486	111,502,220
12/31/2016	76,293,199	95,918,847	107,604,629	111,702,258	113,894,357
12/31/2017	76,060,845	94,804,812	105,912,071	113,326,646	116,263,914
12/31/2018	79,120,046	98,218,063	109,328,622	113,903,116	
12/31/2019	77,433,516	96,376,461	107,948,250		
12/31/2020	53,723,074	68,610,659			
12/31/2021	61,418,252				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2010	1.174	1.097	1.051	1.016
12/31/2011	1.225	1.104	1.041	1.014
12/31/2012	1.241	1.081	1.042	1.019
12/31/2013	1.203	1.111	1.054	1.016
12/31/2014	1.221	1.138	1.053	1.020
12/31/2015	1.251	1.113	1.051	1.018
12/31/2016	1.257	1.122	1.038	1.020
12/31/2017	1.246	1.117	1.070	1.026
12/31/2018	1.241	1.113	1.042	
12/31/2019	1.245	1.120		
12/31/2020	1.277			
Average Factor: (Best 3 of 5)	1.249	1.117	1.049	1.019

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.009
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.028
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.079
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.205
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.505

VERISK

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

Accident Year Ending	\$100,000 Basic Limit				
	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2010	99,159,972	98,890,097	98,900,182	98,903,723	98,830,556
12/31/2011	109,611,008	109,747,332	110,170,307	110,293,781	110,315,177
12/31/2012	107,792,115	107,811,916	107,981,773	107,989,444	107,990,143
12/31/2013	112,764,544	112,900,882	112,876,535	113,020,873	
12/31/2014	109,189,726	109,524,062	109,797,241		
12/31/2015	111,587,993	112,089,217			
12/31/2016	115,333,550				

Ratios

Accident Year Ending	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
12/31/2010	1.003	0.997	1.000	1.000	0.999
12/31/2011	1.006	1.001	1.004	1.001	1.000
12/31/2012	1.004	1.000	1.002	1.000	1.000
12/31/2013	1.004	1.001	1.000	1.001	
12/31/2014	1.006	1.003	1.002		
12/31/2015	1.001	1.004			
12/31/2016	1.013				
Average Factor: (Best 3 of 5)	1.005	1.002	1.001	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)	=	1.002
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.004

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
12/31/2010	85,598,807	88,581,044	88,839,113	89,016,543	89,004,570
12/31/2011	91,603,582	94,528,429	94,944,002	95,387,876	95,704,397
12/31/2012	94,922,400	98,595,914	99,334,110	99,623,906	99,588,369
12/31/2013	95,114,132	99,243,815	99,983,096	100,151,373	100,207,433
12/31/2014	94,446,294	98,913,777	99,396,711	99,800,188	99,913,351
12/31/2015	97,803,033	101,980,821	102,627,480	102,962,405	103,123,738
12/31/2016	101,082,198	105,499,678	106,486,159	106,469,788	106,620,833
12/31/2017	96,381,696	101,248,370	102,193,292	102,387,256	102,347,373
12/31/2018	100,380,741	105,170,192	105,959,838	106,302,274	
12/31/2019	95,499,436	100,220,198	100,737,682		
12/31/2020	57,824,097	60,578,653			
12/31/2021	67,385,001				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2010	1.035	1.003	1.002	1.000
12/31/2011	1.032	1.004	1.005	1.003
12/31/2012	1.039	1.007	1.003	1.000
12/31/2013	1.043	1.007	1.002	1.001
12/31/2014	1.047	1.005	1.004	1.001
12/31/2015	1.043	1.006	1.003	1.002
12/31/2016	1.044	1.009	1.000	1.001
12/31/2017	1.050	1.009	1.002	1.000
12/31/2018	1.048	1.008	1.003	
12/31/2019	1.049	1.005		
12/31/2020	1.048			
Average Factor: (Best 3 of 5)	1.048	1.008	1.003	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) =	1.004
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) =	1.061

VERISK

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

Accident Year Ending	\$100,000 Basic Limit			
	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>
12/31/2010	89,212,505	89,202,405	89,202,832	89,147,550
12/31/2011	95,789,544	95,858,180	95,858,209	95,858,207
12/31/2012	99,699,852	99,643,171	99,646,404	99,645,136
12/31/2013	100,208,019	100,216,795	100,264,504	100,260,564
12/31/2014	99,901,297	99,883,259	99,905,027	
12/31/2015	103,121,595	103,135,742		
12/31/2016	106,667,969			

Ratios

Accident Year Ending	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>
12/31/2010	1.002	1.000	1.000	0.999
12/31/2011	1.001	1.001	1.000	1.000
12/31/2012	1.001	0.999	1.000	1.000
12/31/2013	1.000	1.000	1.000	1.000
12/31/2014	1.000	1.000	1.000	
12/31/2015	1.000	1.000		
12/31/2016	1.000			
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

Basic Limits Loss Development
Auto Dealers - 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
12/31/2010	11,719,200	14,905,280	19,617,861	21,255,656	21,867,578
12/31/2011	12,689,504	18,813,458	21,781,522	23,558,774	24,743,499
12/31/2012	12,218,923	16,853,219	20,418,224	21,408,692	21,834,666
12/31/2013	11,389,447	15,698,570	18,130,101	19,560,260	20,705,196
12/31/2014	12,814,687	17,049,767	18,475,299	19,782,012	20,330,436
12/31/2015	12,705,580	16,113,299	19,533,094	20,451,203	20,688,942
12/31/2016	10,413,208	16,073,602	20,660,159	22,909,017	23,490,013
12/31/2017	13,114,257	18,366,682	21,240,773	22,709,504	23,070,833
12/31/2018	12,035,951	18,453,075	20,841,424	22,317,893	
12/31/2019	9,504,544	13,969,511	16,144,459		
12/31/2020	6,397,195	10,423,338			
12/31/2021	8,054,936				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2010	1.272	1.316	1.083	1.029
12/31/2011	1.483	1.158	1.082	1.050
12/31/2012	1.379	1.212	1.049	1.020
12/31/2013	1.378	1.155	1.079	1.059
12/31/2014	1.330	1.084	1.071	1.028
12/31/2015	1.268	1.212	1.047	1.012
12/31/2016	1.544	1.285	1.109	1.025
12/31/2017	1.401	1.156	1.069	1.016
12/31/2018	1.533	1.129	1.071	
12/31/2019	1.470	1.156		
12/31/2020	1.629			
Average Factor: (Best 3 of 5)	1.516	1.175	1.070	1.023

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.014
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.037
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.110
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.304
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.977

VERISK

Basic Limits Loss Development
Auto Dealers - Bodily Injury
Tort States
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit				
	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2010	21,904,031	21,838,921	21,850,193	21,855,914	21,874,275
12/31/2011	24,891,002	24,871,475	24,855,830	24,818,582	24,721,640
12/31/2012	21,666,448	21,563,804	21,584,010	21,743,866	21,682,726
12/31/2013	21,774,254	21,921,462	22,099,227	22,124,713	
12/31/2014	20,225,672	19,994,682	20,090,244		
12/31/2015	20,841,904	21,109,798			
12/31/2016	24,316,562				

Ratios

Accident Year Ending	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
12/31/2010	1.002	0.997	1.001	1.000	1.001
12/31/2011	1.006	0.999	0.999	0.999	0.996
12/31/2012	0.992	0.995	1.001	1.007	0.997
12/31/2013	1.052	1.007	1.008	1.001	
12/31/2014	0.995	0.989	1.005		
12/31/2015	1.007	1.013			
12/31/2016	1.035				
Average Factor: (Best 3 of 5)	1.012	1.000	1.002	1.002	0.998

Summary of Factors

123 to Ult:	(1.000)	=	1.000
111 to Ult:	(123:111) (123:Ult)	=	0.998
99 to Ult:	(111:99) (123:111) (123:Ult)	=	1.000
87 to Ult:	(99:87) (111:99) (123:111) (123:Ult)	=	1.002
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.002

VERISK

Basic Limits Loss Development
Auto Dealers - Property Damage
Multistate
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit				
	15 Months	27 Months	39 Months	51 Months	63 Months
12/31/2010	13,107,336	13,373,741	13,985,931	14,016,879	13,942,411
12/31/2011	12,855,331	13,255,325	13,682,203	14,320,834	14,566,085
12/31/2012	13,438,805	14,362,563	14,761,094	15,143,294	15,302,113
12/31/2013	12,009,455	12,598,201	13,095,249	13,258,459	13,415,861
12/31/2014	11,983,806	12,962,021	13,514,730	13,954,748	14,319,420
12/31/2015	11,936,309	14,289,022	14,692,337	14,983,324	14,745,064
12/31/2016	13,336,975	14,206,678	14,560,906	14,981,511	15,065,019
12/31/2017	13,322,027	15,109,895	16,438,535	16,783,436	16,897,707
12/31/2018	10,058,709	10,902,066	11,352,212	11,684,467	
12/31/2019	8,293,460	9,228,032	9,588,002		
12/31/2020	5,592,281	6,073,704			
12/31/2021	6,845,870				

Ratios

Accident Year Ending	27:15	39:27	51:39	63:51
12/31/2010	1.020	1.046	1.002	0.995
12/31/2011	1.031	1.032	1.047	1.017
12/31/2012	1.069	1.028	1.026	1.010
12/31/2013	1.049	1.039	1.012	1.012
12/31/2014	1.082	1.043	1.033	1.026
12/31/2015	1.197	1.028	1.020	0.984
12/31/2016	1.065	1.025	1.029	1.006
12/31/2017	1.134	1.088	1.021	1.007
12/31/2018	1.084	1.041	1.029	
12/31/2019	1.113	1.039		
12/31/2020	1.086			
Average Factor: (Best 3 of 5)	1.094	1.036	1.026	1.008

Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.002
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.010
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.036
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.074
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.174

VERISK

Basic Limits Loss Development
Auto Dealers - Property Damage
Multistate
Incurred Losses and Expenses

Accident Year Ending	\$100,000 Basic Limit			
	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>
12/31/2010	13,953,466	13,956,843	13,956,843	13,957,657
12/31/2011	14,685,712	14,852,725	14,880,728	15,018,907
12/31/2012	15,232,119	15,251,773	15,118,752	15,104,021
12/31/2013	13,502,121	13,528,090	13,398,185	13,366,206
12/31/2014	14,283,601	14,276,875	14,257,730	
12/31/2015	14,789,271	14,770,050		
12/31/2016	15,248,754			

Ratios

Accident Year Ending	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>
12/31/2010	1.001	1.000	1.000	1.000
12/31/2011	1.008	1.011	1.002	1.009
12/31/2012	0.995	1.001	0.991	0.999
12/31/2013	1.006	1.002	0.990	0.998
12/31/2014	0.997	1.000	0.999	
12/31/2015	1.003	0.999		
12/31/2016	1.012			
Average Factor: (Best 3 of 5)	1.002	1.001	0.997	1.002

Summary of Factors

111 to Ult:	(1.000)	=	1.000
99 to Ult:	(111:99) (111:Ult)	=	1.002
87 to Ult:	(99:87) (111:99) (111:Ult)	=	0.999
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>
12/31/2010	167,987,493	171,139,775	171,517,082	171,360,322	171,491,813
12/31/2011	190,336,967	193,857,471	193,999,121	194,107,908	194,077,365
12/31/2012	219,938,917	224,995,154	224,993,230	225,093,794	225,361,197
12/31/2013	176,955,250	181,172,362	181,502,511	181,882,116	181,853,220
12/31/2014	186,148,217	190,748,637	190,950,185	190,878,046	190,839,058
12/31/2015	183,404,256	187,652,270	187,683,668	188,148,667	188,234,019
12/31/2016	234,956,451	239,795,346	240,046,766	240,249,186	240,230,001
12/31/2017	243,274,293	249,190,121	249,244,575	249,555,371	249,455,475
12/31/2018	237,853,277	244,071,084	243,858,104	244,125,923	
12/31/2019	249,046,072	256,095,090	256,193,037		
12/31/2020	248,109,581	255,038,984			
12/31/2021	306,757,026				

Ratios

Accident Year Ending	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2010	1.019	1.002	0.999	1.001
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	1.002	1.002	1.000
12/31/2014	1.025	1.001	1.000	1.000
12/31/2015	1.023	1.000	1.002	1.000
12/31/2016	1.021	1.001	1.001	1.000
12/31/2017	1.024	1.000	1.001	1.000
12/31/2018	1.026	0.999	1.001	
12/31/2019	1.028	1.000		
12/31/2020	1.028			
Average Factor: (Best 3 of 5)	1.026	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) =	1.027

VERISK

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

Accident Year <u>Ending</u>	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2010	171,587,653	171,643,953	171,635,821	171,633,645	171,621,664
12/31/2011	194,053,540	194,030,815	194,017,042	194,025,632	193,999,667
12/31/2012	225,337,788	225,401,031	225,401,713	225,410,603	225,394,973
12/31/2013	181,905,914	181,936,807	181,924,794	181,902,671	
12/31/2014	190,845,800	190,847,944	190,846,168		
12/31/2015	188,150,862	188,170,089			
12/31/2016	240,222,744				

Ratios

Accident Year <u>Ending</u>	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
12/31/2010	1.001	1.000	1.000	1.000	1.000
12/31/2011	1.000	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	
12/31/2014	1.000	1.000	1.000		
12/31/2015	1.000	1.000			
12/31/2016	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 <u>Ending</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
12/31/2010	387,370,801	380,104,359	378,791,460	379,012,272	378,986,587
12/31/2011	419,577,934	411,330,288	409,550,563	409,460,636	409,552,697
12/31/2012	418,367,944	411,853,753	410,784,955	410,271,475	410,298,841
12/31/2013	443,875,033	434,954,633	433,289,814	434,146,707	432,932,016
12/31/2014	492,915,841	483,980,015	481,023,676	480,605,361	480,319,344
12/31/2015	528,870,431	514,135,272	510,954,631	509,922,904	510,056,363
12/31/2016	562,870,914	548,618,350	543,865,272	543,321,568	543,232,724
12/31/2017	580,720,035	560,847,491	556,462,765	555,351,776	555,148,898
12/31/2018	623,146,155	607,140,513	602,393,584	601,554,893	
12/31/2019	646,362,421	625,859,554	623,024,657		
12/31/2020	553,670,095	537,639,095			
12/31/2021	691,473,464				

Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2010	0.981	0.997	1.001	1.000
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	0.980	0.996	1.002	0.997
12/31/2014	0.982	0.994	0.999	0.999
12/31/2015	0.972	0.994	0.998	1.000
12/31/2016	0.975	0.991	0.999	1.000
12/31/2017	0.966	0.992	0.998	1.000
12/31/2018	0.974	0.992	0.999	
12/31/2019	0.968	0.995		
12/31/2020	0.971			
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 <u>Ending</u>	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2010	378,884,243	378,838,236	378,780,237	378,755,953	378,722,722
12/31/2011	409,523,895	409,530,741	409,503,953	409,496,576	409,472,005
12/31/2012	410,262,724	410,189,581	409,919,908	409,893,277	409,873,023
12/31/2013	432,833,839	432,793,073	432,781,659	432,776,728	
12/31/2014	480,316,770	480,320,176	480,838,595		
12/31/2015	510,085,068	509,948,364			
12/31/2016	543,197,969				

Ratios

Accident Year <u>Ending</u>	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
12/31/2010	1.000	1.000	1.000	1.000	1.000
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	
12/31/2014	1.000	1.000	1.001		
12/31/2015	1.000	1.000			
12/31/2016	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 <u>Ending</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
12/31/2010	61,150,293	61,504,274	61,480,746	61,475,713	61,478,505
12/31/2011	77,740,205	77,820,258	77,650,810	77,687,346	77,686,548
12/31/2012	87,106,352	85,893,542	85,891,881	85,926,699	85,946,878
12/31/2013	61,721,212	62,301,027	62,512,457	62,524,905	62,515,873
12/31/2014	64,117,874	65,058,808	65,188,174	65,131,158	65,169,188
12/31/2015	55,859,881	56,513,473	56,396,547	56,392,426	56,393,153
12/31/2016	68,310,832	69,078,420	69,053,711	69,017,168	69,012,567
12/31/2017	77,755,702	77,785,863	77,980,756	77,616,679	77,709,188
12/31/2018	64,352,238	65,254,170	65,142,765	65,074,684	
12/31/2019	66,330,985	67,671,350	67,566,859		
12/31/2020	60,944,480	61,455,593			
12/31/2021	71,501,761				

Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2010	1.006	1.000	1.000	1.000
12/31/2011	1.001	0.998	1.000	1.000
12/31/2012	0.986	1.000	1.000	1.000
12/31/2013	1.009	1.003	1.000	1.000
12/31/2014	1.015	1.002	0.999	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	1.000	1.003	0.995	1.001
12/31/2018	1.014	0.998	0.999	
12/31/2019	1.020	0.998		
12/31/2020	1.008			
Average Factor: (Best 3 of 5)	1.011	0.999	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) =	0.998
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.009

VERISK

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

Accident Year <u>Ending</u>	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2010	61,412,788	61,418,005	61,449,827	61,441,080	61,447,932
12/31/2011	77,682,083	77,701,164	77,695,409	77,700,426	77,700,426
12/31/2012	85,991,094	85,987,982	85,960,208	85,961,435	85,945,822
12/31/2013	62,530,236	62,541,319	62,539,773	62,534,014	
12/31/2014	65,172,986	65,174,677	65,173,328		
12/31/2015	56,395,701	56,456,304			
12/31/2016	69,015,283				

Ratios

Accident Year <u>Ending</u>	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
12/31/2010	0.999	1.000	1.001	1.000	1.000
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	
12/31/2014	1.000	1.000	1.000		
12/31/2015	1.000	1.001			
12/31/2016	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>
12/31/2010	154,733,455	147,268,225	146,711,207	146,507,977	146,504,399
12/31/2011	167,226,055	159,852,941	159,370,591	159,145,017	159,117,692
12/31/2012	167,764,190	161,032,962	160,339,066	160,182,728	160,119,464
12/31/2013	169,914,278	162,306,848	161,121,616	161,134,089	161,079,144
12/31/2014	178,419,214	170,342,910	170,103,795	169,883,105	169,825,643
12/31/2015	190,359,452	180,511,258	179,088,574	178,701,553	178,597,354
12/31/2016	193,000,191	183,806,119	182,237,201	181,904,656	181,842,833
12/31/2017	183,372,737	174,222,801	172,805,435	172,561,379	172,473,582
12/31/2018	194,838,404	184,532,300	183,560,657	183,385,686	
12/31/2019	204,122,141	193,562,222	192,742,802		
12/31/2020	147,944,273	140,481,466			
12/31/2021	183,381,235				

Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2010	0.952	0.996	0.999	1.000
12/31/2011	0.956	0.997	0.999	1.000
12/31/2012	0.960	0.996	0.999	1.000
12/31/2013	0.955	0.993	1.000	1.000
12/31/2014	0.955	0.999	0.999	1.000
12/31/2015	0.948	0.992	0.998	0.999
12/31/2016	0.952	0.991	0.998	1.000
12/31/2017	0.950	0.992	0.999	0.999
12/31/2018	0.947	0.995	0.999	
12/31/2019	0.948	0.996		
12/31/2020	0.950			
Average Factor:	0.949	0.993	0.999	1.000
(Best 3 of 5)				

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) =	0.941

VERISK

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

Accident Year <u>Ending</u>	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2010	146,451,531	146,436,667	146,432,685	146,434,143	146,419,574
12/31/2011	159,034,072	159,021,247	159,006,971	158,991,986	158,973,450
12/31/2012	160,069,358	160,040,943	160,015,754	159,997,584	159,984,916
12/31/2013	161,032,378	161,008,626	160,942,081	160,927,857	
12/31/2014	169,982,296	169,999,190	169,790,259		
12/31/2015	178,634,668	178,568,212			
12/31/2016	181,783,186				

Ratios

Accident Year <u>Ending</u>	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
12/31/2010	1.000	1.000	1.000	1.000	1.000
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	
12/31/2014	1.001	1.000	0.999		
12/31/2015	1.000	1.000			
12/31/2016	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 C20</u>
(4)	Specified Cause of Loss Relativity	0.648
	This factor is used for Trucks, Tractors, & Trailers and Private Passenger Types.	
(5)	The loss cost for hired autos is set forth in Section E. 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

Territory

101

104

106

108

109

Class of Business

Trucks, Tractors, & Trailers	Private Passenger Types	Other Buses	School and Church Buses	Taxicabs and Limousines	Van Pools
<u>5000</u>	<u>5000</u>	<u>5000</u>	<u>5000</u>	<u>5000</u>	<u>5000</u>
0.0213	0.0318	0.0616	0.0828	0.0416	0.0321
0.0284	0.0318	0.0928	0.1280	0.0416	0.0321
0.0362	0.0318	0.1334	0.1806	0.0416	0.0321
0.0262	0.0318	0.0868	0.1183	0.0416	0.0321
0.0276	0.0318	0.0800	0.1062	0.0416	0.0321

VERISK

COMMERCIAL AUTOMOBILE PHYSICAL DAMAGE
CLASS 6614 - HIRED AUTOS
DETERMINATION OF MULTISTATE* ADVISORY LOSS COST LEVEL CHANGE

	(1)	(2)	(3)	(4)	(5)
		AGGREGATE LOSS COST AT CURRENT LEVEL (A)	INCURRED LOSSES (B)	EXPERIENCE RATIO (2) / (1)	NUMBER OF PAID CLAIMS
COVERAGE	ACCIDENT YEAR ENDING				
O.T.C	03/31/17	\$1,870,852	\$2,358,018	1.260	445
	03/31/18	\$1,424,334	\$2,460,064	1.727	430
	03/31/19	\$1,233,541	\$2,271,727	1.842	521
	03/31/20	\$1,377,505	\$1,726,074	1.253	439
	03/31/21	\$1,394,846	\$1,172,207	0.840	182
5 YEAR TOTAL		\$7,301,078	\$9,988,090	1.368	2,017
COLL.	03/31/17	\$4,104,187	\$12,707,342	3.096	1,629
	03/31/18	\$3,549,939	\$11,007,592	3.101	1,441
	03/31/19	\$3,356,121	\$10,003,508	2.981	1,423
	03/31/20	\$3,524,435	\$8,509,084	2.414	1,253
	03/31/21	\$2,768,330	\$3,411,356	1.232	401
5 YEAR TOTAL		\$17,303,012	\$45,638,882	2.638	6,147
				O.T.C.	COLLISION
(6)	MULTISTATE EXPERIENCE RATIO.			1.368	2.638
(7)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ((6) - 1.000).			36.8%	163.8%
(8)	FILED CHANGE.			36.8%	163.8%

* EXCLUDES MASSACHUSETTS

(A) THE AGGREGATE LOSS COST AT CURRENT LEVEL IS CALCULATED BY DIVIDING THE ANNUAL COST OF HIRE BY ONE HUNDRED AND MULTIPLYING THE RESULT BY THE LOSS COST FOR THE COVERAGE AND DEDUCTIBLE.

(B) LOSSES INCLUDE ALL LOSS ADJUSTMENT EXPENSES FOR O.T.C. AND COLL.
SEE FOLLOWING PAGE.

VERISK

COMMERCIAL AUTOMOBILE PHYSICAL DAMAGE
CLASS 6614 - HIRED AUTOS
DETERMINATION OF PHYSICAL DAMAGE LOSSES

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) PAID LOSSES	03/31/17	\$1,434,187	\$8,545,164
	03/31/18	\$1,578,715	\$7,700,579
	03/31/19	\$1,538,162	\$7,274,167
	03/31/20	\$1,234,083	\$6,514,207
	03/31/21	\$836,747	\$2,667,461
(2) DEVELOPED LOSSES AND	03/31/17	\$1,620,631	\$9,656,035
ALL LOSS ADJUSTMENT	03/31/18	\$1,783,948	\$8,701,654
EXPENSES (A)	03/31/19	\$1,738,123	\$8,219,809
	03/31/20	\$1,393,119	\$7,272,721
	03/31/21	\$998,473	\$3,032,316
(3) SELECTED ANNUAL LOSS TREND		5.5%	4.0%
(4) TRENDED LOSSES AND	03/31/17	\$2,358,018	\$12,707,342
ALL LOSS ADJUSTMENT	03/31/18	\$2,460,064	\$11,007,592
EXPENSES (B)	03/31/19	\$2,271,727	\$10,003,508
	03/31/20	\$1,726,074	\$8,509,084
	03/31/21	\$1,172,207	\$3,411,356

(A) PAID LOSSES ARE ADJUSTED BY THE FOLLOWING:

1 - LOSS ADJUSTMENT EXPENSE FACTORS:

O.T.C	COLL.
1.130	1.130

2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	O.T.C.	COLL.
03/31/17	1.000	1.000
03/31/18	1.000	1.000
03/31/19	1.000	1.000
03/31/20	0.999	0.988
03/31/21	1.056	1.006

(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 10/01/22 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
03/31/17	10/1/16	7.000	7.000
03/31/18	10/1/17	6.000	6.000
03/31/19	10/1/18	5.000	5.000
03/31/20	10/1/19	4.000	4.000
03/31/21	10/1/20	3.000	3.000

VERISK

Physical Damage Loss Development
 Class 6614 - Hired Autos 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>
03/31/2010	1,285,108	1,371,867	1,334,046	1,333,044	1,332,928
03/31/2011	2,119,490	2,072,364	2,104,344	1,981,844	1,981,844
03/31/2012	1,973,654	2,127,182	2,163,929	2,161,130	2,163,377
03/31/2013	2,431,661	2,394,546	2,443,704	2,502,330	2,526,387
03/31/2014	1,357,094	1,291,442	1,291,599	1,292,818	1,292,900
03/31/2015	1,367,205	1,348,485	1,348,248	1,348,248	1,347,493
03/31/2016	1,309,499	1,414,147	1,414,251	1,414,251	1,414,251
03/31/2017	1,393,080	1,446,320	1,442,339	1,434,237	1,434,237
03/31/2018	1,492,485	1,590,431	1,578,687	1,578,715	
03/31/2019	1,468,800	1,537,494	1,538,162		
03/31/2020	1,165,313	1,234,083			
03/31/2021	836,747				

Ratios

Accident Year Ending	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
03/31/2010	1.068	0.972	0.999	1.000
03/31/2011	0.978	1.015	0.942	1.000
03/31/2012	1.078	1.017	0.999	1.001
03/31/2013	0.985	1.021	1.024	1.010
03/31/2014	0.952	1.000	1.001	1.000
03/31/2015	0.986	1.000	1.000	0.999
03/31/2016	1.080	1.000	1.000	1.000
03/31/2017	1.038	0.997	0.994	1.000
03/31/2018	1.066	0.993	1.000	
03/31/2019	1.047	1.000		
03/31/2020	1.059			
Average Factor: (Best 3 of 5)	1.057	0.999	1.000	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) =	1.000
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) =	1.056

VERISK

Physical Damage Loss Development
 Class 6614 - Hired Autos Other than Collision
 Multistate
 Paid Losses

Accident Year <u>Ending</u>	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
03/31/2010	1,331,375	1,330,773	1,330,773	1,330,773	1,330,773
03/31/2011	2,030,463	2,037,742	2,037,742	2,037,742	2,037,742
03/31/2012	2,165,790	2,165,790	2,165,790	2,165,790	2,165,790
03/31/2013	2,526,387	2,526,387	2,526,387	2,524,748	
03/31/2014	1,292,900	1,292,900	1,292,900		
03/31/2015	1,349,904	1,349,904			
03/31/2016	1,414,251				

Ratios

Accident Year <u>Ending</u>	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
03/31/2010	0.999	1.000	1.000	1.000	1.000
03/31/2011	1.025	1.004	1.000	1.000	1.000
03/31/2012	1.001	1.000	1.000	1.000	1.000
03/31/2013	1.000	1.000	1.000	0.999	
03/31/2014	1.000	1.000	1.000		
03/31/2015	1.002	1.000			
03/31/2016	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
 Class 6614 - Hired Autos 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>
03/31/2010	5,541,442	5,476,586	5,436,736	5,442,327	5,421,531
03/31/2011	7,395,246	7,124,216	7,052,187	7,022,712	7,021,049
03/31/2012	7,847,913	8,066,066	8,016,194	8,002,310	7,411,632
03/31/2013	7,237,599	7,208,141	7,633,465	7,613,941	7,581,420
03/31/2014	8,304,911	8,502,984	8,476,725	8,494,370	8,499,196
03/31/2015	8,018,911	8,373,250	8,167,327	8,255,027	8,279,449
03/31/2016	7,463,495	7,696,050	7,480,718	7,449,159	7,435,649
03/31/2017	8,748,475	8,684,832	8,603,979	8,529,132	8,545,164
03/31/2018	7,046,439	7,709,671	7,686,166	7,700,579	
03/31/2019	7,057,480	7,259,632	7,274,167		
03/31/2020	6,694,733	6,514,207			
03/31/2021	2,667,461				

Ratios

Accident Year Ending	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
03/31/2010	0.988	0.993	1.001	0.996
03/31/2011	0.963	0.990	0.996	1.000
03/31/2012	1.028	0.994	0.998	0.926
03/31/2013	0.996	1.059	0.997	0.996
03/31/2014	1.024	0.997	1.002	1.001
03/31/2015	1.044	0.975	1.011	1.003
03/31/2016	1.031	0.972	0.996	0.998
03/31/2017	0.993	0.991	0.991	1.002
03/31/2018	1.094	0.997	1.002	
03/31/2019	1.029	1.002		
03/31/2020	0.973			
Average Factor: (Best 3 of 5)	1.018	0.988	1.000	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) =	1.000
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.988
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.006

VERISK

Physical Damage Loss Development
 Class 6614 - Hired Autos Collision
 Multistate
 Paid Losses

Accident Year <u>Ending</u>	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
03/31/2010	5,421,422	5,421,286	5,421,286	5,419,786	5,419,786
03/31/2011	7,025,718	7,026,860	7,026,711	7,026,711	7,026,711
03/31/2012	7,400,763	7,399,965	7,399,965	7,399,965	7,399,965
03/31/2013	7,590,229	7,556,370	7,553,406	7,554,231	
03/31/2014	8,485,967	8,481,989	8,480,107		
03/31/2015	8,277,625	8,275,058			
03/31/2016	7,434,356				

Ratios

Accident Year <u>Ending</u>	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
03/31/2010	1.000	1.000	1.000	1.000	1.000
03/31/2011	1.001	1.000	1.000	1.000	1.000
03/31/2012	0.999	1.000	1.000	1.000	1.000
03/31/2013	1.001	0.996	1.000	1.000	
03/31/2014	0.998	1.000	1.000		
03/31/2015	1.000	1.000			
03/31/2016	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

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

Frequency (expressed as claims per 100 exposures)

	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
Year Ending:	Actual	Change**	Actual	Change**	Actual	Change**
6/30/2016	1.19		0.76		0.57	
12/31/2016	1.16		0.73		0.55	
6/30/2017	1.16		0.72		0.55	
12/31/2017	1.21	4.3%	0.76	4.1%	0.57	3.6%
6/30/2018	1.28		0.79		0.59	
12/31/2018	1.34	10.7%	0.82	7.9%	0.61	7.0%
6/30/2019	1.40		0.85		0.63	
12/31/2019	1.42	6.0%	0.85	3.7%	0.63	3.3%
6/30/2020	1.35		0.82		0.60	
12/31/2020	1.34	-5.6%	0.81	-4.7%	0.58	-7.9%

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

Deductible:	Percent of Losses
Full	0.6%
\$50	0.7%
\$100	2.3%
\$200	0.1%
\$250	9.2%
\$500	34.1%
\$1,000	45.7%
\$2,000	4.5%
\$3,000	1.1%
\$5,000	1.7%

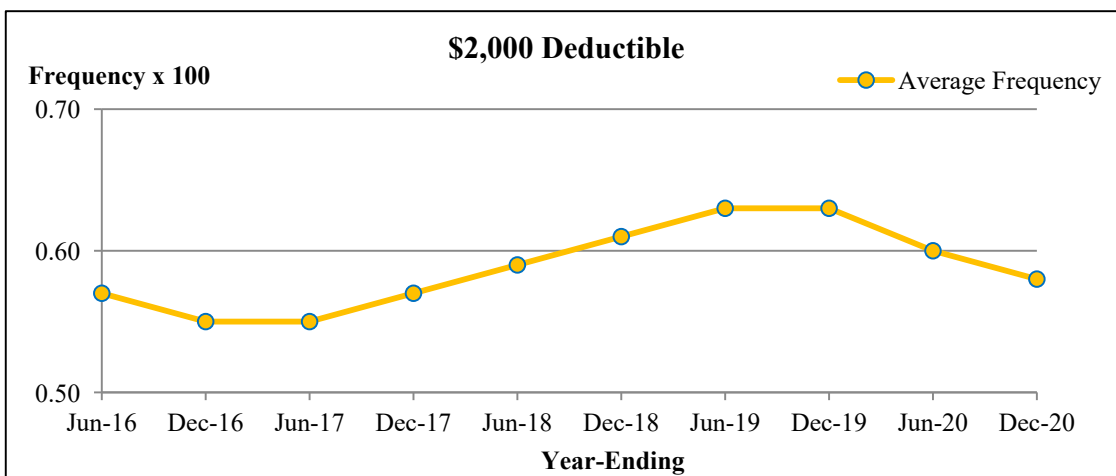
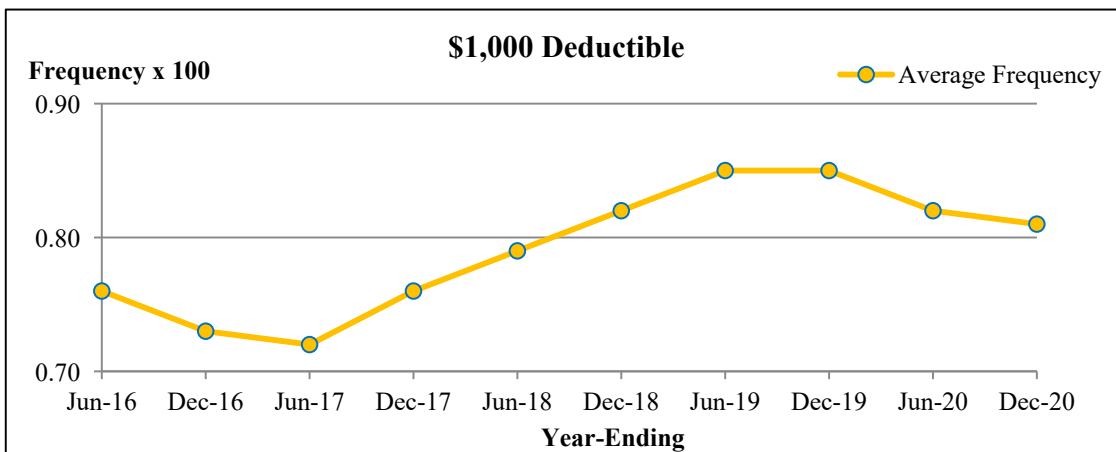
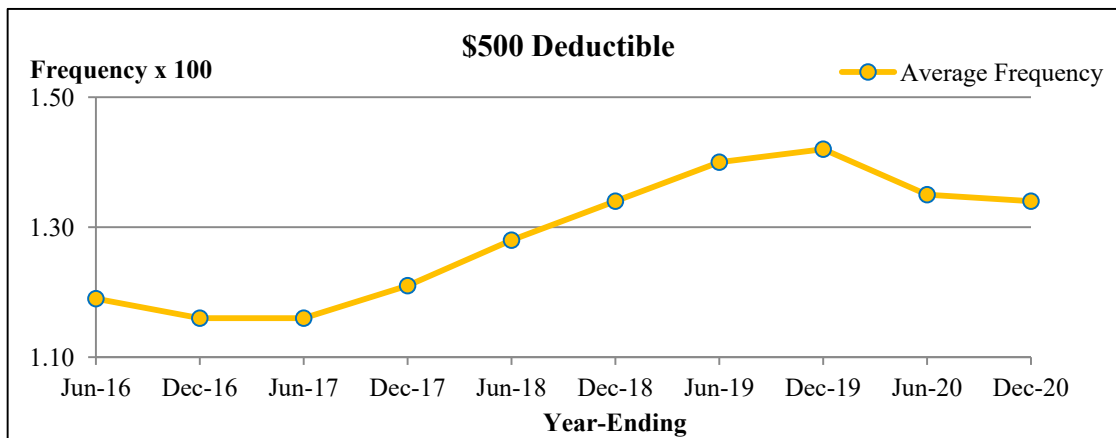
* Multistate data excludes Massachusetts

** Change based on years ending 12/31/xxxx

*** Deductibles above \$2,000, totaling 2.8% 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

Year Ending:	\$500 Deductible	\$1,000 Deductible	\$2,000 Deductible
6/30/2016	4,398.57	6,753.17	8,059.51
12/31/2016	4,414.93	7,057.00	8,435.77
6/30/2017	4,710.32	7,324.30	8,675.68
12/31/2017	5,047.29	7,593.51	8,909.32
6/30/2018	5,106.87	7,930.04	9,410.02
12/31/2018	5,164.55	8,152.85	9,832.47
6/30/2019	5,233.21	8,317.70	10,214.84
12/31/2019	5,414.01	8,816.26	10,875.04
6/30/2020	5,438.32	8,621.98	10,559.97
12/31/2020	5,488.41	8,514.32	10,452.52

Average Annual Change Using Exponential Fits:

10 point fit:	5.3%	5.9%	6.9%
8 point fit:	4.0%	4.9%	6.5%
6 point fit:	3.2%	3.4%	4.7%

Selected severity trend:	5.5%
Selected frequency trend:	0.0%
Selected pure premium trend:	5.5%

* Multistate data excludes Massachusetts

VERISK

Multistate*
Trucks, Tractors & Trailers Physical Damage
Collision

Frequency (expressed as claims per 100 exposures)

	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
Year Ending:	Actual	Change**	Actual	Change**	Actual	Change**
6/30/2016	2.18		1.92		1.57	
12/31/2016	2.23		1.96		1.60	
6/30/2017	2.24		1.96		1.61	
12/31/2017	2.21	-0.9%	1.94	-1.0%	1.60	0.0%
6/30/2018	2.24		1.99		1.65	
12/31/2018	2.25	1.8%	2.01	3.6%	1.66	3.7%
6/30/2019	2.25		2.01		1.66	
12/31/2019	2.24	-0.4%	2.01	0.0%	1.66	0.0%
6/30/2020	2.00		1.76		1.47	
12/31/2020	1.86	-17.0%	1.62	-19.4%	1.37	-17.5%

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

Deductible:	Percent of Losses
\$100	0.1%
\$200	0.0%
\$250	1.2%
\$500	32.5%
\$1,000	53.8%
\$2,000	7.0%
\$3,000	1.6%
\$5,000	3.6%

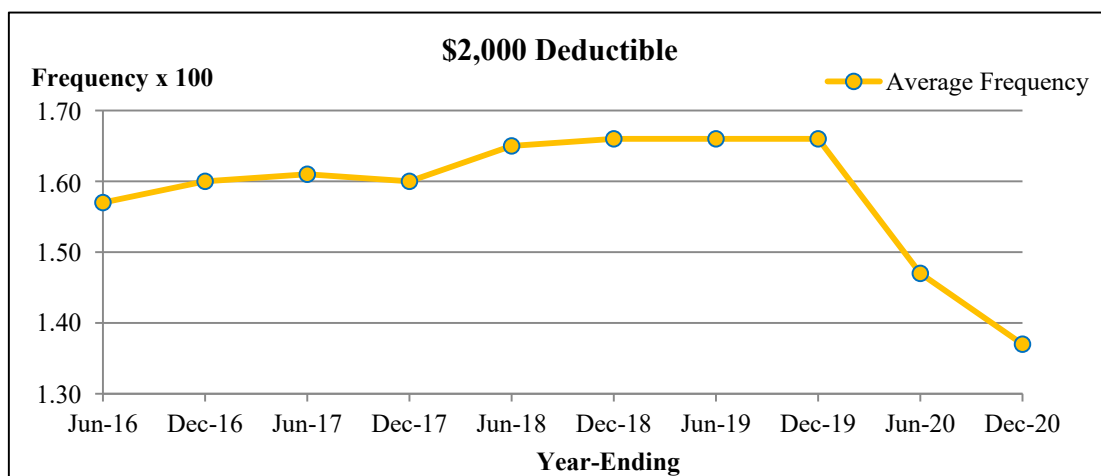
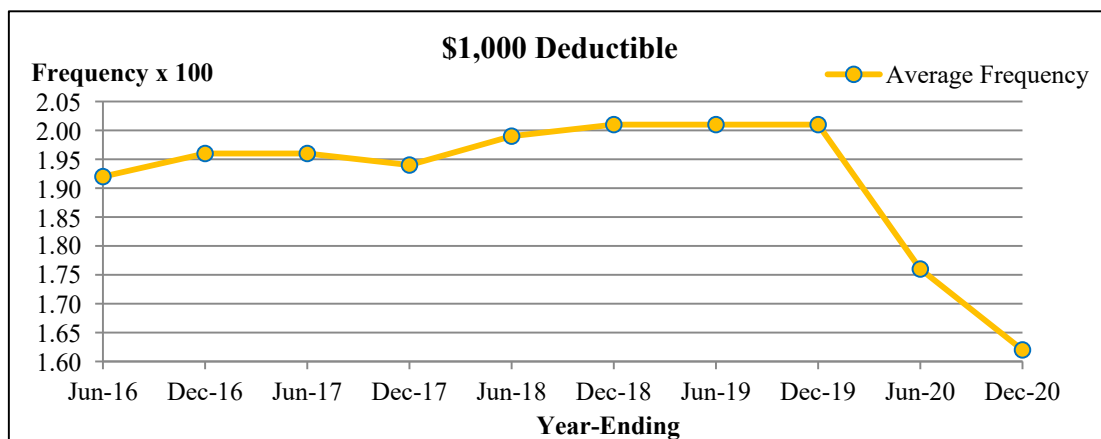
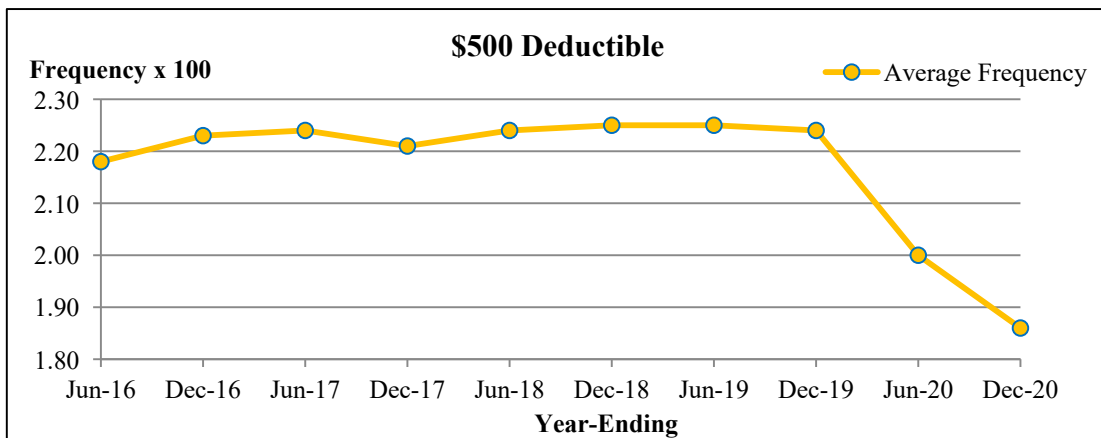
* Multistate data excludes Massachusetts

** Change based on years ending 12/31/xxxx

*** Deductibles above \$2,000, totaling 5.2% 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

Year Ending:	\$500 Deductible	\$1,000 Deductible	\$2,000 Deductible
6/30/2016	9,281.28	10,964.08	11,928.82
12/31/2016	9,493.73	11,239.00	12,206.31
6/30/2017	9,513.79	11,238.62	12,181.06
12/31/2017	9,709.62	11,295.33	12,263.07
6/30/2018	9,906.99	11,561.60	12,598.31
12/31/2018	10,098.28	11,783.35	12,807.24
6/30/2019	10,347.84	12,072.56	13,161.79
12/31/2019	10,423.55	12,122.46	13,246.24
6/30/2020	10,771.39	12,506.12	13,649.25
12/31/2020	11,364.54	13,563.81	14,639.24

Average Annual Change Using Exponential Fits:

10 point fit:	4.2%	4.0%	4.0%
8 point fit:	4.7%	4.9%	4.9%
6 point fit:	5.2%	5.8%	5.6%

Selected severity trend:	4.0%
Selected frequency trend:	0.0%
Selected pure premium trend:	4.0%

* Multistate data excludes Massachusetts

VERISK

Hired Autos OTC

All Perils (excluding specified causes of loss coverage codes)

Triangle of Shifted Losses

Original Deductible Amount	Shifted to Deductible Amount								
	0	50	100	250	500	1000	2000	3000	5000
0	670,430	664,830	659,367	645,204	626,628	598,514	551,449	511,985	450,264
50	-	80,586	74,136	57,262	38,824	28,152	17,989	13,394	7,910
100	-	-	5,988,943	5,734,102	5,405,626	4,940,276	4,228,035	3,671,705	2,927,337

Triangle of Relative Loss Ratios

Original Deductible Amount	Deductible Amounts								
	50:0	100:50	250:100	500:250	1000:500	2000:1000	3000:2000	5000:3000	
	0	0.992	0.992	0.979	0.971	0.955	0.921	0.928	0.879
	50	-	0.920	0.772	0.678	0.725	0.639	0.745	0.591
	100	-	-	0.957	0.943	0.914	0.856	0.868	0.797

Weighted Aves:

0.992 0.984 0.957 0.943 0.917 0.862 0.875 0.807

Cumulative:

1.000 0.992 0.976 0.934 0.881 0.808 0.696 0.609 0.491

Hired Autos Collision

All Perils

Triangle of Shifted Losses

	Shifted to Deductible Amount						
Original Deductible Amount	100	250	500	1000	2000	3000	5000
100	782,997	755,379	711,913	640,710	544,485	477,852	390,789
250	-	631,012	596,037	539,003	467,334	420,596	359,068
500	-	-	6,143,504	5,376,364	4,345,678	3,668,339	2,763,772
1000	-	-	-	25,869,421	22,305,578	19,665,125	15,900,026

Triangle of Relative Loss Ratios

Original Deductible Amount	Deductible Amounts					
	250:100	500:250	1000:500	2000:1000	3000:2000	5000:3000
100	0.965	0.942	0.900	0.850	0.878	0.818
250	-	0.945	0.904	0.867	0.900	0.854
500	-	-	0.875	0.808	0.844	0.753
1000	-	-	-	0.862	0.882	0.809

Weighted Aves:

0.965 0.943 0.880 0.853 0.876 0.801

Cumulative:

1.000 0.965 0.910 0.801 0.683 0.598 0.479

VERISK

Indicated Percentage Discounts

Hired Autos Deductible Amount	OTC	Collision
0	-0.025	---
50	-0.016	---
100	0.000	-0.099
250	0.043	-0.060
500	0.097	0.000
1000	0.172	0.120
2000	0.287	0.249
3000	0.376	0.343
5000	0.497	0.474

VERISK

CALCULATION OF OFF-BALANCE FACTORS

HIRED AUTOS PHYSICAL DAMAGE

OTHER THAN COLLISION

The base loss cost for Other Than Collision is the \$100 deductible.

The off-balance factor to be applied to the current Hired Autos OTC base loss cost is 1.003.

$$1.003 \frac{\$ 1,394,846}{\$ 1,390,110}$$

where \$ 1,394,846 = Aggregate Loss Cost at Current
Level under the current class plan.
\$ 1,390,110 = Aggregate Loss Cost at Current
Level under the revised class plan.

COLLISION

The base loss cost for Collision is the \$500 deductible.

The off-balance factor to be applied to the current Hired Autos Collision base loss cost is 1.056.

$$1.056 \frac{\$ 2,768,330}{\$ 2,621,629}$$

where \$ 2,768,330 = Aggregate Loss Cost at Current
Level under the current class plan.
\$ 2,621,629 = Aggregate Loss Cost at Current
Level under the revised class plan.

VERISK

DETERMINATION OF REVISED BASE LOSS COSTS

HIRED AUTOS PHYSICAL DAMAGE

OTHER THAN COLLISION

Current Multi-State Base Loss Cost	X	Experience Review Loss Cost Level Change	X	Off-Balance Factor	=	Revised Multi-State Base Loss Cost
\$0.31	X	1.368	X	1.003	=	\$0.43

COLLISION

Current Multi-State Base Loss Cost	X	Experience Review Loss Cost Level Change	X	Off-Balance Factor	=	Revised Multi-State Base Loss Cost
\$0.46	X	2.638	X	1.056	=	\$1.28

* The base loss cost for Other Than Collision is the \$100 deductible.
The base loss cost for Collision is the \$500 deductible.

VERISK

HIRED AUTOS REVISED LOSS COSTS

Hired Autos

Deductible Amount	OTC			Collision		
	Current	Indicated	Selected	Current	Indicated	Selected
0	0.34	0.44	0.45	---	---	---
50	0.32	0.44	0.44	---	---	---
100	0.31	0.43	0.43	0.51	1.41	1.41
250	---	0.41	0.41	0.49	1.36	1.36
500	---	0.39	0.39	0.46	1.28	1.28
1000	---	0.36	0.36	0.43	1.13	1.13
2000	---	0.31	0.31	---	0.96	0.96
3000	---	0.27	0.27	---	0.84	0.84
5000	---	0.22	0.22	---	0.67	0.67

Specified Perils

Current	Indicated	Selected
0.16	0.22	0.22

* The base loss cost for Other Than Collision is the \$100 deductible.
The base loss cost for Collision is the \$500 deductible.

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**SOUTH DAKOTA (40)
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		
\$ 272	\$ 6	N/A
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS		
\$ 257	\$ 8	N/A
RULE 240. PUBLIC AUTO CLASSIFICATIONS –		
– TAXICABS AND LIMOUSINES		
\$ 1093	\$ 45	N/A
– SCHOOL AND CHURCH BUSES		
\$ 103	\$ 9	N/A
– OTHER BUSES		
\$ 860	\$ 53	N/A
– VAN POOLS		
\$ 258	\$ 8	N/A
RULE 249. AUTO DEALERS – PREMIUM DEVELOPMENT		
\$ 438	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. 		

LIABILITY	MEDICAL PAYMENTS	PERSONAL INJURY PROTECTION
Limit Of Liab. \$100,000	Limit Per Person \$5000	Basic Limits
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS		
\$ 151	\$ 4	N/A
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS		
\$ 154	\$ 5	N/A
RULE 240. PUBLIC AUTO CLASSIFICATIONS –		
– TAXICABS AND LIMOUSINES		
\$ 607	\$ 25	N/A
– SCHOOL AND CHURCH BUSES		
\$ 57	\$ 7	N/A
– OTHER BUSES		
\$ 477	\$ 44	N/A
– VAN POOLS		
\$ 143	\$ 5	N/A
RULE 249. AUTO DEALERS – PREMIUM DEVELOPMENT		
\$ 243	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. 		

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**SOUTH DAKOTA (40)
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		
\$ 93	\$ 3	N/A
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS		
\$ 130	\$ 4	N/A
RULE 240. PUBLIC AUTO CLASSIFICATIONS –		
– TAXICABS AND LIMOUSINES		
\$ 374	\$ 16	N/A
– SCHOOL AND CHURCH BUSES		
\$ 35	\$ 6	N/A
– OTHER BUSES		
\$ 294	\$ 39	N/A
– VAN POOLS		
\$ 88	\$ 3	N/A
RULE 249. AUTO DEALERS – PREMIUM DEVELOPMENT		
\$ 150	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. 		

LIABILITY	MEDICAL PAYMENTS	PERSONAL INJURY PROTECTION
Limit Of Liab. \$100,000	Limit Per Person \$5000	Basic Limits
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS		
\$ 234	\$ 6	N/A
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS		
\$ 194	\$ 6	N/A
RULE 240. PUBLIC AUTO CLASSIFICATIONS –		
– TAXICABS AND LIMOUSINES		
\$ 941	\$ 39	N/A
– SCHOOL AND CHURCH BUSES		
\$ 89	\$ 11	N/A
– OTHER BUSES		
\$ 739	\$ 64	N/A
– VAN POOLS		
\$ 222	\$ 7	N/A
RULE 249. AUTO DEALERS – PREMIUM DEVELOPMENT		
\$ 378	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. 		

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**SOUTH DAKOTA (40)
TERRITORY 109**

LIABILITY	MEDICAL PAYMENTS	PERSONAL INJURY PROTECTION
Limit Of Liab. \$100,000	Limit Per Person \$5000	Basic Limits
RULE 223. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS		
\$ 198	\$ 5	N/A
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS		
\$ 160	\$ 5	N/A
RULE 240. PUBLIC AUTO CLASSIFICATIONS –		
– TAXICABS AND LIMOUSINES		
\$ 796	\$ 33	N/A
– SCHOOL AND CHURCH BUSES		
\$ 75	\$ 8	N/A
– OTHER BUSES		
\$ 626	\$ 50	N/A
– VAN POOLS		
\$ 188	\$ 6	N/A
RULE 249. AUTO DEALERS – PREMIUM DEVELOPMENT		
\$ 319	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. 		

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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			
	\$ 113	\$ 175	\$ 290
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS			
	\$ 161	\$ 248	\$ 251
RULE 240. PUBLIC AUTO CLASSIFICATIONS			
– TAXICABS AND LIMOUSINES			
	\$ 172	\$ 266	\$ 653
– SCHOOL AND CHURCH BUSES			
	\$ 77	\$ 119	\$ 183
– OTHER BUSES			
	\$ 77	\$ 119	\$ 183
– VAN POOLS			
	\$ 172	\$ 266	\$ 653
<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. 			

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**SOUTH DAKOTA (40)
TERRITORY 104**

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	\$ 145	\$ 224	\$ 275
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS			
	\$ 171	\$ 264	\$ 216
RULE 240. PUBLIC AUTO CLASSIFICATIONS			
– TAXICABS AND LIMOUSINES	\$ 220	\$ 340	\$ 619
– SCHOOL AND CHURCH BUSES	\$ 99	\$ 152	\$ 173
– OTHER BUSES	\$ 99	\$ 152	\$ 173
– VAN POOLS	\$ 220	\$ 340	\$ 619
<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. 			

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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			
	\$ 167	\$ 258	\$ 209
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS			
	\$ 337	\$ 520	\$ 246
RULE 240. PUBLIC AUTO CLASSIFICATIONS			
– TAXICABS AND LIMOUSINES			
	\$ 254	\$ 392	\$ 470
– SCHOOL AND CHURCH BUSES			
	\$ 114	\$ 175	\$ 132
– OTHER BUSES			
	\$ 114	\$ 175	\$ 132
– VAN POOLS			
	\$ 254	\$ 392	\$ 470
<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. 			

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**SOUTH DAKOTA (40)
TERRITORY 108**

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	\$ 198	\$ 305	\$ 233
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS			
	\$ 249	\$ 384	\$ 258
RULE 240. PUBLIC AUTO CLASSIFICATIONS			
– TAXICABS AND LIMOUSINES	\$ 301	\$ 464	\$ 524
– SCHOOL AND CHURCH BUSES	\$ 135	\$ 207	\$ 147
– OTHER BUSES	\$ 135	\$ 207	\$ 147
– VAN POOLS	\$ 301	\$ 464	\$ 524
<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. 			

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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			
	\$ 279	\$ 431	\$ 405
RULE 232. PRIVATE PASSENGER TYPES CLASSIFICATIONS			
	\$ 465	\$ 718	\$ 256
RULE 240. PUBLIC AUTO CLASSIFICATIONS			
– TAXICABS AND LIMOUSINES			
	\$ 424	\$ 655	\$ 911
– SCHOOL AND CHURCH BUSES			
	\$ 190	\$ 293	\$ 255
– OTHER BUSES			
	\$ 190	\$ 293	\$ 255
– VAN POOLS			
	\$ 424	\$ 655	\$ 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. 			

290. HIRED AUTOS

Cost Of Hire Basis – All Territories Liability Base Loss Cost
\$ 0.33

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
	5,000 Deductible	0.22
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
	5,000 Deductible	0.67
Specified Causes Of Loss	No Deductible	0.22

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

Supplementary Information – South Dakota

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 South Dakota

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>
3/31/2018	+4.2%	+4.5%
6/30/2018	+4.4%	+4.3%
9/30/2018	+5.1%	+4.2%
12/31/2018	+5.5%	+4.3%
3/31/2019	+5.7%	+4.6%
6/30/2019	+5.7%	+5.1%
9/30/2019	+5.7%	+5.5%
12/31/2019	+5.9%	+5.9%
3/31/2020	+6.0%	+6.2%
6/30/2020	+5.9%	+6.8%
9/30/2020	+5.7%	+7.3%
12/31/2020	+5.6%	+7.8%
3/31/2021	+5.3%	+8.0%
6/30/2021	+5.7%	+8.0%
9/30/2021	+6.3%	+8.2%
12/31/2021	+7.1%	+8.2%

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 – South Dakota

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 2010 - September 2011	2.8%	4.9%
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%

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 – South Dakota

South Dakota Trends

Liability Loss Trend

	Current Trends <u>Data through</u> <u>12/31/2021</u>	Previous Trends <u>Data through</u> <u>12/31/2020</u>	Previous Trends <u>Data through</u> <u>3/31/2020</u>
South Dakota Claim Cost Trends			
Bodily Injury (\$100,000 Limit)	13.7%	-14.3%	-12.1%
Property Damage (\$100,000 Limit)	6.2%	3.1%	5.9%
Credibility-Weighted Claim Cost Trends			
Bodily Injury (\$100,000 Limit)	7.1%	5.6%	5.7%
Property Damage (\$100,000 Limit)	8.1%	7.6%	6.3%
Selected Claim Frequency Trends			
Trucks, Tractors & Trailers			
Bodily Injury	0.0%	0.0%	0.0%
Property Damage	0.0%	0.0%	0.0%
Private Passenger Types			
Bodily Injury	0.0%	0.0%	0.0%
Property Damage	0.0%	0.0%	0.0%
Selected Pure Premium Trends			
Trucks, Tractors & Trailers			
Bodily Injury (\$100,000 Limit)	7.1%	5.6%	5.7%
Property Damage (\$100,000 Limit)	8.1%	7.6%	6.3%
Private Passenger Types*			
Bodily Injury (\$100,000 Limit)	7.1%	5.6%	5.7%
Property Damage (\$100,000 Limit)	8.1%	7.6%	6.3%

*The Private Passenger Types trend is also used for the Auto Dealers coverage.

Liability Premium Trend

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

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

Liability premium trends are being introduced to correspond with the new class plan.

If the prior trends were used to calculate the indicated changes in this document, the Truck, Tractors & Trailers Liability indication would have been 3.3% instead of 5.4%. For the Private Passenger Types coverage, the indication would have been 2.3% instead of 4.2%. For the Auto Dealers coverage, the indication would have been 15.9% instead of 20.5%.

Supplementary Information – South Dakota

Physical Damage Loss Trend

		Current Trends Data through 12/31/2021	Previous Trends Data through 12/31/2020
Trucks, Tractors & Trailers	<u>Coverage</u>		
	OTC	6.0%	5.5%
	Collision	7.0%	4.0%
Private Passenger Types	OTC	6.5%	7.0%
	Collision	7.0%	5.0%

Physical Damage Premium Trend

		Current VVF Trends Data through 12/31/2021	Previous OCN Trends Data through 12/31/2020
Trucks, Tractors & Trailers	<u>Coverage</u>		
	OTC	1.5%	0.9%
	Collision	2.5%	1.4%
Private Passenger Types	OTC	2.2%	0.9%
	Collision	1.0%	0.5%

Physical Damage premium trends are now based on trends in Vehicle Value Factor (VVF), rather than the previous Original Cost New (OCN) trends, to correspond with the new class plan.

The loss trend has increased by 0.5 points for Trucks, Tractors & Trailers OTC and has decreased by 0.5 points for Private Passenger Types OTC. The premium trend has increased by 0.6 points for Trucks, Tractors & Trailers OTC and has increased by 1.3 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 been 8.9%, instead of 8.4%, and 4.4%, instead of 0.4%, respectively.

The loss trend has increased by 3.0 points for Trucks, Tractors & Trailers Collision and has increased by 2.0 points for Private Passenger Types Collision. The premium trend has increased by 1.1 points for Trucks, Tractors, & Trailers Collision and has increased by 0.5 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 5.5%, instead of 11.0%, and 0.2%, instead of 3.0%, respectively.

Supplementary Information – South Dakota

Loss Development

Methodology

For the Trucks, Tractors & Trailers and Private Passenger Types Liability coverages, we continue to employ a credibility-weighted combination of South Dakota 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. Auto Dealers Liability losses are developed using multistate data. 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	1.080	1.080
27 to Ultimate	1.192	1.205
15 to Ultimate	1.430	1.463
Trucks, Tractors and Trailers PD		
39 to Ultimate	1.005	1.004
27 to Ultimate	1.015	1.014
15 to Ultimate	1.013	1.032
Private Passenger Types BI		
39 to Ultimate	1.079	1.080
27 to Ultimate	1.203	1.186
15 to Ultimate	1.545	1.523
Private Passenger Types PD		
39 to Ultimate	1.004	1.003
27 to Ultimate	1.012	1.011
15 to Ultimate	1.042	1.035
Auto Dealers BI		
39 to Ultimate	1.110	N/A
27 to Ultimate	1.304	N/A
15 to Ultimate	1.977	N/A
Auto Dealers PD		
39 to Ultimate	1.036	N/A
27 to Ultimate	1.074	N/A
15 to Ultimate	1.174	N/A

Supplementary Information – South Dakota

Other Factors

Unallocated Loss Adjustment Expense factors:

	<u>Data through 12/31/2020</u>	<u>Data through 12/31/2019</u>
Bodily Injury	1.070	1.070
Property Damage	1.100	1.100
Physical Damage	1.130	1.130

Indicated vs. Filed Changes

An overall change of 7.1% is indicated when each of the coverage indications is weighted by its respective loss cost volume. Staff will file the indications, which reflect a 7/1/2023 proposed effective date, with the following exceptions: For Private Passenger Types liability and Private Passenger Types collision, No Change (N.C.) was selected to better reflect the favorable state experience. For Private Passenger Types OTC, No Change (N.C.) was selected due to the modest indication. For Auto Dealers liability, -10.0% was selected to better reflect the favorable state experience.

<u>Coverage</u>	<u>Indicated Change</u>	<u>Filed Change</u>
Private Passenger Types liability	4.2%	No Change (N.C.)
Private Passenger Types OTC	0.4%	No Change (N.C.)
Private Passenger Types collision	3.0%	No Change (N.C.)

The overall filed change is 5.3%.

Notes

- The Trucks, Tractors & Trailers OTC indication (8.4%) is driven by unfavorable experience in four of the five accident years included in the review.
- The Auto Dealers and Garagekeepers Physical Damage coverages are not being reviewed this year.