

LOSS COSTS – IMPLEMENTATION

JANUARY 23, 2020

COMMERCIAL AUTOMOBILE

LI-CA-2020-035

## NORTH DAKOTA REVISED COMMERCIAL AUTO ADVISORY PROSPECTIVE LOSS COSTS TO BE IMPLEMENTED; NEW FILING FORMAT

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### KEY MESSAGE

Loss costs representing a -2.5% statewide change to be implemented.

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### BACKGROUND

In circular [LI-CA-2019-280](#), we provided you with information about the Commercial Auto loss cost level experience review.

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### ISO ACTION

We filed CA-2020-BRLA1, which presents a review of Commercial Auto loss cost experience.

Refer to the attached explanatory material for complete details about the filing.

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### IMPORTANT NOTE

#### Change in Format

The filing has been restructured. All explanatory text, for all sections of the filing, appears first; all exhibits are grouped together and appear thereafter, followed by the manual pages. We invite customers to share feedback on this revised format and suggestions for further enhancements by contacting the individuals listed in the Contact Information block.

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### SUPPLEMENTARY INFORMATION

We are including supplementary information for North 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.

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### EFFECTIVE DATE

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

These changes are applicable to all policies written on or after July 1, 2020.

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.

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## 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, 2020, the multiplier must be based on the relationship between your gross rates and the ISO advisory prospective loss costs contained in this circular.

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## 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 JUNE 19, 2020. 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 Reference Filing Number CA-2020-BRLA1, 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.

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## RATING SOFTWARE IMPACT

No new attributes are being introduced with this revision.

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## POLICYHOLDER NOTIFICATION

If you decide to implement this revision, you should check all applicable laws for the state(s) to which this revision applies, to determine whether or not a specific policyholder notice requirement may apply. Please note that circular [LI-CL-2019-057](#) contains the ISO Guide To Renewals With Changed Conditions For Commercial Lines, which is available only as a guide to assist participating companies in complying with various conditional renewal statutes or regulations, for the major commercial lines of insurance serviced by ISO. The information in the Guide does not necessarily reflect all requirements or exceptions that may apply, and it is not intended as a substitute for your review of all applicable statutes and regulations concerning policyholder notification.

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## 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](http://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.

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## REVISION DISTRIBUTION

We will issue a Notice to Manualholders with an edition date of 7-20 (or the earliest possible subsequent date), along with any new and/or revised manual pages.

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## REFERENCE(S)

- [LI-CL-2019-057](#) (12/10/2019) Revised Lead Time Requirements Listing
- [LI-CA-2019-280](#) (12/04/2019) Commercial Auto Experience Level Indications Reviewed By Staff

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## ATTACHMENT(S)

- Filing CA-2020-BRLA1
- Supplementary Information

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## FILES AVAILABLE FOR DOWNLOAD

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

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

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## DATA QUALITY

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

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## 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, David Terné, am a Managing Director of Strategic Actuarial Operations for ISO, and I, James Davidson, 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.

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## OPTIONAL CLASS PLAN INFORMATION

For the latest updates on the Optional Class Plan, visit <https://www.verisk.com/insurance/products/new-commercial-auto-class-plan>.

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## CONTACT INFORMATION

If you have any questions concerning:

- The actuarial content of this circular, please contact:  
Rebecca Gordon  
Actuarial Operations  
201-469-2623  
[Rebecca.Gordon@verisk.com](mailto:Rebecca.Gordon@verisk.com)  
[autoactuarial@verisk.com](mailto:autoactuarial@verisk.com)
- The non-actuarial content of this circular, please contact:  
Jeannette Schuff  
Production Operations, Compliance and Product Services  
201-469-2857  
[productionoperations@verisk.com](mailto:productionoperations@verisk.com)
- Other issues for this circular, please contact Customer Support:  
E-mail: [info@verisk.com](mailto:info@verisk.com)  
Phone: 800-888-4476

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](http://www.verisk.com/iso). To keep abreast of the latest Insurance Lines Services updates, view [www.verisk.com/ils](http://www.verisk.com/ils).

NORTH DAKOTA  
BASIC LIMITS PROSPECTIVE LOSS COST LEVEL – COMMERCIAL AUTOMOBILE  
FILING CA–2020-BRLA1  
EXECUTIVE SUMMARY

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PURPOSE	<p>This document:</p> <ul style="list-style-type: none"><li>• revises the advisory prospective loss costs for the major Commercial Automobile classes. These loss costs represent a -2.5% statewide change from the loss costs currently in effect.</li><li>• provides the analyses used to derive these advisory loss costs.</li></ul>
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>
OPTIONAL CLASS PLAN LOSS COSTS	<p>The loss costs contained in this filing CA-2020-BRLA1 are intended for use with the class plan in our standard manual. The prospective loss costs in this filing have also been used as the basis to develop the loss costs for the Optional Class Plan, which are located in companion filing CA-2020-BRLB1.</p>
CHANGE IN FORMAT	<p>In this document, all explanatory material appears first, followed by all exhibits, and then the revised prospective loss costs. Explanatory pages are numbered B-1 through C-27, the exhibits are labeled EXHIBIT A1 through EXHIBIT C16, and the revised prospective loss cost pages are numbered D-1 through D-11.</p>
PRIVATE PASSENGER TYPES SPECIFIED CAUSES OF LOSS	<p>This filing introduces a Loss Cost for Specified Causes of Loss Coverage for Private Passenger Types Vehicles.</p>
AUTO DEALERS LIABILITY AND PIP COVERAGES	<p>The Auto Dealers Liability and PIP coverages are not being reviewed this year.</p>

REVISED LOSS  
COST CHANGES

The statewide advisory loss cost level changes are:

<u>Trucks, Tractors &amp; Trailers</u>	<u>Indicated</u>	<u>Filed</u>
Liability		
Single Limit Liability	-6.9%	-6.9%
Personal Injury Protection	-2.5%	N.C.
Physical Damage		
Other than Collision	11.9%	11.9%
Collision	-6.5%	-6.5%
Total Trucks, Tractors & Trailers	-3.0%	-3.0%
<u>Private Passenger Types</u>		
Liability		
Single Limit Liability	1.7%	N.C.
Personal Injury Protection	-1.1%	-10.0%
Physical Damage		
Other than Collision	11.9%	11.9%
Collision	3.1%	3.1%
Total Private Passenger Types	4.2%	2.9%
<u>Grand Total</u>	-2.5%	-2.5%

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

INDICATED VS.  
FILED

Indicated changes are based on standard ISO methodology, utilizing a 7/1/2020 trend effective date. The filed loss cost level changes are the same as the indicated with the following exceptions: No Change (N.C.) was selected for Trucks, Tractors & Trailers PIP because the indicated statewide change is too small to change the loss cost for any individual territory. No Change (N.C.) was selected for Private Passenger Types Liability due to the modest indication and -10.0% was selected for Private Passenger Types PIP to reflect the favorable state experience.

PRIOR ISO  
REVISIONS

The latest selected revisions in this state are:

<u>Filing</u>	CA-2019-BRLA1	CA-2017-BRLA1	CA-2015-BRLA1
Rate Level/ Loss Costs	Loss Costs	Loss Costs	Loss Costs
Effective Date	7/1/2019	7/1/2017	7/1/2015
<u>Changes</u>			
Indicated	-3.9%	-3.0%	12.3%
Filed	-4.0%	-3.3%	12.2%
Approved	-4.0%	-3.3%	12.2%

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## 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 12/31/2018 for all coverages.
  - Various external price index data from the Bureau of Labor Statistics.
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## 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 2018 and claim frequency trend data through third quarter 2018 were used in selecting the following annual liability trend factors:

<u>Coverage</u>	<u>Annual Trend Factor</u>
Trucks, Tractors, and Trailers Liability:	
Bodily Injury	+5.5%
Property Damage	+3.9%
Private Passenger Types Liability:	
Bodily Injury	+5.5%
Property Damage	+3.9%
Trucks, Tractors & Trailers PIP	+2.9%
Private Passenger Types PIP	+2.9%
Trucks, Tractors & Trailers OTC	+7.0%
Trucks, Tractors & Trailers Collision	+4.5%
Private Passenger Types OTC	+6.5%
Private Passenger Types Collision	+4.0%

### OCN Trend

To recognize the trend in the Original Cost New (OCN) relativities for Trucks, Tractors & Trailers and Private Passenger Type's physical damage, aggregate loss costs at current level have been multiplied by trend factors. The selected annual OCN trend factors for Trucks, Tractors & Trailers are +0.9% and +1.5% for OTC and Collision respectively. For Private Passenger Types, the OCN Trend factors are +1.0% and +0.6% 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. Travelers Indemnity Company
2. Zurich American Insurance Company
3. Employers Mutual Casualty Company
4. Nationwide Mutual Insurance Co.
5. Liberty Mutual Insurance Company
6. United Fire & Casualty Company
7. Cincinnati Insurance Company
8. Western National Mutual Ins. Co.
9. Plaza Insurance Company
10. Tokio Marine Companies

##### PHYSICAL DAMAGE (ASLOB 21.2)

1. Travelers Indemnity Company
2. Employers Mutual Casualty Company
3. Motors Insurance Corporation
4. Western National Mutual Ins. Co.
5. Cincinnati Insurance Company
6. United Fire & Casualty Company
7. Zurich American Insurance Company
8. Liberty Mutual Insurance Company
9. Nationwide Mutual Insurance Co.
10. Federated Mutual Insurance Company

Insurers are listed in descending order based on the percent of statewide written premium volume from Annual Statement Page 15 for the year ending 12/31/2018 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 12/31/2018 is:

Liability (ASLOB 19.3 & 19.4)  
34.0%

Physical Damage (ASLOB 21.2)  
31.5%

#### 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.



COMPANY  
DECISION (Cont'd)

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.

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

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NORTH DAKOTA  
COMMERCIAL AUTOMOBILE  
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## OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

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

## OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

### STEP 1 – DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGE

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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.</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 &amp; Trailers and Private Passenger Types physical damage aggregate loss costs are placed on the prospective OCN relativity level by the application of OCN trend factors.</p>

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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.

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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.

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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.

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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.

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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.

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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.

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## OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

### STEP 2 – DETERMINATION OF TERRITORY RELATIVITIES

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

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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 LIABILITY OR BASIC PIP 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 \$100,000 liability or basic PIP loss cost at present ISO manual level.
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 or basic PIP 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 liability or basic PIP 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> $\frac{[\text{Terr. Group Col. (4)} \times \text{Terr. Group Col. (5)}] + [\text{SW Total Col. (4)} \times (1.0 - \text{Terr. Group Col. (5)})]}{[\text{Terr. Group Col. (4)} + \text{SW Total Col. (4)}]}$



COLUMN (7)  
INDEX TO  
STATE

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

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

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

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COLUMN (8)  
BASE CLASS  
LOSS COST

Present ISO \$100,000 liability base class loss cost or basic PIP loss cost.

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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.

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COLUMN (10)  
REVISED BASE  
LOSS COST

Revised \$100,000 liability base loss cost or basic PIP loss cost.

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COLUMN (11)  
ADVISORY  
LOSS COST  
CHANGE

Percentage change from the present base loss cost to the revised base loss cost.

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

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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 OCN level by the application of OCN 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> $[\text{Terr. Group Col. (4)} \times \text{Terr. Group Col. (5)}] \\ + [\text{SW Total Col. (4)} \times (1.0 - \text{Terr. Group Col. (5)})]$

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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.)

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COLUMN (8)  
BASE CLASS  
LOSS COST

Present ISO base class loss cost.

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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.

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COLUMN (10)  
REVISED BASE  
LOSS COST

Revised base loss cost.

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COLUMN (11)  
ADVISORY  
LOSS COST  
CHANGE

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

---

## LOSS ADJUSTMENT EXPENSE FACTORS

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

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## AVERAGE ANNUAL CHANGE IN LOSSES (LOSS TREND)

OBJECTIVE	The application of the average annual change in losses to historical data recognizes that advisory loss costs are being made for use in a future period based on historical experience. Due to economic and social factors, claim cost and frequency levels continue to change from those underlying the historical data.
DETERMINATION OF HISTORICAL AVERAGE CLAIM COST TREND	To determine the historical average claim cost trend, ISO makes use of the Least Squares Method fitted to the reported time series data; specifically, an exponential curve represented by the equation $Y=A(B^X)$ is fitted to the paid claim cost data. The parameters A and B are calculated by regressing Y, which is the applicable claim cost on X, which is the unit of time. The resulting fitted curve allows the determination of a historical average trend for the data under review.
LIABILITY LOSS TREND	The historical average annual change in claim costs for both Bodily Injury and Property Damage coverages are measured in this document using a credibility-weighted mix of multistate and statewide data. Prospective average annual changes for claim frequency have been selected based on the historical multistate data, as well as other relevant factors. Combining the state credibility-weighted claim cost trends with the selected claim frequency trends results in the selected Bodily Injury and Property Damage pure premium trend used to adjust the losses to a prospective level.
TREND CREDIBILITY FOR LIABILITY CLAIM SEVERITY	<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. 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.

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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.

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.

1) All losses are divided by the appropriate class plan and age 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.

PHYSICAL  
DAMAGE:  
LOSS TREND  
(CONT'D)

For example, consider 12 Truck exposures reported with Age Code 1 (current model year, age factor of 1.00). Each exposure experiences a loss of \$500. The average severity of the losses for these 12 exposures is \$500.

Now consider these 12 exposures 5 years in the future. The exposures are now reported with Age Code A (6th preceding model year, age factor of 0.80). Assume that there is 10% inflation per year on all severities. Also assume that each of these 12 exposures experience the same amount of damage as they did 5 years ago. The average severity of the losses for these 12 exposures is now \$644 (taking into account both inflation and the older age of the vehicles).

If we analyze the severity trend without dividing each loss by its corresponding age factor, we get an annual trend of  $(\$644/\$500)^{1/5} - 1 = 5.2\%$

If we first divide each loss by its corresponding age factor, we get an annual trend of  $((\$644/0.80) / (\$500/1.00))^{1/5} - 1 = 10.0\%$

The first calculated severity is not equal to the assumed inflation because the calculation includes the decrease in average severity caused by aging of the vehicles. By dividing each loss record by its corresponding class plan and age factors, we remove distortions on the severity trend caused by the change in the distribution of classes and ages from one year to the next.

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

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

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

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

PHYSICAL  
DAMAGE:  
LOSS TREND  
(CONT'D)

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

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

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

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

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

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

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

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

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

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

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

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

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



PHYSICAL  
DAMAGE:  
LOSS TREND  
(CONT'D)

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

The trend selections for physical damage are based on the data in the attached exhibits. 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 \$250, \$500, and \$1,000 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:	+7.0%	+6.5%
COLL:	+4.5%	+4.0%

PERSONAL  
INJURY  
PROTECTION  
TREND

The average annual trend for personal injury protection coverage is based on consumer price indices for medical and hospital related services, and wage data from the Bureau of Labor statistics. The average annual claim cost trend uses a weighted average of the medical and wage trends using weights based on type of loss data for this state. The weighted average annual trend in claim cost is then multiplied by the selected average annual trend in claim frequency. The average annual trend in claim frequency for PIP that is used is the same for bodily injury claim frequency.

COMMERCIAL AUTOMOBILE PHYSICAL DAMAGE  
SUPPLEMENTARY EXHIBIT

Quarterly Values <u>Ending</u>	Consumer Price Index for Bodywork	
	<u>Actual</u>	<u>Exponential Fit</u>
12/31/2015	2.831	2.823
03/31/2016	2.847	2.843
06/30/2016	2.866	2.862
09/30/2016	2.877	2.882
12/31/2016	2.913	2.901
03/31/2017	2.925	2.921
06/30/2017	2.942	2.941
09/30/2017	2.945	2.962
12/31/2017	2.966	2.982
03/31/2018	2.999	3.002
06/30/2018	3.016	3.023
09/30/2018	3.033	3.044
12/31/2018	3.061	3.065
03/31/2019	3.074	3.086
06/30/2019	3.118	3.107
09/30/2019	3.158	3.128
		Average
		Annual
		<u>Change</u>
16 Point Fit	<u>R-Squared</u>	
12 Point Fit		
	0.9857	2.8%
	0.9724	2.9%

## PHYSICAL DAMAGE OCN TREND

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### OBJECTIVE

In Physical Damage for Trucks, Tractors & Trailers and Private Passenger Types, as new, higher-valued commercial automobiles are introduced, there is an increase in revenue due to the original cost new component of the rating procedure. In order to reflect the revenue impact of the higher-valued vehicles during the prospective period, ISO uses an OCN trend procedure. The effect of this procedure is to reduce the indicated loss costs for Trucks, Tractors & Trailers and Private Passenger Types physical damage coverages.

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### DESCRIPTION OF ORIGINAL COST NEW DATA

The average original cost new (OCN) relativities for Comprehensive and Collision are displayed on the following exhibits. The data is displayed by coverage. To determine the historical average trend for OCN, 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 OCN relativities. Based on the results of these curves, ISO has selected annual OCN trends of 0.9% and 1.5% for Trucks, Tractors & Trailers OTC and Collision coverages respectively. This trend is necessary to reflect the additional revenue generated by the shift in the OCN distribution as new, higher-priced automobiles are introduced.

For Private Passenger Types, OCN trends of 1.0% and 0.6% were selected for the OTC and Collision coverages respectively.

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## LOSS DEVELOPMENT FOR LIABILITY

OBJECTIVE	The application of loss development recognizes the important concept that some of the losses for a particular accident year have not been finally determined at the time the experience is compiled.
DESCRIPTION OF EXPERIENCE PERIOD DATA	For Trucks, Tractors & Trailers and Private Passenger Types Liability, the incurred losses and allocated loss adjustment expenses underlying the statewide loss cost level indications are on an accident year basis and were evaluated as of March 31, 2019. In other words, accident year ended December 31, 2018 includes all losses and allocated loss adjustment expenses paid through March 31, 2019 on accidents occurring from January 1, 2018 to December 31, 2018 and all losses and allocated loss adjustment expenses outstanding on these accidents as of March 31, 2019, 15 months after the inception of the accident year. Similarly, the incurred losses and allocated loss adjustment expenses for accident year ended December 31, 2017 include all loss and loss adjustment expenses paid through March 31, 2019 on accidents occurring from January 1, 2017 to December 31, 2017 and all losses and allocated loss adjustment expenses outstanding on these accidents as of March 31, 2019, 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.
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 &amp; Trailers and Private Passenger Types are calculated for each link ratio based on a "best three of five" approach. Specifically, for the latest five years, the highest and lowest ratios were removed from the calculation and the three year average was calculated using the three remaining factors. Beyond 123 months the loss development is assumed to be unity.</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 &amp; Trailers and Private Passenger Types are calculated for each link ratio based on a "best three of five" years approach. Specifically, for the latest five years, the highest and lowest ratios were removed from the calculation and the three year average was calculated using the three remaining factors. Development beyond 111 months is assumed to be unity.</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.

## LOSS DEVELOPMENT FOR PHYSICAL DAMAGE

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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, 2019. In other words, accident year ended December 31, 2018 includes all losses paid through March 31, 2019 on accidents occurring from January 1, 2018 to December 31, 2018. Similarly, the paid losses for accident year ended December 31, 2017 include all losses paid through March 31, 2019 on accidents occurring from January 1, 2017 to December 31, 2017. 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.
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.

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## CREDIBILITY PROCEDURE FOR EXPERIENCE LOSS RATIO

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OBJECTIVE	The extent to which the state experience is reflected in the development of the prospective loss costs is determined by the credibility of the data for that state. Specifically, ISO credibility procedures are based upon the volume of claims for each coverage separately.
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METHODOLOGY	The standards for full credibility were determined from a credibility study using various size of loss distributions for liability, PIP, 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.
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CREDIBILITY FOR EXPERIENCE LOSS RATIO	The assignment of credibility to the experience loss ratio is based on the total number of claims for the years used. For liability, the claims are based on BI and PD claims combined. For physical damage, credibility is determined separately for OTC and Collision. Partial credibility (Z), as used for the experience loss ratio, is determined using the square root rule as follows:
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$$Z = \sqrt{\frac{\text{Claims}}{X}}$$

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

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

TRUCKS, TRACTORS, & TRAILERS AND PRIVATE PASSENGER TYPES

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  $\geq 3,000$ ,  
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  $\geq 350$ ,  
Then use 3 years of experience and assign 50/30/20 weights.
5. If 3 year Avg. claims  $< 350$ ,  
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

CREDIBILITY FORMULA = ( # CLAIMS)/( # 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.

PERSONAL INJURY PROTECTION  
CREDIBILITY TABLES  
NUMBER OF CLAIMS

<u>Credibility</u>	<u>Trucks, Tractors &amp; Trailers and Private Pass Types</u>		
*0.00	0	-	7
0.05	8	-	29
0.10	30	-	67
0.15	68	-	119
0.20	120	-	187
0.25	188	-	269
0.30	270	-	367
0.35	368	-	479
0.40	480	-	607
0.45	608	-	749
0.50	750	-	907
0.55	908	-	1,079
0.60	1,080	-	1,267
0.65	1,268	-	1,469
0.70	1,470	-	1,687
0.75	1,688	-	1,919
0.80	1,920	-	2,167
0.85	2,168	-	2,429
0.90	2,430	-	2,707
0.95	2,708	-	2,999
1.00	>		2,999

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 &amp; 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 &amp; 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.

NORTH DAKOTA  
CLAIMS PER TERRITORY  
LIABILITY AND PIP

Territory	Trucks, Tractors & Trailers Incurred Claims 5 Years Ending 12/31/2018		Private Passenger Types Incurred Claims 5 Years Ending 12/31/2018	
	Combined BI and PD	PIP	Combined BI and PD	PIP
101	403	10	108	10
102	1,407	97	143	24
104	421	20	38	8
105	137	1	30	2
106	203	10	24	3
SW Total	2,571	138	343	47

Claims for Trend

BI

PD

60

457

NORTH DAKOTA  
CLAIMS PER TERRITORY  
PHYSICAL DAMAGE

Territory	Trucks, Tractors & Trailers Paid Claims 5 Years Ending 12/31/2018		Private Passenger Types Paid Claims 5 Years Ending 12/31/2018	
	OTC	Coll	OTC	Coll
101	370	306	155	103
102	2,512	1,597	362	156
104	413	275	94	48
105	134	114	139	67
106	173	137	65	36
SW Total	3,602	2,429	815	410



WIND AND WATER PROCEDURE  
OTHER THAN COLLISION

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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.

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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.

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WIND AND WATER PROCEDURE  
OTHER THAN COLLISION  
NORTH 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	137,862	372,687	234,825	0.587	-0.152	-35,693	336,994
1988	60,672	420,454	359,782	0.169	0.266	95,702	516,156
1989	63,151	403,582	340,431	0.186	0.249	84,767	488,349
1990	160,441	864,625	704,184	0.228	0.207	145,766	1,010,391
1991	121,669	580,476	458,807	0.265	0.170	77,997	658,473
1992	49,679	428,407	378,728	0.131	0.304	115,133	543,540
1993	132,970	539,790	406,820	0.327	0.108	43,937	583,727
1994	330,332	890,969	560,637	0.589	-0.154	-86,338	804,631
1995	591,021	1,261,869	670,848	0.881	-0.446	-299,198	962,671
1996	262,014	964,390	702,376	0.373	0.062	43,547	1,007,937
1997	691,942	1,784,292	1,092,350	0.633	-0.198	-216,285	1,568,007
1998	164,724	1,077,355	912,631	0.180	0.255	232,721	1,310,076
1999	543,702	1,745,584	1,201,882	0.452	-0.017	-20,432	1,725,152
2000	1,135,062	2,329,953	1,194,891	0.950	-0.515	-615,369	1,714,584
2001	2,018,537	3,026,996	1,008,459	2.002	-1.567	-1,580,255	1,446,741
2002	271,776	919,757	647,981	0.419	0.016	10,368	930,125
2003	133,803	885,917	752,114	0.178	0.257	193,293	1,079,210
2004	78,522	744,189	665,667	0.118	0.317	211,016	955,205
2005	297,808	1,203,505	905,697	0.329	0.106	96,004	1,299,509
2006	51,084	612,831	561,747	0.091	0.344	193,241	806,072
2007	207,123	1,288,547	1,081,424	0.192	0.243	262,786	1,551,333
2008	179,154	1,264,818	1,085,664	0.165	0.270	293,129	1,557,947
2009	277,017	1,399,333	1,122,316	0.247	0.188	210,995	1,610,328
2010	625,236	1,537,484	912,248	0.685	-0.250	-228,062	1,309,422
2011	439,819	1,554,415	1,114,596	0.395	0.040	44,584	1,598,999
2012	265,310	1,740,618	1,475,308	0.180	0.255	376,204	2,116,822
2013	519,217	1,847,575	1,328,358	0.391	0.044	58,448	1,906,023
2014	1,059,665	2,560,967	1,501,302	0.706	-0.271	-406,853	2,154,114
2015	492,047	2,232,939	1,740,892	0.283	0.152	264,616	2,497,555
2016	2,467,353	4,450,989	1,983,636	1.244	-0.809	-1,604,762	2,846,227
2017	159,328	2,102,446	1,943,118	0.082	0.353	685,921	2,788,367
2018	590,912	2,789,021	2,198,109	0.269	0.166	364,886	3,153,907

(8) NORMAL WIND TO NON W&W RATIO= AVG. (4) 0.435

WIND AND WATER PROCEDURE  
OTHER THAN COLLISION  
NORTH 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	106,175	234,120	127,945	0.830	-0.371	-47,468	186,652
1988	53,977	168,743	114,766	0.470	-0.011	-1,262	167,481
1989	45,704	215,320	169,616	0.269	0.190	32,227	247,547
1990	38,411	180,005	141,594	0.271	0.188	26,620	206,625
1991	46,443	211,000	164,557	0.282	0.177	29,127	240,127
1992	19,926	170,033	150,107	0.133	0.326	48,935	218,968
1993	83,390	245,460	162,070	0.515	-0.056	-9,076	236,384
1994	173,612	366,090	192,478	0.902	-0.443	-85,268	280,822
1995	271,893	577,612	305,719	0.889	-0.430	-131,459	446,153
1996	126,207	444,405	318,198	0.397	0.062	19,728	464,133
1997	396,988	712,230	315,242	1.259	-0.800	-252,194	460,036
1998	73,290	343,501	270,211	0.271	0.188	50,800	394,301
1999	146,311	427,320	281,009	0.521	-0.062	-17,423	409,897
2000	272,895	664,733	391,838	0.696	-0.237	-92,866	571,867
2001	539,871	891,875	352,004	1.534	-1.075	-378,404	513,471
2002	68,214	347,209	278,995	0.244	0.215	59,984	407,193
2003	46,135	352,439	306,304	0.151	0.308	94,342	446,781
2004	28,422	245,741	217,319	0.131	0.328	71,281	317,022
2005	187,474	375,113	187,639	0.999	-0.540	-101,325	273,788
2006	24,866	229,493	204,627	0.122	0.337	68,959	298,452
2007	109,405	311,451	202,046	0.541	-0.082	-16,568	294,883
2008	76,092	267,555	191,463	0.397	0.062	11,871	279,426
2009	26,150	198,219	172,069	0.152	0.307	52,825	251,044
2010	82,454	302,204	219,750	0.375	0.084	18,459	320,663
2011	36,585	141,055	104,470	0.350	0.109	11,387	152,442
2012	19,573	193,296	173,723	0.113	0.346	60,108	253,404
2013	48,608	241,566	192,958	0.252	0.207	39,942	281,508
2014	68,269	242,874	174,605	0.391	0.068	11,873	254,747
2015	37,993	209,552	171,559	0.221	0.238	40,831	250,383
2016	209,355	510,087	300,732	0.696	-0.237	-71,273	438,814
2017	28,640	266,258	237,618	0.121	0.338	80,315	346,573
2018	48,308	300,923	252,615	0.191	0.268	67,701	368,624

(8) NORMAL WIND TO NON W&W RATIO= AVG. (4) 0.459

## EXPLANATORY MEMORANDUM FOR WIND AND WATER PROCEDURE

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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	$\text{Column (2)} + \text{Column (6)}$ .

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## TERRITORIAL WIND AND WATER PROCEDURE OTHER THAN COLLISION

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### OBJECTIVE

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

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### DESCRIPTION OF TERRITORIAL WIND AND WATER PROCEDURE

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

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

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

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

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

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

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

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## METHODOLOGY FOR CALCULATING 'WIND &amp; 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

## INSURANCE SERVICES OFFICE, INC.

NORTH 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)
<b>TRUCKS, TRACTORS &amp; TRAILERS (D)</b>		
Liability		
Single Limit Liability	\$ 9,280,381	-6.9%
Personal Injury Protection	401,670	N.C.
Combined	9,682,051	-6.6%
Physical Damage		
Other Than Collision	3,576,182	11.9%
Collision	5,069,729	-6.5%
Combined	8,645,911	1.1%
Total Trucks, Tractors & Trailers	18,327,962	-3.0%
<b>PRIVATE PASSENGER TYPES</b>		
Liability		
Single Limit Liability	789,415	N.C.
Personal Injury Protection	70,819	-10.0%
Combined	860,234	-0.8%
Physical Damage		
Other Than Collision	349,760	11.9%
Collision	354,256	3.1%
Combined	704,016	7.5%
Total Private Passenger Types	1,564,250	2.9%
<b>GRAND TOTAL ALL COVERAGES</b>	19,892,212	-2.5%
TOTAL LIABILITY	10,542,285	-6.1%
TOTAL PHYSICAL DAMAGE	9,349,927	1.6%

(A) An implementation date of 07/01/2020 is assumed for purposes of trending.

(B) Accident Year ending 12/31/2018 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, Personal Injury Protection 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.

INSURANCE SERVICES OFFICE, INC.

NORTH 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	
Code	Liability	PIP (a)
101	-8.1%	
102	-7.7%	
104	-3.6%	
105	-7.7%	
106	-4.4%	

(a) For Trucks, Tractors and Trailers PIP, No Change (N.C.) was selected because the indicated statewide change is too small to change the loss cost for any individual territory.



INSURANCE SERVICES OFFICE, INC.

NORTH 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	13.3%	-3.5%	14.3%
102	13.0%	-7.1%	13.1%
104	6.7%	-5.2%	6.7%
105	7.9%	-3.2%	6.8%
106	10.4%	-7.5%	10.4%

INSURANCE SERVICES OFFICE, INC.

NORTH 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		Physical Damage		Specified Causes
Code	\$100,000 CSL	PIP	Comprehensive (a)	Collision (b)	of Loss (c)
101	137	13	111	164	64
102	84	12	165	183	95
104	160	14	222	184	128
105	108	20	136	149	78
106	129	14	148	185	85

(a) Comprehensive base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost.

(b) Collision base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost.

(c) The loss costs for Specified Causes of Loss have been calculated by a relativity of 0.576 to the Trucks, Tractors, and Trailers Comprehensive base loss costs.

INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR PRIVATE PASSENGER TYPES POLICY COVERAGES

Territory Code	\$100,000 CSL Liability (a)	PIP
101		-7.4%
102		-11.1%
104		-13.3%
105		-9.5%
106		-9.1%

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

INSURANCE SERVICES OFFICE, INC.

NORTH 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	
	Comprehensive	Collision
101	14.7%	3.4%
102	11.3%	1.8%
104	7.9%	1.9%
105	15.7%	11.7%
106	15.8%	4.3%

INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
COMMERCIAL AUTOMOBILE INSURANCE

REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES  
REVISED BASE LOSS COSTS BY TERRITORY

FOR PRIVATE PASSENGER TYPES POLICY COVERAGES

Territory	Liability		Physical Damage		Specified Causes
Code	\$100,000 CSL	PIP	Comprehensive (a)	Collision (b)	of Loss (c)
101	215	25	125	211	72
102	103	24	177	226	102
104	171	26	206	219	119
105	110	19	140	182	81
106	119	20	132	243	76

(a) Comprehensive base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost.

(b) Collision base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost.

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

INSURANCE SERVICES OFFICE, INC.

NORTH 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	
Code	Liability	PIP (a)
101	-8.0%	
102	-8.0%	
104	-3.6%	
105	-8.0%	
106	-4.4%	

(a) For Trucks, Tractors and Trailers PIP, No Change (N.C.) was selected because the indicated statewide change is too small to change the loss cost for any individual territory.

INSURANCE SERVICES OFFICE, INC.

NORTH 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	13.0%	-3.7%	14.0%
102	12.8%	-7.2%	12.8%
104	6.6%	-4.9%	7.4%
105	7.8%	-3.6%	8.1%
106	10.2%	-7.5%	10.1%

INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
COMMERCIAL AUTOMOBILE INSURANCE

REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES  
REVISED BASE LOSS COSTS BY TERRITORY

FOR VAN POOLS POLICY COVERAGES

Territory	Liability		Physical Damage		Specified Causes
Code	\$100,000 CSL (a)	PIP (b)	Comprehensive (c)	Collision (d)	of Loss (e)
101	206	9	113	208	65
102	126	9	168	232	97
104	240	10	226	234	131
105	162	14	139	189	80
106	194	10	151	235	87

- (a) The loss costs for Van Pools have been calculated by a relativity of 1.50 to the Trucks, Tractors, and Trailers CSL Liability loss costs.
- (b) The loss costs for PIP have been calculated by a relativity of 0.72 to the Trucks, Tractors, and Trailers PIP loss costs.
- (c) Comprehensive base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost and has been calculated by a relativity of 1.02 to the Trucks, Tractors, and Trailers loss cost.
- (d) Collision base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost, and has been calculated by a relativity of 1.27 to the Trucks, Tractors, and Trailers loss cost.
- (e) The loss costs for Specified Causes of Loss have been calculated by a relativity of 1.02 to the Trucks, Tractors, and Trailers Comprehensive base loss costs.



INSURANCE SERVICES OFFICE, INC.

NORTH 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	
Code	Liability	PIP (a)
101	-8.1%	
102	-7.6%	
104	-3.6%	
105	-7.6%	
106	-4.4%	

(a) For Trucks, Tractors and Trailers PIP, No Change (N.C.) was selected because the indicated statewide change is too small to change the loss cost for any individual territory.

INSURANCE SERVICES OFFICE, INC.

NORTH 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	13.0%	-3.7%	14.0%
102	12.8%	-7.2%	12.8%
104	6.6%	-4.9%	7.4%
105	7.8%	-3.6%	8.1%
106	10.2%	-7.5%	10.1%

INSURANCE SERVICES OFFICE, INC.

NORTH 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		Physical Damage		Specified Causes
Code	\$100,000 CSL (a)	PIP (b)	Comprehensive (c)	Collision (d)	of Loss (e)
101	849	70	113	208	65
102	521	65	168	232	97
104	992	76	226	234	131
105	670	108	139	189	80
106	800	76	151	235	87

- (a) The loss costs for Taxis and Limousines have been calculated by a relativity of 6.20 to the Trucks, Tractors, and Trailers CSL Liability loss costs.
- (b) The loss costs for PIP have been calculated by a relativity of 5.41 to the Trucks, Tractors, and Trailers PIP loss costs.
- (c) Comprehensive base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost and has been calculated by a relativity of 1.02 to the Trucks, Tractors, and Trailers loss cost.
- (d) Collision base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost, and has been calculated by a relativity of 1.27 to the Trucks, Tractors, and Trailers loss cost.
- (e) The loss costs for Specified Causes of Loss have been calculated by a relativity of 1.02 to the Trucks, Tractors, and Trailers Comprehensive base loss costs.

INSURANCE SERVICES OFFICE, INC.

NORTH 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	
Code	Liability	PIP (a)
101	-8.5%	
102	-8.0%	
104	-3.3%	
105	-7.8%	
106	-4.1%	

(a) For Trucks, Tractors and Trailers PIP, No Change (N.C.) was selected because the indicated statewide change is too small to change the loss cost for any individual territory.

INSURANCE SERVICES OFFICE, INC.

NORTH 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	13.0%	-3.6%	15.4%
102	13.7%	-7.0%	13.6%
104	6.2%	-4.8%	7.1%
105	8.0%	-3.0%	7.8%
106	10.6%	-7.7%	11.1%

INSURANCE SERVICES OFFICE, INC.

NORTH 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 Code	Liability	Physical Damage			Specified Causes
	\$100,000 CSL (a)	PIP (b)	Comprehensive (c)	Collision (d)	of Loss (e)
101	75	9	78	107	45
102	46	8	116	119	67
104	88	9	155	120	90
105	59	13	95	97	55
106	71	9	104	120	60

- (a) The loss costs for School and Church Buses have been calculated by a relativity of 0.55 to the Trucks, Tractors, and Trailers CSL Liability loss costs.
- (b) The loss costs for PIP have been calculated by a relativity of 0.66 to the Trucks, Tractors, and Trailers PIP loss costs.
- (c) Comprehensive base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost and has been calculated by a relativity of 0.70 to the Trucks, Tractors, and Trailers loss cost.
- (d) Collision base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost, and has been calculated by a relativity of 0.65 to the Trucks, Tractors, and Trailers loss cost.
- (e) The loss costs for Specified Causes of Loss have been calculated by a relativity of 0.70 to the Trucks, Tractors, and Trailers Comprehensive base loss costs.

INSURANCE SERVICES OFFICE, INC.

NORTH 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	
Code	Liability	PIP (a)
101	-8.0%	
102	-7.8%	
104	-3.6%	
105	-7.9%	
106	-4.5%	

(a) For Trucks, Tractors and Trailers PIP, No Change (N.C.) was selected because the indicated statewide change is too small to change the loss cost for any individual territory.

INSURANCE SERVICES OFFICE, INC.

NORTH 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 of Loss
	Comprehensive	Collision	
101	13.0%	-3.6%	15.4%
102	13.7%	-7.0%	13.6%
104	6.2%	-4.8%	7.1%
105	8.0%	-3.0%	7.8%
106	10.6%	-7.7%	11.1%



INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
COMMERCIAL AUTOMOBILE INSURANCE

REVISED PROSPECTIVE LOSS COSTS AND PERCENTAGE CHANGES  
REVISED BASE LOSS COSTS BY TERRITORY

FOR ALL OTHER BUSES POLICY COVERAGES

Territory Code	Liability	Physical Damage			Specified Causes
	\$100,000 CSL (a)	PIP (b)	Comprehensive (c)	Collision (d)	of Loss (e)
101	521	82	78	107	45
102	319	76	116	119	67
104	608	88	155	120	90
105	410	126	95	97	55
106	490	88	104	120	60

- (a) The loss costs for All Other Buses have been calculated by a relativity of 3.80 to the Trucks, Tractors, and Trailers CSL Liability loss costs.
- (b) The loss costs for PIP have been calculated by a relativity of 6.30 to the Trucks, Tractors, and Trailers PIP loss costs.
- (c) Comprehensive base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost and has been calculated by a relativity of 0.70 to the Trucks, Tractors, and Trailers loss cost.
- (d) Collision base loss cost is the \$15,001-20,000 OCN, age 1, \$500 deductible loss cost, and has been calculated by a relativity of 0.65 to the Trucks, Tractors, and Trailers loss cost.
- (e) The loss costs for Specified Causes of Loss have been calculated by a relativity of 0.70 to the Trucks, Tractors, and Trailers Comprehensive base loss costs.

INSURANCE SERVICES OFFICE, INC.

NORTH 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 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
12/31/14	\$6,264,380	\$6,721,432	1.073	10%	619
12/31/15	\$6,201,124	\$5,991,697	0.966	15%	552
12/31/16	\$5,985,310	\$4,201,527	0.702	20%	499
12/31/17	\$6,027,909	\$4,425,837	0.734	25%	441
12/31/18	\$5,833,049	\$4,207,489	0.721	30%	460
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				0.792
(7)	EXPECTED EXPERIENCE RATIO (D).				1.045
(8)	CREDIBILITY (E).				0.45
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000 - (8)) ).				0.931
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).				-6.9%
(11)	FILED CHANGE.				-6.9%
(A)	TRUCK, TRACTOR, AND TRAILER EXPERIENCE IS FOR VEHICLES WRITTEN IN ACCORDANCE WITH RULE 23 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 07/01/20 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 1.00 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).				

## INSURANCE SERVICES OFFICE, INC.

NORTH 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 ALLOCATED LOSS ADJUSTMENT EXPENSES	12/31/14 12/31/15 12/31/16 12/31/17 12/31/18	\$1,060,942 \$1,397,373 \$941,117 \$1,313,277 \$996,551	\$3,510,504 \$2,794,200 \$2,069,764 \$1,858,419 \$2,022,899	
(2) DEVELOPED LOSSES AND ALL LOSS ADJUSTMENT EXPENSES (A)	12/31/14 12/31/15 12/31/16 12/31/17 12/31/18	\$1,150,777 \$1,538,228 \$1,096,684 \$1,624,950 \$1,355,185	\$3,861,554 \$3,076,694 \$2,285,847 \$2,070,836 \$2,331,998	
(3) SELECTED ANNUAL LOSS TREND (SEE TREND EXHIBIT IN SECTION C)		5.5%	3.9%	4.5%
(4) TRENDED LOSSES AND ALL LOSS ADJUSTMENT EXPENSES (B)	12/31/14 12/31/15 12/31/16 12/31/17 12/31/18	\$1,674,381 \$2,121,216 \$1,433,366 \$2,013,313 \$1,590,987	\$5,047,051 \$3,870,481 \$2,768,161 \$2,412,524 \$2,616,502	\$6,721,432 \$5,991,697 \$4,201,527 \$4,425,837 \$4,207,489
(A) INCURRED LOSSES AND ALLOCATED LOSS ADJUSTMENT EXPENSES ARE ADJUSTED BY THE FOLLOWING FACTORS:				
1 - UNALLOCATED LOSS ADJUSTMENT FACTORS:		B.I. 1.075	P.D. 1.100	
2 - LOSS DEVELOPMENT FACTORS:				
	YEAR ENDING	B.I.	P.D.	
	12/31/14	1.009	1.000	
	12/31/15	1.024	1.001	
	12/31/16	1.084	1.004	
	12/31/17	1.151	1.013	
	12/31/18	1.265	1.048	
(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 07/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.				

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
12/31/14	7/1/14	7.000
12/31/15	7/1/15	6.000
12/31/16	7/1/16	5.000
12/31/17	7/1/17	4.000
12/31/18	7/1/18	3.000

INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
 AUTOMOBILE LIABILITY INSURANCE - TRUCKS, TRACTORS, AND TRAILERS (A)  
 DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGES  
 PERSONAL INJURY PROTECTION

	(1)	(2)	(3)	(4)	(5)
ACCIDENT YEAR ENDING	AGGREGATE LOSS COST AT CURRENT LEVEL (B)	INCURRED LOSSES (C)	EXPERIENCE RATIO (2) / (1)	ACCIDENT YEAR WEIGHTS	NUMBER OF INCURRED CLAIMS
12/31/14	\$406,992	\$370,728	0.911	10%	36
12/31/15	\$415,517	\$442,845	1.066	15%	23
12/31/16	\$402,844	\$364,317	0.904	20%	25
12/31/17	\$407,632	\$248,318	0.609	25%	32
12/31/18	\$401,670	\$234,612	0.584	30%	22
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				0.759
(7)	EXPECTED EXPERIENCE RATIO (D).				1.029
(8)	CREDIBILITY (E).				0.20
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000 - (8)) ).				0.975
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).				-2.5%
(11)	FILED CHANGE.				N.C.
(A)	TRUCK, TRACTOR, AND TRAILER EXPERIENCE IS FOR VEHICLES WRITTEN IN ACCORDANCE WITH RULE 23 OF THE COMMERCIAL LINES MANUAL, DIVISION 1, AUTOMOBILE, ELIGIBLE FOR FIRST PARTY COVERAGE.				
(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 PERSONAL INJURY PROTECTION. SEE FOLLOWING PAGE.				
(D)	EXPECTED EXPERIENCE RATIO IS EQUAL TO THE 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 07/01/20 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 1.00 YEAR(S).				
(E)	CREDIBILITY IS BASED ON A 5 YEAR TOTAL OF CLAIMS FOR PIP SHOWN IN COLUMN (5). THE STANDARD FOR FULL CREDIBILITY IS 3,000 CLAIMS (SEE CREDIBILITY TABLES IN SECTION C).				

INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
TRUCKS, TRACTORS, AND TRAILERS  
AUTOMOBILE LIABILITY INSURANCE  
DETERMINATION OF PERSONAL INJURY PROTECTION LOSSES

	ACC. YEAR ENDING	PIP
(1) INCURRED LOSSES AND	12/31/14	\$282,212
ALLOCATED LOSS	12/31/15	\$344,980
ADJUSTMENT EXPENSES	12/31/16	\$291,922
	12/31/17	\$206,267
	12/31/18	\$199,624
 (2) DEVELOPED LOSSES AND	12/31/14	\$303,378
ALL LOSS ADJUSTMENT	12/31/15	\$373,079
EXPENSES (A)	12/31/16	\$315,699
	12/31/17	\$221,515
	12/31/18	\$215,240
 (3) SELECTED ANNUAL LOSS		
TREND (SEE TREND		2.9%
EXHIBIT IN SECTION C)		
 (4) TRENDED LOSSES AND	12/31/14	\$370,728
ALL LOSS ADJUSTMENT	12/31/15	\$442,845
EXPENSES (B)	12/31/16	\$364,317
	12/31/17	\$248,318
	12/31/18	\$234,612

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

- 1 - UNALLOCATED LOSS ADJUSTMENT FACTORS: 1.075  
2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	PIP
12/31/14	1.000
12/31/15	1.006
12/31/16	1.006
12/31/17	0.999
12/31/18	1.003

(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 07/01/20  
WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
12/31/14	7/1/14	7.000
12/31/15	7/1/15	6.000
12/31/16	7/1/16	5.000
12/31/17	7/1/17	4.000
12/31/18	7/1/18	3.000

INSURANCE SERVICES OFFICE, INC.

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

	(1)	(2)	(3)	(4)	(5)
COVERAGES	AGGREGATE LOSS COST AT CURRENT LEVEL (B)	INCURRED LOSSES (C)	EXPERIENCE RATIO (2) / (1)	ACCIDENT YEAR WEIGHTS	NUMBER OF PAID CLAIMS
O.T.C.	12/31/14	\$3,999,652	\$3,909,243	0.977	10% 657
	12/31/15	\$4,024,516	\$4,236,178	1.053	15% 729
	12/31/16	\$3,691,034	\$4,516,893	1.224	20% 749
	12/31/17	\$3,558,136	\$4,139,032	1.163	25% 738
	12/31/18	\$3,576,182	\$4,474,941	1.251	30% 729
COLL.	12/31/14	\$7,233,347	\$8,614,846	1.191	10% 594
	12/31/15	\$7,449,967	\$6,916,510	0.928	15% 535
	12/31/16	\$6,926,235	\$5,538,266	0.800	20% 500
	12/31/17	\$5,269,100	\$4,376,381	0.831	25% 422
	12/31/18	\$5,069,729	\$4,528,849	0.893	30% 378
				O.T.C.	COLLISION
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).			1.167	0.894
(7)	EXPECTED EXPERIENCE RATIO (D).			1.060	1.030
(8)	CREDIBILITY (E).			0.55	0.70
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000 - (8)) ).			1.119	0.935
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).			11.9%	-6.5%
(11)	FILED CHANGE.			11.9%	-6.5%
(A)	TRUCK, TRACTOR AND TRAILER EXPERIENCE IS FOR VEHICLES WRITTEN IN ACCORDANCE WITH RULE 23 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 OCN LEVEL BY THE APPLICATION OF OCN 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 OCN 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 07/01/20 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 1.00 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).				

## INSURANCE SERVICES OFFICE, INC.

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

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) PAID LOSSES	12/31/14	\$2,154,114	\$5,601,585
	12/31/15	\$2,497,555	\$4,701,080
	12/31/16	\$2,846,227	\$3,937,421
	12/31/17	\$2,788,367	\$3,269,241
	12/31/18	\$3,153,907	\$3,632,430
(2) DEVELOPED LOSSES AND	12/31/14	\$2,434,149	\$6,329,791
ALL LOSS ADJUSTMENT	12/31/15	\$2,822,237	\$5,312,220
EXPENSES (A)	12/31/16	\$3,219,453	\$4,444,836
	12/31/17	\$3,157,156	\$3,668,383
	12/31/18	\$3,653,013	\$3,969,193
(3) SELECTED ANNUAL LOSS TREND (SEE TREND EXHIBIT IN SECTION C)		7.0%	4.5%
(4) TRENDED LOSSES AND	12/31/14	\$3,909,243	\$8,614,846
ALL LOSS ADJUSTMENT	12/31/15	\$4,236,178	\$6,916,510
EXPENSES (B)	12/31/16	\$4,516,893	\$5,538,266
	12/31/17	\$4,139,032	\$4,376,381
	12/31/18	\$4,474,941	\$4,528,849

## (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.
12/31/14	1.000	1.000
12/31/15	1.000	1.000
12/31/16	1.001	0.999
12/31/17	1.002	0.993
12/31/18	1.025	0.967

(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 07/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/14	7/1/14	7.000	7.000
12/31/15	7/1/15	6.000	6.000
12/31/16	7/1/16	5.000	5.000
12/31/17	7/1/17	4.000	4.000
12/31/18	7/1/18	3.000	3.000

INSURANCE SERVICES OFFICE, INC.

NORTH 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	12/31/14	\$3,755,542	\$6,516,529
AT CURRENT LEVEL	12/31/15	\$3,814,707	\$6,816,072
	12/31/16	\$3,528,713	\$6,431,045
	12/31/17	\$3,434,494	\$4,966,164
	12/31/18	\$3,482,164	\$4,846,777
(2) SELECTED ANNUAL OCN			
TREND (SEE TREND		0.9%	1.5%
EXHIBIT IN SECTION C)			
(3) TRENDED AGGREGATE	12/31/14	\$3,999,652	\$7,233,347
LOSS COSTS AT	12/31/15	\$4,024,516	\$7,449,967
CURRENT LEVEL (A)	12/31/16	\$3,691,034	\$6,926,235
	12/31/17	\$3,558,136	\$5,269,100
	12/31/18	\$3,576,182	\$5,069,729

(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  
07/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC  
AND COLLISION.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/14	1/1/14	7.000	7.000
12/31/15	1/1/15	6.000	6.000
12/31/16	1/1/16	5.000	5.000
12/31/17	1/1/17	4.000	4.000
12/31/18	1/1/18	3.000	3.000



INSURANCE SERVICES OFFICE, INC.

NORTH 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 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
12/31/14	\$527,525	\$713,619	1.353	10%	76
12/31/15	\$543,273	\$451,803	0.832	15%	73
12/31/16	\$545,510	\$459,340	0.842	20%	77
12/31/17	\$535,982	\$389,559	0.727	25%	62
12/31/18	\$519,352	\$397,514	0.765	30%	55
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				0.840
(7)	EXPECTED EXPERIENCE RATIO (D).				1.048
(8)	CREDIBILITY (E).				0.15
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000- (8)) ).				1.017
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).				1.7%
(11)	FILED CHANGE.				N.C.
(A)	PRIVATE PASSENGER TYPE EXPERIENCE IS FOR VEHICLES WRITTEN IN ACCORDANCE WITH RULE 31 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 07/01/20 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 1.00 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).				

## INSURANCE SERVICES OFFICE, INC.

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

	ACC. YEAR ENDING	BODILY INJURY	PROPERTY DAMAGE	COMBINED
(1) INCURRED LOSSES AND	12/31/14	\$284,300	\$185,948	
ALLOCATED LOSS	12/31/15	\$83,697	\$234,446	
ADJUSTMENT EXPENSES	12/31/16	\$92,511	\$238,294	
	12/31/17	\$61,099	\$223,200	
	12/31/18	\$115,747	\$124,200	
(2) DEVELOPED LOSSES AND	12/31/14	\$306,539	\$204,747	
ALL LOSS ADJUSTMENT	12/31/15	\$92,134	\$258,148	
EXPENSES (A)	12/31/16	\$107,604	\$263,172	
	12/31/17	\$80,788	\$248,466	
	12/31/18	\$203,067	\$141,812	
(3) SELECTED ANNUAL LOSS				
TREND (SEE TREND		5.5%	3.9%	4.8%
EXHIBIT IN SECTION C)				
(4) TRENDED LOSSES AND	12/31/14	\$446,014	\$267,604	\$713,619
ALL LOSS ADJUSTMENT	12/31/15	\$127,053	\$324,750	\$451,803
EXPENSES (B)	12/31/16	\$140,638	\$318,701	\$459,340
	12/31/17	\$100,096	\$289,463	\$389,559
	12/31/18	\$238,401	\$159,113	\$397,514
(A) INCURRED LOSSES AND ALLOCATED LOSS ADJUSTMENT EXPENSES ARE ADJUSTED				
BY THE FOLLOWING FACTORS:				
1 - UNALLOCATED LOSS ADJUSTMENT FACTORS:		B.I. 1.075	P.D. 1.100	
2 - LOSS DEVELOPMENT FACTORS:				
	YEAR ENDING	B.I.	P.D.	
	12/31/14	1.003	1.001	
	12/31/15	1.024	1.001	
	12/31/16	1.082	1.004	
	12/31/17	1.230	1.012	
	12/31/18	1.632	1.038	

(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 07/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
12/31/14	7/1/14	7.000
12/31/15	7/1/15	6.000
12/31/16	7/1/16	5.000
12/31/17	7/1/17	4.000
12/31/18	7/1/18	3.000

INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
 AUTOMOBILE LIABILITY INSURANCE - PRIVATE PASSENGER TYPES (A)  
 DETERMINATION OF STATEWIDE ADVISORY LOSS COST LEVEL CHANGES  
 PERSONAL INJURY PROTECTION

	(1)	(2)	(3)	(4)	(5)
ACCIDENT YEAR ENDING	AGGREGATE LOSS COST AT CURRENT LEVEL (B)	INCURRED LOSSES (C)	EXPERIENCE RATIO (2) / (1)	ACCIDENT YEAR WEIGHTS	NUMBER OF INCURRED CLAIMS
12/31/14	\$69,829	\$27,958	0.400	10%	10
12/31/15	\$72,160	\$17,893	0.248	15%	8
12/31/16	\$72,997	\$49,376	0.676	20%	8
12/31/17	\$71,996	\$42,307	0.588	25%	12
12/31/18	\$70,819	\$64,128	0.906	30%	9
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				0.631
(7)	EXPECTED EXPERIENCE RATIO (D).				1.029
(8)	CREDIBILITY (E).				0.10
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000- (8)) ).				0.989
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).				-1.1%
(11)	FILED CHANGE.				-10.0%
(A)	PRIVATE PASSENGER TYPE EXPERIENCE IS FOR VEHICLES WRITTEN IN ACCORDANCE WITH RULE 31 OF THE COMMERCIAL LINES MANUAL, DIVISION 1, AUTOMOBILE, ELIGIBLE FOR FIRST PARTY COVERAGE.				
(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 PERSONAL INJURY PROTECTION. SEE FOLLOWING PAGE.				
(D)	EXPECTED EXPERIENCE RATIO IS EQUAL TO THE 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 07/01/20 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 1.00 YEAR(S).				
(E)	CREDIBILITY IS BASED ON A 5 YEAR TOTAL OF CLAIMS FOR PIP SHOWN IN COLUMN (5). THE STANDARD FOR FULL CREDIBILITY IS 3,000 CLAIMS (SEE CREDIBILITY TABLES IN SECTION C).				

INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
PRIVATE PASSENGER TYPES  
AUTOMOBILE LIABILITY INSURANCE  
DETERMINATION OF PERSONAL INJURY PROTECTION LOSSES

	ACC. YEAR ENDING	PIP
(1) INCURRED LOSSES AND	12/31/14	\$21,283
ALLOCATED LOSS	12/31/15	\$14,022
ADJUSTMENT EXPENSES	12/31/16	\$39,802
	12/31/17	\$34,419
	12/31/18	\$59,230
(2) DEVELOPED LOSSES AND	12/31/14	\$22,879
ALL LOSS ADJUSTMENT	12/31/15	\$15,074
EXPENSES (A)	12/31/16	\$42,787
	12/31/17	\$37,740
	12/31/18	\$58,833
(3) SELECTED ANNUAL LOSS		
TREND (SEE TREND		2.9%
EXHIBIT IN SECTION C)		
(4) TRENDED LOSSES AND	12/31/14	\$27,958
ALL LOSS ADJUSTMENT	12/31/15	\$17,893
EXPENSES (B)	12/31/16	\$49,376
	12/31/17	\$42,307
	12/31/18	\$64,128

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

- 1 - UNALLOCATED LOSS ADJUSTMENT FACTORS: 1.075  
2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	PIP
12/31/14	1.000
12/31/15	1.000
12/31/16	1.000
12/31/17	1.020
12/31/18	0.924

(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 07/01/20  
WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
12/31/14	7/1/14	7.000
12/31/15	7/1/15	6.000
12/31/16	7/1/16	5.000
12/31/17	7/1/17	4.000
12/31/18	7/1/18	3.000

INSURANCE SERVICES OFFICE, INC.

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

	(1)	(2)	(3)	(4)	(5)
COVERAGES	AGGREGATE LOSS COST AT CURRENT LEVEL (B)	INCURRED LOSSES (C)	EXPERIENCE RATIO (2) / (1)	ACCIDENT YEAR WEIGHTS	NUMBER OF PAID CLAIMS
O.T.C.					
12/31/14	\$482,994	\$447,344	0.926	10%	156
12/31/15	\$485,113	\$412,799	0.851	15%	174
12/31/16	\$486,230	\$679,328	1.397	20%	198
12/31/17	\$378,975	\$504,136	1.330	25%	141
12/31/18	\$349,760	\$508,721	1.454	30%	146
COLL.					
12/31/14	\$514,835	\$476,568	0.926	10%	90
12/31/15	\$516,648	\$515,581	0.998	15%	89
12/31/16	\$509,518	\$430,910	0.846	20%	93
12/31/17	\$391,124	\$370,851	0.948	25%	66
12/31/18	\$354,256	\$440,940	1.245	30%	72
				O.T.C.	COLLISION
(6) AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				1.269	1.023
(7) EXPECTED EXPERIENCE RATIO (D).				1.054	1.034
(8) CREDIBILITY (E).				0.30	0.30
(9) CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000 - (8)) ).				1.119	1.031
(10) INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).				11.9%	3.1%
(11) FILED CHANGE.				11.9%	3.1%
(A) PRIVATE PASSENGER TYPE EXPERIENCE IS FOR VEHICLES WRITTEN IN ACCORDANCE WITH RULE 31 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 OCN LEVEL BY THE APPLICATION OF OCN 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 OCN 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 07/01/20 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 1.00 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).					

INSURANCE SERVICES OFFICE, INC.

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

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) PAID LOSSES	12/31/14	\$254,749	\$320,473
	12/31/15	\$250,383	\$360,685
	12/31/16	\$438,814	\$313,655
	12/31/17	\$346,573	\$282,479
	12/31/18	\$368,624	\$366,655
(2) DEVELOPED LOSSES AND	12/31/14	\$287,866	\$362,134
ALL LOSS ADJUSTMENT	12/31/15	\$282,933	\$407,574
EXPENSES (A)	12/31/16	\$495,860	\$354,076
	12/31/17	\$392,019	\$316,967
	12/31/18	\$421,127	\$391,947
(3) SELECTED ANNUAL LOSS TREND (SEE TREND EXHIBIT IN SECTION C)		6.5%	4.0%
(4) TRENDED LOSSES AND	12/31/14	\$447,344	\$476,568
ALL LOSS ADJUSTMENT	12/31/15	\$412,799	\$515,581
EXPENSES (B)	12/31/16	\$679,328	\$430,910
	12/31/17	\$504,136	\$370,851
	12/31/18	\$508,721	\$440,940

## (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.
12/31/14	1.000	1.000
12/31/15	1.000	1.000
12/31/16	1.000	0.999
12/31/17	1.001	0.993
12/31/18	1.011	0.946

(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 07/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/14	7/1/14	7.000	7.000
12/31/15	7/1/15	6.000	6.000
12/31/16	7/1/16	5.000	5.000
12/31/17	7/1/17	4.000	4.000
12/31/18	7/1/18	3.000	3.000

INSURANCE SERVICES OFFICE, INC.

NORTH 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	12/31/14	\$450,554	\$493,610
AT CURRENT LEVEL	12/31/15	\$456,792	\$498,214
	12/31/16	\$462,636	\$494,678
	12/31/17	\$364,049	\$381,957
	12/31/18	\$339,573	\$347,992
(2) SELECTED ANNUAL OCN			
TREND (SEE TREND		1.0%	0.6%
EXHIBIT IN SECTION C)			
(3) TRENDED AGGREGATE	12/31/14	\$482,994	\$514,835
LOSS COSTS AT	12/31/15	\$485,113	\$516,648
CURRENT LEVEL (A)	12/31/16	\$486,230	\$509,518
	12/31/17	\$378,975	\$391,124
	12/31/18	\$349,760	\$354,256

(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  
07/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC  
AND COLLISION.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
12/31/14	1/1/14	7.000	7.000
12/31/15	1/1/15	6.000	6.000
12/31/16	1/1/16	5.000	5.000
12/31/17	1/1/17	4.000	4.000
12/31/18	1/1/18	3.000	3.000

INSURANCE SERVICES OFFICE, INC.

NORTH 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)
T	EARNED CAR	\$100000	EXPER LOSS					BASE	BASE	BASE	
E	YRS YR	UND	COST 5 YRS				INDEX	CLASS	CLASS	CLASS	ADV
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	LOSS	LOSS	LOSS	LOSS
R	12/31/2018	COST	12/31/2018	RATIO	CRED	RATIO	STATE	COST	COST	COST	COST
								PRES	IND*	REV	CHG**
101	4118	142.60	107.39	0.753	0.15	0.829	0.989	149	137	137	-8.1%
102	42468	88.05	70.98	0.806	0.30	0.831	0.992	91	84	84	-7.7%
104	4877	169.61	171.56	1.011	0.15	0.867	1.035	166	160	160	-3.6%
105	2289	134.82	100.15	0.743	0.10	0.832	0.993	117	108	108	-7.7%
106	2853	129.98	136.17	1.048	0.10	0.863	1.030	135	129	129	-4.4%
SW	56605	103.05	86.76	0.842		0.838					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF -6.9 PERCENT.

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



INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
COMMERCIAL AUTOMOBILE INSURANCE  
PERSONAL INJURY PROTECTION

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	EARNED CAR YRS YR ENDED 12/31/2018	P.I.P. UND LOSS COST	EXPER LOSS COST 5 YRS END 12/31/2018	EXPER RATIO	CRED	FORM RATIO	INDEX (6) TO STATE	BASE CLASS LOSS COST PRES	BASE CLASS LOSS COST IND*
101	3987	6.77	6.40	0.945	0.05	0.825	1.007	13	13
102	45905	6.34	5.06	0.798	0.15	0.816	0.996	12	12
104	4844	7.86	8.62	1.097	0.05	0.833	1.017	14	14
105	2357	10.14	3.29	0.324	0.00	0.819	1.000	20	20
106	2992	7.20	7.08	0.983	0.05	0.827	1.010	14	14
SW	60085	6.68	5.47	0.819		0.819			

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF -2.5 PERCENT.

BECAUSE THE INDICATED STATEWIDE CHANGE IS TOO SMALL TO CHANGE THE LOSS COST FOR ANY INDIVIDUAL TERRITORY, WE WILL NOT BE FILING THESE INDICATED LOSS COSTS. THE LOSS COSTS IN COLUMN (8) REMAIN IN EFFECT.

INSURANCE SERVICES OFFICE, INC.

NORTH 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)
T	EARNED CAR	\$100000	EXPER LOSS					BASE	BASE
E	YRS YR	UND	COST 5 YRS				INDEX	CLASS	CLASS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	LOSS	LOSS
R	12/31/2018	COST	12/31/2018	RATIO	CRED	RATIO	STATE	COST	COST
								PRES	IND*
101	624	217.46	262.11	1.205	0.05	0.921	1.014	215	222
102	2445	103.16	99.63	0.966	0.10	0.912	1.004	103	105
104	445	173.60	72.30	0.416	0.05	0.882	0.971	171	169
105	250	109.99	53.00	0.482	0.05	0.885	0.975	110	109
106	226	118.08	80.02	0.678	0.00	0.906	0.998	119	121
SW	3990	130.16	117.96	0.906		0.908			

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 1.7 PERCENT.

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

INSURANCE SERVICES OFFICE, INC.

NORTH DAKOTA  
COMMERCIAL AUTOMOBILE INSURANCE  
PERSONAL INJURY PROTECTION

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
T E R R	EARNED CAR YRS YR ENDED 12/31/2018	P.I.P. UND LOSS COST	EXPER LOSS COST 5 YRS END 12/31/2018	EXPER RATIO	CRED	FORM RATIO	INDEX (6) TO STATE	BASE CLASS LOSS COST PRES	BASE CLASS LOSS COST IND*	BASE CLASS LOSS COST REV	ADV LOSS COST CHG**
101	574	17.38	12.87	0.741	0.05	0.565	1.016	27	27	25	-7.4%
102	2203	21.03	12.09	0.575	0.05	0.557	1.002	27	27	24	-11.1%
104	394	20.23	2.57	0.127	0.05	0.535	0.962	30	29	26	-13.3%
105	247	14.75	1.07	0.073	0.00	0.556	1.000	21	21	19	-9.5%
106	202	14.31	20.07	1.403	0.00	0.556	1.000	22	22	20	-9.1%
SW	3620	19.56	10.87	0.556		0.556					

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

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

INSURANCE SERVICES OFFICE, INC.

NORTH 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)
T E R R	EARNED CAR YRS YR ENDED 12/31/2018	UND LOSS COST	EXPER LOSS COST 5 YRS END 12/31/2018	EXPER RATIO	CRED	FORM RATIO	INDEX (6) TO STATE	BASE CLASS LOSS COST PRES	BASE CLASS LOSS COST IND*	BASE CLASS LOSS COST REV	ADV LOSS COST CHG**
101	3159	66.94	89.81	1.342	0.15	1.196	1.012	98	111	111	13.3%
102	28394	92.17	112.59	1.222	0.45	1.193	1.009	146	165	165	13.0%
104	3330	140.03	125.26	0.895	0.15	1.129	0.955	208	222	222	6.7%
105	1439	73.36	64.14	0.874	0.10	1.140	0.964	126	136	136	7.9%
106	1966	89.36	98.47	1.102	0.10	1.163	0.984	134	148	148	10.4%
SW	38288	93.40	109.27	1.170		1.182					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 11.9 PERCENT.

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

INSURANCE SERVICES OFFICE, INC.

NORTH 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)
T E R R	EARNED CAR YRS YR ENDED 12/31/2018	UND LOSS COST	EXPER LOSS COST 5 YRS END 12/31/2018	EXPER RATIO	CRED	FORM RATIO	INDEX (6) TO STATE	BASE CLASS LOSS COST PRES	BASE CLASS LOSS COST IND*	BASE CLASS LOSS COST REV	ADV LOSS COST CHG**
101	2969	159.08	163.82	1.030	0.25	0.951	1.034	170	164	164	-3.5%
102	17998	197.44	178.45	0.904	0.55	0.913	0.992	197	183	183	-7.1%
104	2953	183.48	179.37	0.978	0.20	0.935	1.016	194	184	184	-5.2%
105	1252	129.19	144.54	1.119	0.15	0.953	1.036	154	149	149	-3.2%
106	1588	214.38	175.02	0.816	0.15	0.908	0.987	200	185	185	-7.5%
SW	26760	189.46	175.14	0.924		0.920					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF -6.5 PERCENT.

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

INSURANCE SERVICES OFFICE, INC.

NORTH 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)	(10)	(11)
T E R R	EARNED CAR YRS YR ENDED 12/31/2018	UND LOSS COST	EXPER LOSS COST 5 YRS END 12/31/2018	EXPER RATIO	CRED	FORM RATIO	INDEX (6) TO STATE	BASE CLASS LOSS COST PRES	BASE CLASS LOSS COST IND*	BASE CLASS LOSS COST REV	ADV LOSS COST CHG**
101	509	128.23	184.25	1.437	0.10	1.220	1.024	109	125	125	14.7%
102	999	165.55	187.09	1.130	0.20	1.183	0.993	159	177	177	11.3%
104	309	217.32	162.76	0.749	0.10	1.151	0.966	191	206	206	7.9%
105	214	139.40	216.19	1.551	0.10	1.232	1.034	121	140	140	15.7%
106	175	126.43	234.93	1.858	0.05	1.229	1.032	114	132	132	15.8%
SW	2206	158.55	189.64	1.196		1.191					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 11.9 PERCENT.

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

INSURANCE SERVICES OFFICE, INC.

NORTH 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)	(10)	(11)
T	EARNED CAR		EXPER LOSS					BASE	BASE	BASE	
E	YRS YR	UND	COST 5 YRS				INDEX	CLASS	CLASS	CLASS	ADV
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	LOSS	LOSS	LOSS	LOSS
R	12/31/2018	COST	12/31/2018	RATIO	CRED	RATIO	STATE	COST	COST	COST	COST
								PRES	IND*	REV	CHG**
101	494	180.24	177.54	0.985	0.15	0.999	1.002	204	211	211	3.4%
102	871	172.40	155.38	0.901	0.20	0.982	0.985	222	226	226	1.8%
104	294	181.71	149.34	0.822	0.10	0.984	0.987	215	219	219	1.9%
105	206	141.41	255.00	1.803	0.10	1.082	1.085	163	182	182	11.7%
106	167	194.65	211.86	1.088	0.10	1.011	1.014	233	243	243	4.3%
SW	2032	174.34	174.63	1.002		0.997					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 3.1 PERCENT.

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

## INSURANCE SERVICES OFFICE, INC.

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.	5 YR.
		<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>AVG</u>	<u>AVG</u>
(1)	ITEM Direct Losses Incurred	4,201,981	4,808,966	5,392,813	5,762,768	6,343,079		
(2)	Allocated Loss Adjustment Expenses Incurred	480,882	516,366	609,253	669,634	692,813		
(3)	Unallocated Loss Adjustment Expense Incurred	431,513	471,206	478,672	478,481	509,596		
(4)	Unallocated LAE as a Ratio to Losses + Allocated LAE (3)/[(1)+(2)]	9.2%	8.8%	8.0%	7.4%	7.2%	7.6%	8.1%
(5)	Selected Factor							7.5%

		<u>Property Damage</u> (000's)					3 YR.	5 YR.
		<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>AVG</u>	<u>AVG</u>
(1)	ITEM Direct Losses Incurred	965,963	1,036,103	1,144,361	1,240,811	1,278,538		
(2)	Allocated Loss Adjustment Expenses Incurred	70,743	69,240	85,269	72,162	83,354		
(3)	Unallocated Loss Adjustment Expense Incurred	113,312	129,347	129,840	127,728	134,901		
(4)	Unallocated LAE as a Ratio to Losses + Allocated LAE (3)/[(1)+(2)]	10.9%	11.7%	10.6%	9.7%	9.9%	10.1%	10.6%
(5)	Selected Factor							10.0%

All items are from Special Call Submission for available writers.



## INSURANCE SERVICES OFFICE, INC.

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>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>AVG</u>	<u>AVG</u>
(1)	ITEM Direct Losses Incurred	3,615,666	4,009,807	4,293,030	4,806,080	5,434,351		
(2)	Loss Adjustment Expenses Incurred	581,191	657,537	578,445	622,951	702,920		
(3)	Losses + LAE Incurred as Ratio to Losses Incurred [(1)+(2)]/(1)	1.161	1.164	1.135	1.130	1.129	1.131	1.144
(4)	Selected							1.130

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

INSURANCE SERVICES OFFICE, INC.

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

AVERAGE PAID CLAIM COST DATA

YEAR ENDED	NORTH DAKOTA				MULTISTATE*			
	BODILY INJURY		PROPERTY DAMAGE		BODILY INJURY		PROPERTY DAMAGE	
	(\$100000 LIMITS)		(\$100000 LIMITS)		(\$100000 LIMITS)		(\$100000 LIMITS)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT
3/31/2016	25267.21	23856.69	5461.64	5453.63	21452.49	21338.63	4097.81	4094.24
6/30/2016	23341.10	24743.01	5407.40	5404.31	21640.70	21626.08	4157.45	4137.34
9/30/2016	26150.20	25662.26	5194.10	5355.45	22032.66	21917.40	4185.35	4180.90
12/31/2016	28974.23	26615.66	5324.57	5307.02	22305.11	22212.64	4228.88	4224.91
3/31/2017	24084.15	27604.48	5107.02	5259.03	22511.43	22511.86	4273.58	4269.39
6/30/2017	26418.65	28630.04	5098.24	5211.47	22784.19	22815.11	4296.48	4314.33
9/30/2017	29345.48	29693.69	5456.93	5164.35	22751.25	23122.44	4347.40	4359.75
12/31/2017	31098.77	30796.87	5456.91	5117.65	23154.91	23433.92	4380.42	4405.65
3/31/2018	36187.30	31941.03	5015.00	5071.37	23561.65	23749.59	4423.60	4452.02
6/30/2018	37557.15	33127.69	5253.19	5025.51	24127.67	24069.51	4490.97	4498.89
9/30/2018	32178.07	34358.45	4865.86	4980.07	24648.04	24393.74	4558.73	4546.25
12/31/2018	33267.18	35634.92	4681.81	4935.04	24953.34	24722.34	4637.72	4594.11

		BODILY INJURY	PROPERTY DAMAGE
(9)	AVERAGE ANNUAL PERCENT CHANGE IN PAID CLAIM COST (12TH POINT / 8TH POINT)		
	(A) NORTH DAKOTA	15.7%	-3.6%
	(B) MULTISTATE	5.5%	4.3%
(10)	CREDIBILITY	0.00	0.05
(11)	WEIGHTED AVERAGE ANNUAL PERCENT CHANGE IN PAID CLAIM COSTS { (10) * (9A) } + { (1.0 - (10)) * (9B) }	5.5%	3.9%
(12)	SELECTED ANNUAL PERCENT CHANGE IN CLAIM FREQUENCY	0.0%	0.0%
(13)	AVERAGE ANNUAL PERCENT CHANGE IN LIABILITY LOSS RATIO (11) * (12)	5.5%	3.9%

\* EXCLUDES MASSACHUSETTS

INSURANCE SERVICES OFFICE, INC.

CLAIM COST TREND DATA FOR PIP  
TRUCKS, TRACTORS, & TRAILERS  
NORTH DAKOTA

QUARTER ENDING	MEDICAL INDEX*		HOSPITAL AND RELATED SERVICES*		INCOME LOSSES**	
	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT
9/30/2016	467.3	467.4	799.1	804.4	724.62	723.94
12/31/2016	469.3	469.7	805.5	811.7	732.42	729.41
3/31/2017	473.6	472.0	818.6	819.2	732.29	734.91
6/30/2017	473.8	474.3	829.6	826.7	739.21	740.46
9/30/2017	476.5	476.6	835.6	834.3	746.07	746.05
12/31/2017	477.4	479.0	843.0	841.9	752.57	751.68
3/31/2018	482.7	481.3	860.1	849.7	749.98	757.35
6/30/2018	485.0	483.7	866.1	857.5	765.17	763.07
9/30/2018	484.7	486.1	869.3	865.3	774.71	768.83
12/31/2018	486.5	488.4	872.1	873.3	777.88	774.63
3/31/2019	491.2	490.8	878.8	881.3	775.44	780.47
6/30/2019	494.6	493.3	877.1	889.4	786.90	786.36

	(A) MEDICAL	(B) HOSPITAL	(C) COMBINED+	(D) INCOME
(1) AVERAGE ANNUAL PERCENT CHANGE IN INDICES (12TH POINT/8TH POINT)	2.0%	3.7%	2.9%	3.1%
(2) AVERAGE ANNUAL PERCENT CHANGE IN CLAIM COST $0.98*(1C) + 0.02*(1D)$ . BASED ON RESPECTIVE WEIGHT OF MEDICAL AND INCOME FROM PRICING.				2.9%
(3) SELECTED ANNUAL PERCENT CHANGE IN CLAIM FREQUENCY				0.0%
(4) AVERAGE ANNUAL PERCENT CHANGE IN CLAIM RATIOS $(1.0 + (2)) * (1.0 + (3))$				2.9%

\* MEDICAL INDEX AND HOSPITAL AND RELATED SERVICES INDEX  
BASED ON CONSUMER PRICE INDEX.

\*\* INCOME LOST BASED ON BUREAU OF LABOR STATISTICS DATA.

+ WEIGHT MEDICAL AND HOSPITAL AVERAGE ANNUAL PERCENT CHANGE  
IN INDEX =  $\{(1A) * .5\} + \{(1B) * .5\}$ .

INSURANCE SERVICES OFFICE, INC.

CLAIM COST TREND DATA FOR PIP  
PRIVATE PASSENGER TYPES  
NORTH DAKOTA

QUARTER ENDING	MEDICAL INDEX*		HOSPITAL AND RELATED SERVICES*		INCOME LOSSES**	
	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT
9/30/2016	467.3	467.4	799.1	804.4	724.62	723.94
12/31/2016	469.3	469.7	805.5	811.7	732.42	729.41
3/31/2017	473.6	472.0	818.6	819.2	732.29	734.91
6/30/2017	473.8	474.3	829.6	826.7	739.21	740.46
9/30/2017	476.5	476.6	835.6	834.3	746.07	746.05
12/31/2017	477.4	479.0	843.0	841.9	752.57	751.68
3/31/2018	482.7	481.3	860.1	849.7	749.98	757.35
6/30/2018	485.0	483.7	866.1	857.5	765.17	763.07
9/30/2018	484.7	486.1	869.3	865.3	774.71	768.83
12/31/2018	486.5	488.4	872.1	873.3	777.88	774.63
3/31/2019	491.2	490.8	878.8	881.3	775.44	780.47
6/30/2019	494.6	493.3	877.1	889.4	786.90	786.36

	(A) MEDICAL	(B) HOSPITAL	(C) COMBINED+	(D) INCOME
(1) AVERAGE ANNUAL PERCENT CHANGE IN INDICES (12TH POINT/8TH POINT)	2.0%	3.7%	2.9%	3.1%
(2) AVERAGE ANNUAL PERCENT CHANGE IN CLAIM COST $0.81*(1C) + 0.19*(1D)$ . BASED ON RESPECTIVE WEIGHT OF MEDICAL AND INCOME FROM PRICING.				2.9%
(3) SELECTED ANNUAL PERCENT CHANGE IN CLAIM FREQUENCY				0.0%
(4) AVERAGE ANNUAL PERCENT CHANGE IN CLAIM RATIOS $(1.0 + (2)) * (1.0 + (3))$				2.9%

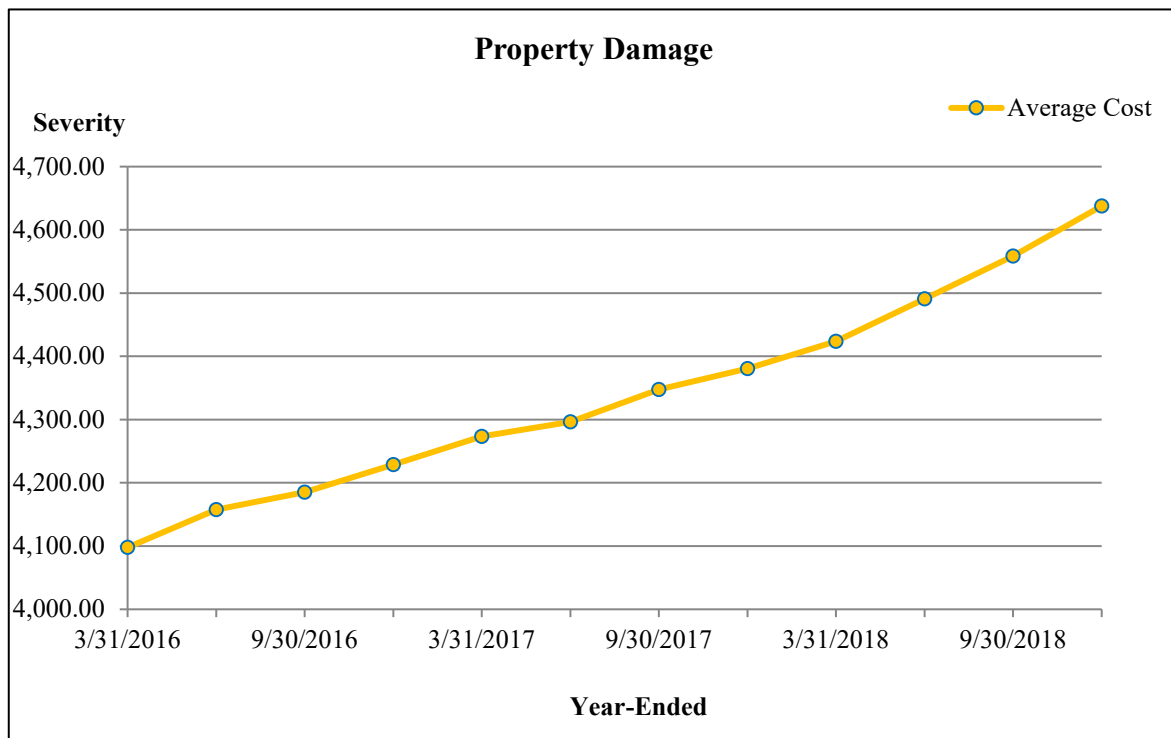
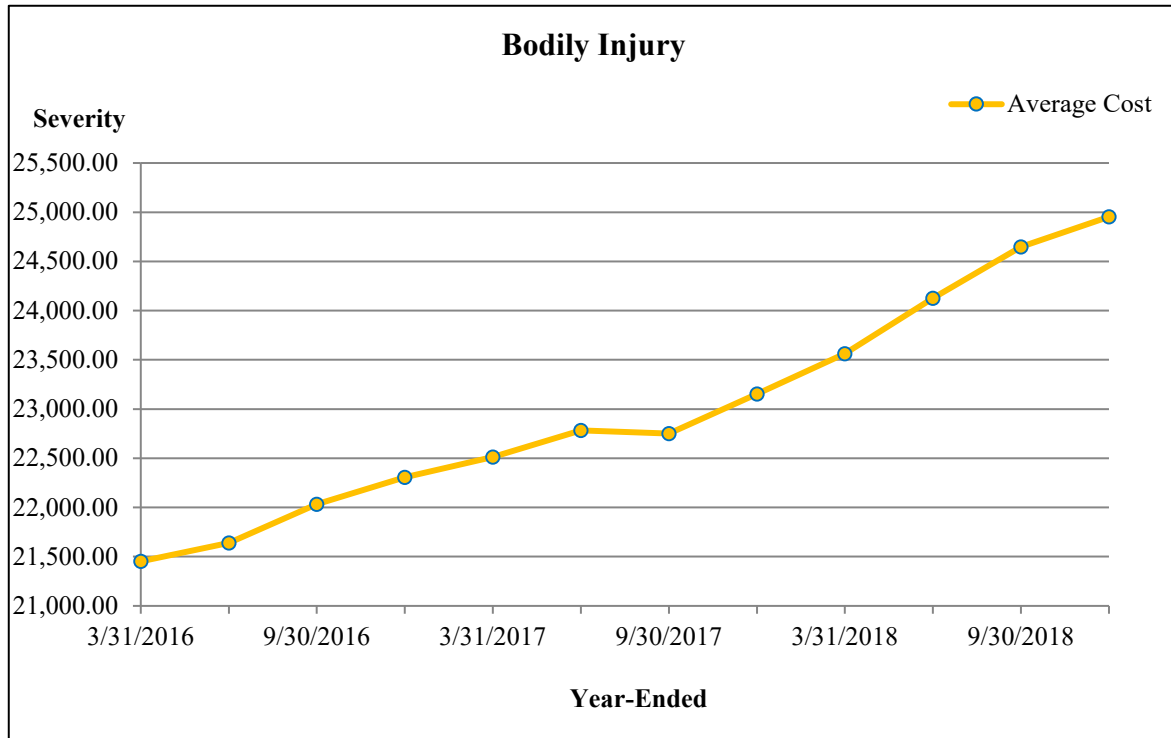
\* MEDICAL INDEX AND HOSPITAL AND RELATED SERVICES INDEX  
BASED ON CONSUMER PRICE INDEX.

\*\* INCOME LOST BASED ON BUREAU OF LABOR STATISTICS DATA.

+ WEIGHT MEDICAL AND HOSPITAL AVERAGE ANNUAL PERCENT CHANGE  
IN INDEX =  $\{(1A) * .5\} + \{(1B) * .5\}$ .

INSURANCE SERVICES OFFICE, INC.

Commercial Automobile Liability  
Average Paid Claim Cost Experience  
Multistate\*



\*Excludes Massachusetts

INSURANCE SERVICES OFFICE, INC.

COMMERCIAL AUTO LIABILITY  
INCURRED CLAIM FREQUENCY

MULTISTATE\*

TRUCKS, TRACTORS, AND TRAILERS

<u>YEAR</u> <u>ENDING</u>	<u>BODILY INJURY</u> <u>ACTUAL</u>	<u>BODILY INJURY</u> <u>ACTUAL CHANGE@</u>	<u>PROPERTY DAMAGE</u> <u>ACTUAL</u>	<u>PROPERTY DAMAGE</u> <u>ACTUAL CHANGE@</u>
12/31/2012	0.7355		2.6523	
3/31/2013	0.7330		2.6853	
6/30/2013	0.7440		2.7160	
9/30/2013	0.7560		2.7489	
12/31/2013	0.7561	2.8% &	2.7667	4.3% &
3/31/2014	0.7707		2.8565	
6/30/2014	0.7615		2.8560	
9/30/2014	0.7580	0.3%	2.8630	4.2%
12/31/2014	0.7634		2.8658	
3/31/2015	0.7542		2.8301	
6/30/2015	0.7626		2.8382	
9/30/2015	0.7717	1.8%	2.8619	0.0%
12/31/2015	0.7859		2.8770	
3/31/2016	0.8009		2.8604	
6/30/2016	0.8113		2.8688	
9/30/2016	0.8190	6.1%	2.8747	0.4%
12/31/2016	0.8230		2.8738	
3/31/2017	0.8259		2.8501	
6/30/2017	0.8321		2.8439	
9/30/2017	0.8268	1.0%	2.8082	-2.3%
12/31/2017	0.8239		2.7930	
3/31/2018	0.8187		2.8032	
6/30/2018	0.8095		2.8067	
9/30/2018	0.8054	-2.6%	2.7990	-0.3%

\* EXCLUDES MASSACHUSETTS

@ CHANGE BASED ON YEARS ENDING 9/30/XXXX

&amp; CHANGE BASED ON YEAR ENDING 12/31/2013 divided by 12/31/2012

INSURANCE SERVICES OFFICE, INC.

COMMERCIAL AUTO LIABILITY  
INCURRED CLAIM FREQUENCY

MULTISTATE\*

PRIVATE PASSENGER TYPES

<u>YEAR</u> <u>ENDING</u>	<u>BODILY INJURY</u> <u>ACTUAL</u>	<u>BODILY INJURY</u> <u>ACTUAL CHANGE@</u>	<u>PROPERTY DAMAGE</u> <u>ACTUAL</u>	<u>PROPERTY DAMAGE</u> <u>ACTUAL CHANGE@</u>
12/31/2012	0.8711		3.1723	
3/31/2013	0.8593		3.1432	
6/30/2013	0.8532		3.0989	
9/30/2013	0.8616		3.1097	
12/31/2013	0.8680	-0.4% &	3.1399	-1.0% &
3/31/2014	0.8645		3.1695	
6/30/2014	0.8651		3.1686	
9/30/2014	0.8549	-0.8%	3.1242	0.5%
12/31/2014	0.8504		3.0988	
3/31/2015	0.8306		3.0699	
6/30/2015	0.8147		3.0428	
9/30/2015	0.8126	-4.9%	3.0784	-1.5%
12/31/2015	0.8122		3.0889	
3/31/2016	0.8248		3.0901	
6/30/2016	0.8310		3.1116	
9/30/2016	0.8464	4.2%	3.1038	0.8%
12/31/2016	0.8370		3.0882	
3/31/2017	0.8347		3.0235	
6/30/2017	0.8335		2.9874	
9/30/2017	0.8112	-4.2%	2.9073	-6.3%
12/31/2017	0.8110		2.8743	
3/31/2018	0.8170		2.8885	
6/30/2018	0.8150		2.8403	
9/30/2018	0.8133	0.3%	2.7969	-3.8%

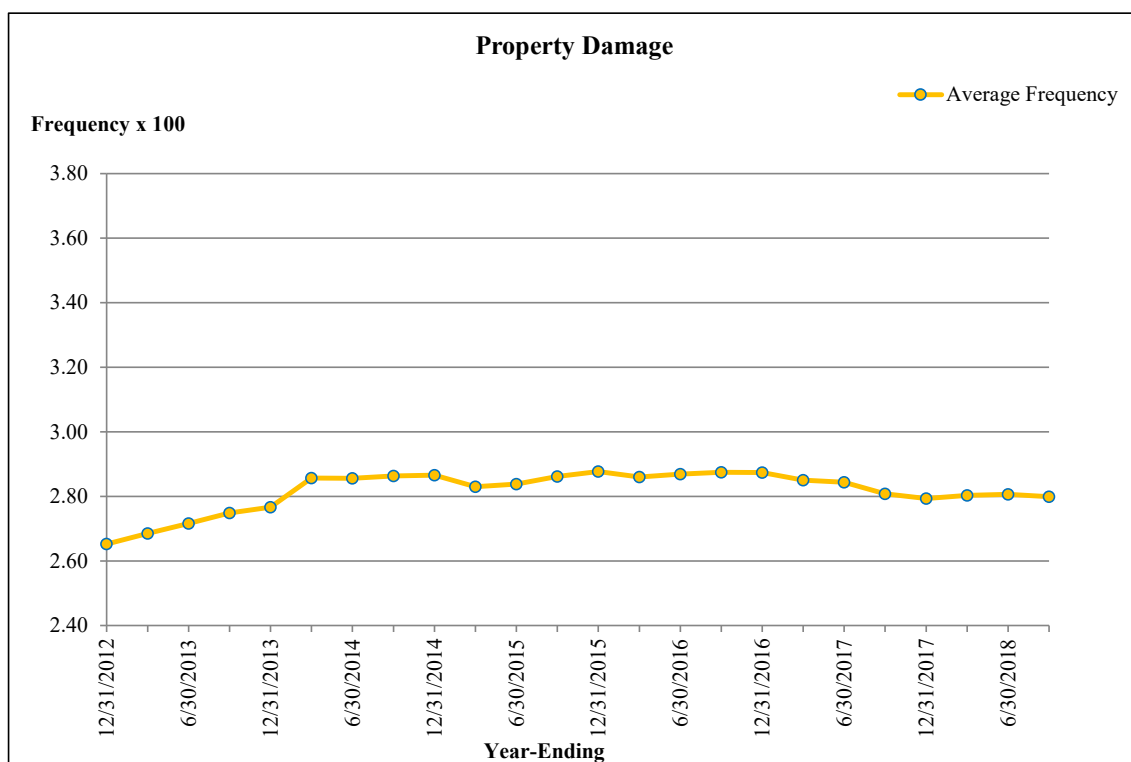
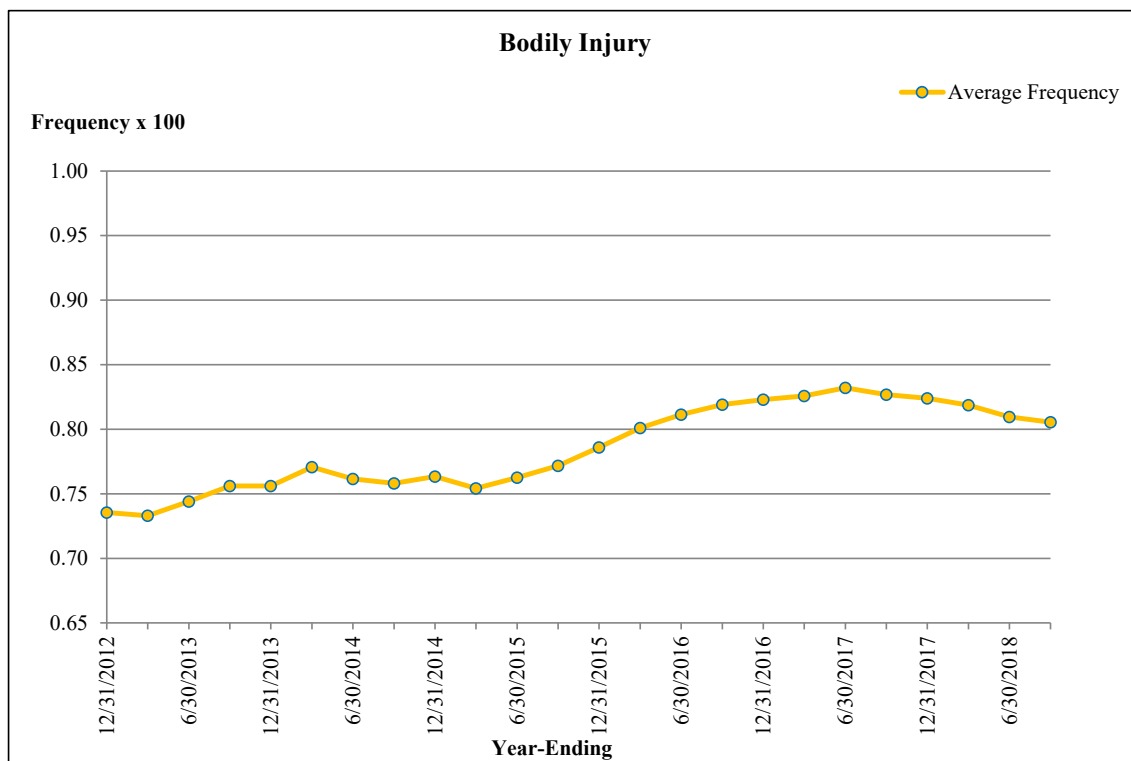
\* EXCLUDES MASSACHUSETTS

@ CHANGE BASED ON YEARS ENDING 9/30/XXXX

&amp; CHANGE BASED ON YEAR ENDING 12/31/2013 divided by 12/31/2012

INSURANCE SERVICES OFFICE, INC.

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

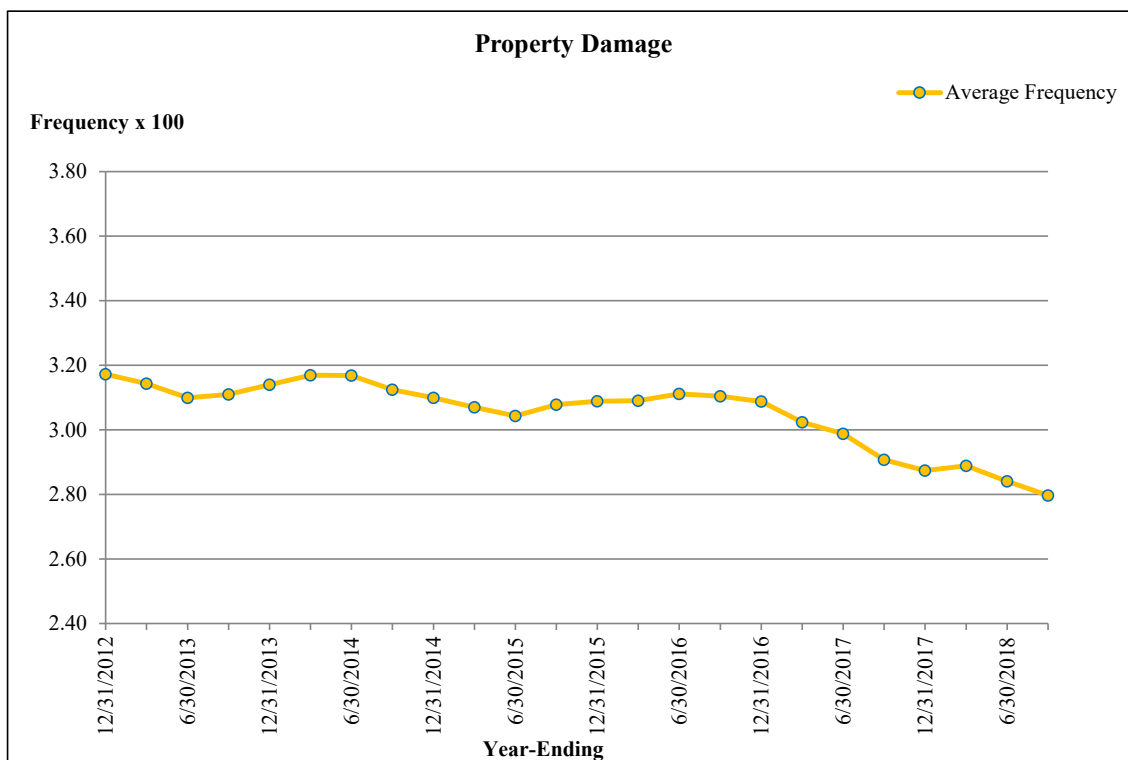
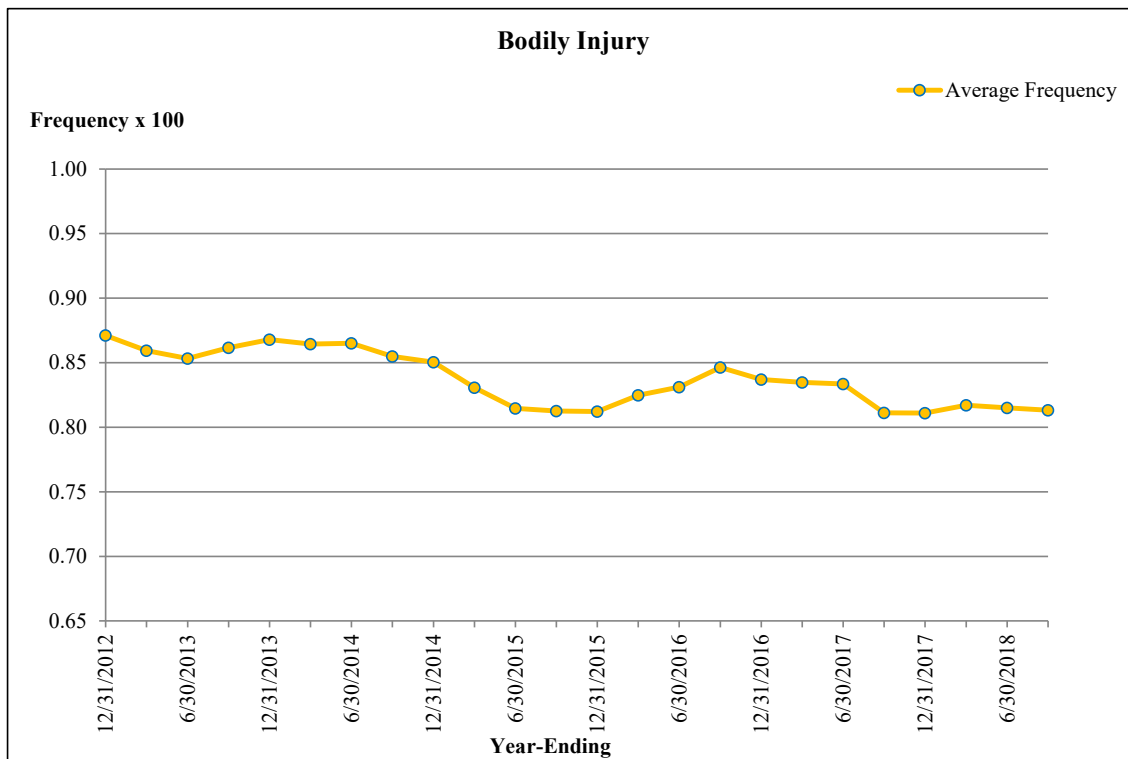


\*Excludes Massachusetts



INSURANCE SERVICES OFFICE, INC.

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



\*Excludes Massachusetts

## INSURANCE SERVICES OFFICE, INC.

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

Frequency (expressed as claims per 100 exposures)

	\$250 Deductible		\$500 Deductible		\$1,000 Deductible	
Year Ending:	Actual	Change**	Actual	Change**	Actual	Change**
6/30/2014	2.50		1.40		0.92	
12/31/2014	2.47		1.37		0.90	
6/30/2015	2.37		1.35		0.89	
12/31/2015	2.31	-6.5%	1.35	-1.5%	0.89	-1.1%
6/30/2016	2.22		1.34		0.91	
12/31/2016	2.22	-3.9%	1.34	-0.7%	0.90	1.1%
6/30/2017	2.23		1.36		0.90	
12/31/2017	2.26	1.8%	1.41	5.2%	0.92	2.2%
6/30/2018	2.38		1.47		0.94	
12/31/2018	2.49	10.2%	1.53	8.5%	0.96	4.3%

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

Deductible:	Percent of Losses
Full	0.4%
\$50	0.4%
\$100	2.5%
\$200	0.2%
\$250	9.3%
\$500	36.3%
\$1,000	44.1%
\$2,000	4.3%
\$3,000	0.9%
\$5,000	1.6%

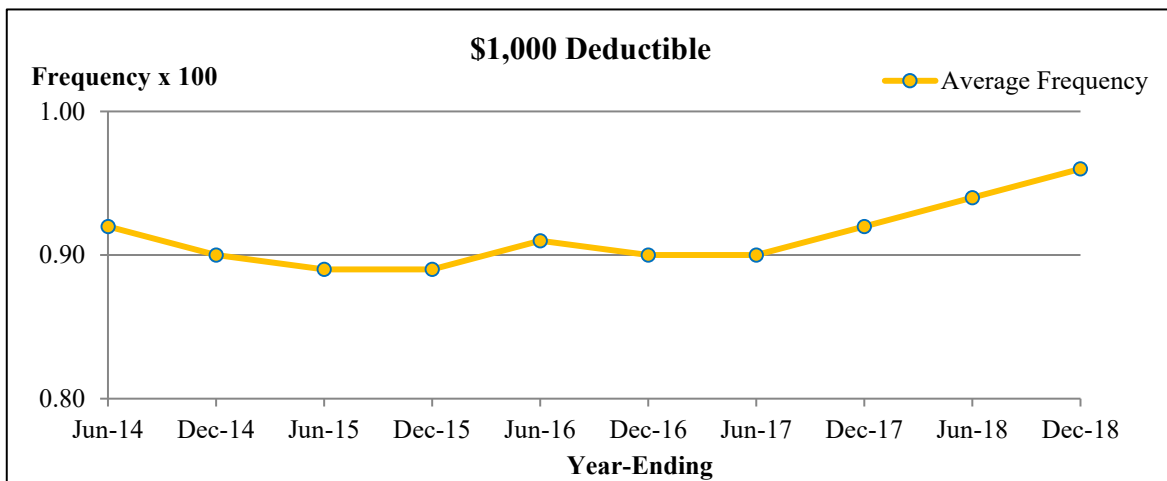
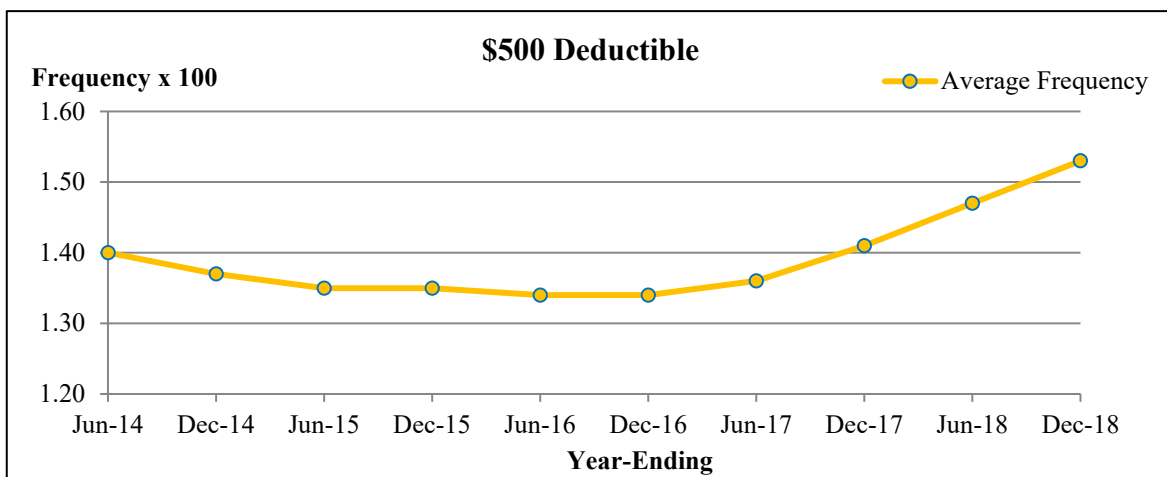
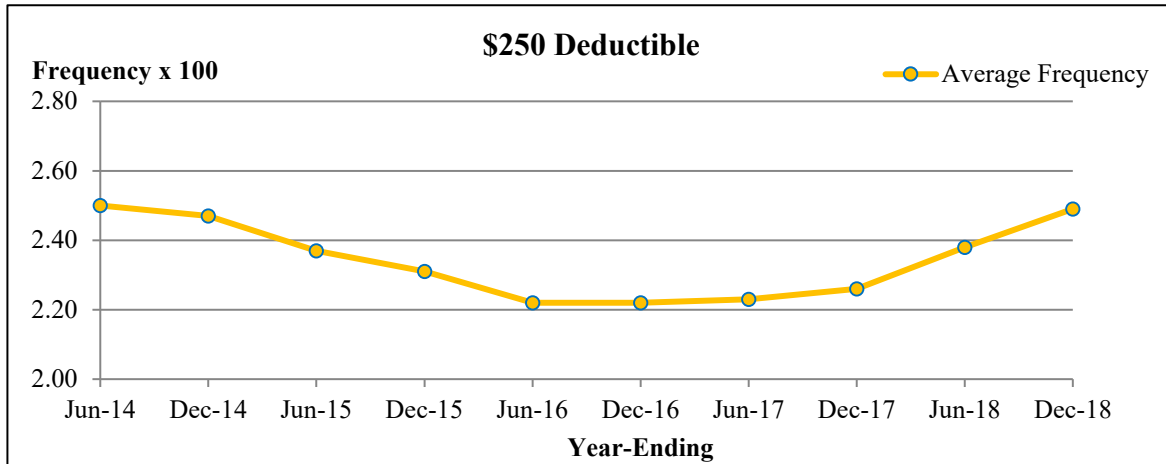
\* Multistate data excludes Massachusetts

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

\*\*\* Deductibles above \$1,000, totaling 6.8% of losses, are excluded from the trend calculations.

## INSURANCE SERVICES OFFICE, INC.

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



\*Excludes Massachusetts

Selected Other Than Collision Frequency Trend Factor: 0.0%

## INSURANCE SERVICES OFFICE, INC.

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

Severity Trend

Year Ending:	\$250 Deductible	\$500 Deductible	\$1,000 Deductible
6/30/2014	2,885.88	4,948.54	7,327.88
12/31/2014	2,981.15	5,079.85	7,452.83
6/30/2015	3,055.82	5,160.68	7,491.47
12/31/2015	3,156.42	5,431.05	7,733.42
6/30/2016	3,403.34	5,597.25	8,031.89
12/31/2016	3,469.71	5,649.55	8,378.59
6/30/2017	3,534.58	5,945.59	8,739.47
12/31/2017	3,708.55	6,293.24	9,153.24
6/30/2018	3,753.56	6,314.13	9,369.71
12/31/2018	3,862.44	6,393.21	9,409.87

Average Annual Change Using Exponential Fits:

10 point fit:	7.0%	6.4%	6.6%
8 point fit:	6.8%	6.5%	7.4%
6 point fit:	5.4%	6.2%	6.9%

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

\* Multistate data excludes Massachusetts

## INSURANCE SERVICES OFFICE, INC.

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**
6/30/2014	2.32		1.98		1.58	
12/31/2014	2.32		1.99		1.59	
6/30/2015	2.29		1.98		1.60	
12/31/2015	2.31	-0.4%	2.01	1.0%	1.63	2.5%
6/30/2016	2.29		2.01		1.63	
12/31/2016	2.38	3.0%	2.08	3.5%	1.68	3.1%
6/30/2017	2.40		2.07		1.69	
12/31/2017	2.33	-2.1%	2.00	-3.8%	1.65	-1.8%
6/30/2018	2.35		2.02		1.67	
12/31/2018	2.37	1.7%	2.03	1.5%	1.70	3.0%

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

Deductible:	Percent of Losses
\$100	0.1%
\$200	0.0%
\$250	1.8%
\$500	34.1%
\$1,000	53.5%
\$2,000	5.4%
\$3,000	1.6%
\$5,000	3.6%

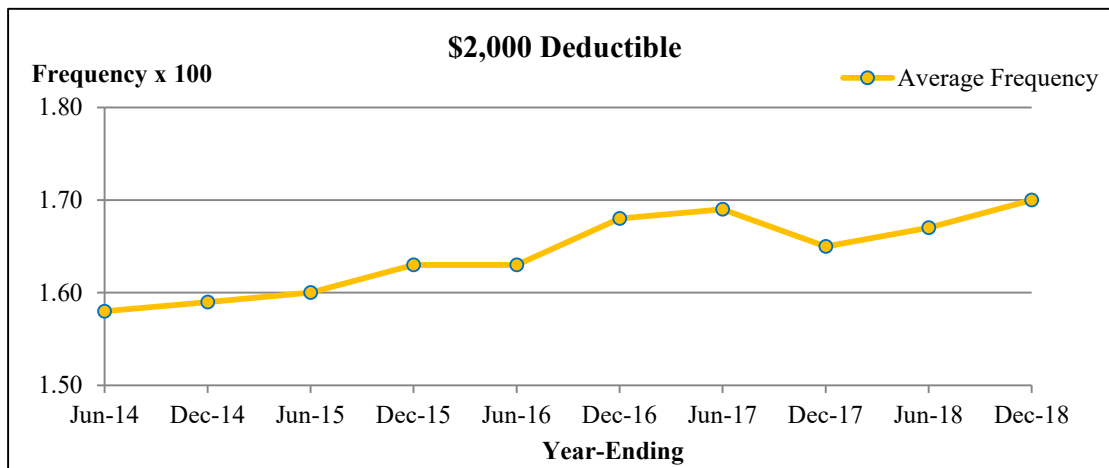
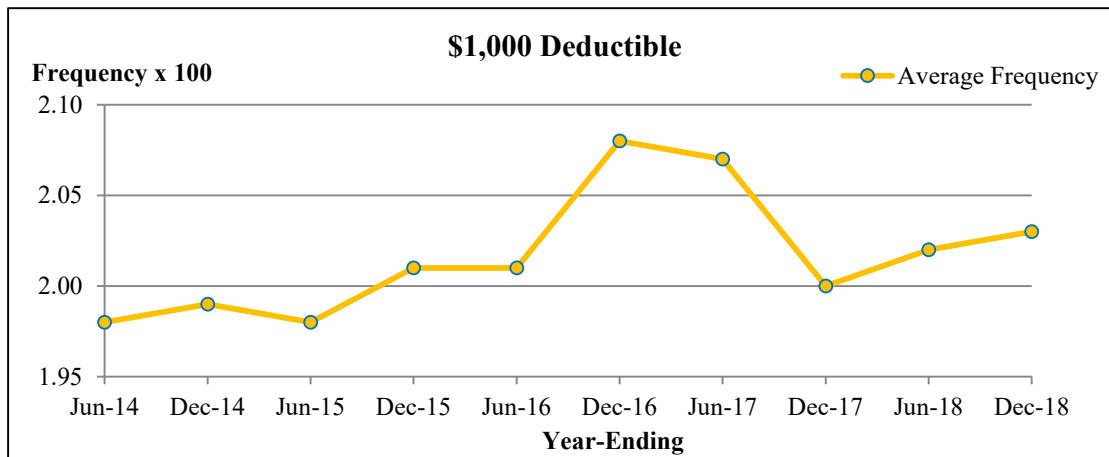
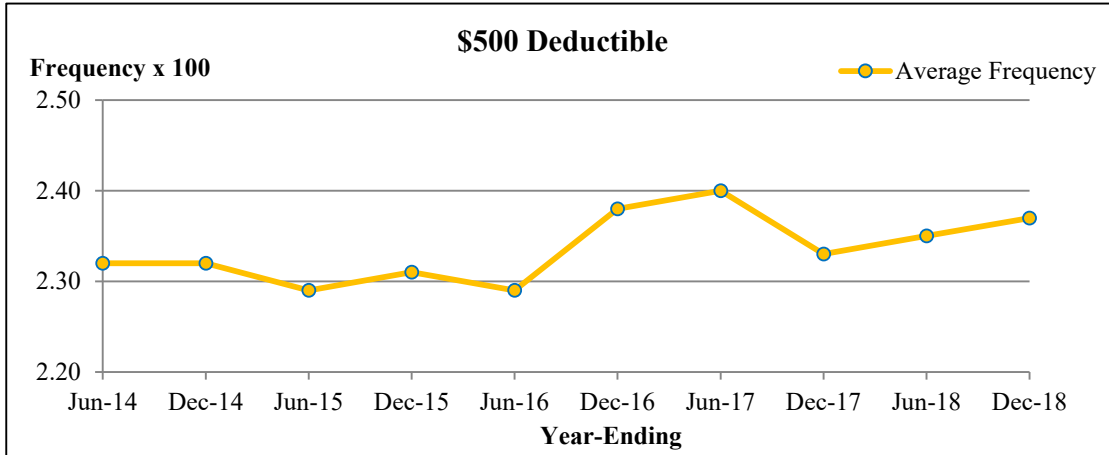
\* Multistate data excludes Massachusetts

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

\*\*\* Deductibles above \$2,000, totaling 5.2% of losses, are excluded from trend calculations.

## INSURANCE SERVICES OFFICE, INC.

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



\*Excludes Massachusetts

Selected Collision Frequency Trend Factor: 0.0%

## INSURANCE SERVICES OFFICE, INC.

Multistate\*  
Trucks, Tractors & Trailers Physical Damage  
Collision

Severity Trend

Year Ending:	\$500 Deductible	\$1,000 Deductible	\$2,000 Deductible
6/30/2014	8,006.95	9,709.23	10,578.28
12/31/2014	8,328.42	10,052.35	10,996.98
6/30/2015	8,624.52	10,264.31	11,154.78
12/31/2015	8,784.58	10,478.77	11,361.59
6/30/2016	9,123.06	10,789.93	11,709.15
12/31/2016	9,290.63	10,973.53	11,920.32
6/30/2017	9,302.59	10,979.20	11,887.61
12/31/2017	9,547.23	11,200.14	12,123.28
6/30/2018	9,800.39	11,561.15	12,548.35
12/31/2018	10,206.82	11,967.55	12,822.63

Average Annual Change Using Exponential Fits:

10 point fit:	5.0%	4.3%	4.0%
8 point fit:	4.5%	4.1%	3.8%
6 point fit:	4.4%	4.0%	3.7%

Selected severity trend:	4.5%
Selected frequency trend:	0.0%
Selected pure premium trend:	4.5%

\* Multistate data excludes Massachusetts

## INSURANCE SERVICES OFFICE, INC.

Multistate\*  
Private Passenger Types Physical Damage  
Other Than Collision

Frequency (expressed as claims per 100 exposures)

	\$250 Deductible		\$500 Deductible		\$1,000 Deductible	
Year Ending:	Actual	Change**	Actual	Change**	Actual	Change**
6/30/2014	5.47		3.24		1.93	
12/31/2014	5.30		3.18		1.92	
6/30/2015	4.95		3.07		1.89	
12/31/2015	4.97	-6.2%	3.15	-0.9%	1.94	1.0%
6/30/2016	4.97		3.19		1.98	
12/31/2016	4.98	0.2%	3.09	-1.9%	1.92	-1.0%
6/30/2017	4.83		2.99		1.89	
12/31/2017	4.79	-3.8%	3.03	-1.9%	1.94	1.0%
6/30/2018	5.04		3.16		2.00	
12/31/2018	5.13	7.1%	3.30	8.9%	2.05	5.7%

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

Deductible:	Percent of Losses
Full	0.3%
\$50	0.6%
\$100	3.3%
\$200	0.8%
\$250	12.1%
\$500	43.5%
\$1,000	36.7%
\$2,000	1.8%
\$3,000	0.2%
\$5,000	0.7%

\* Multistate data excludes Massachusetts

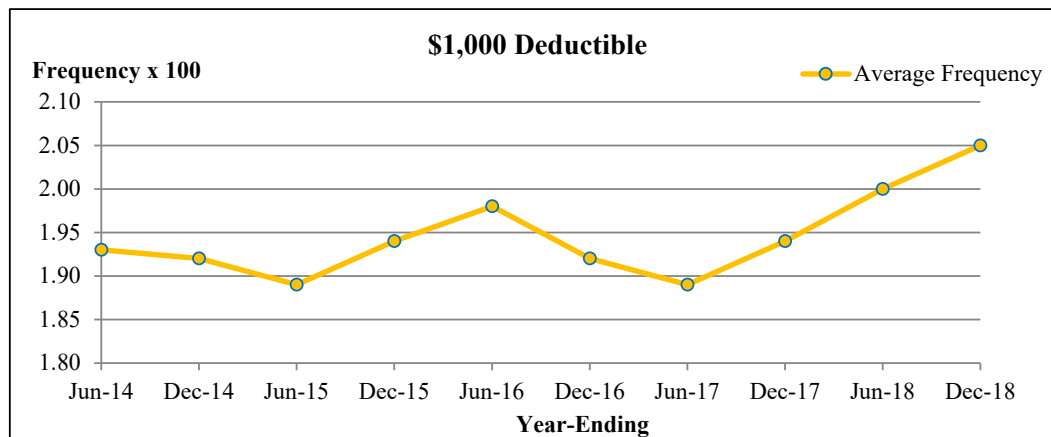
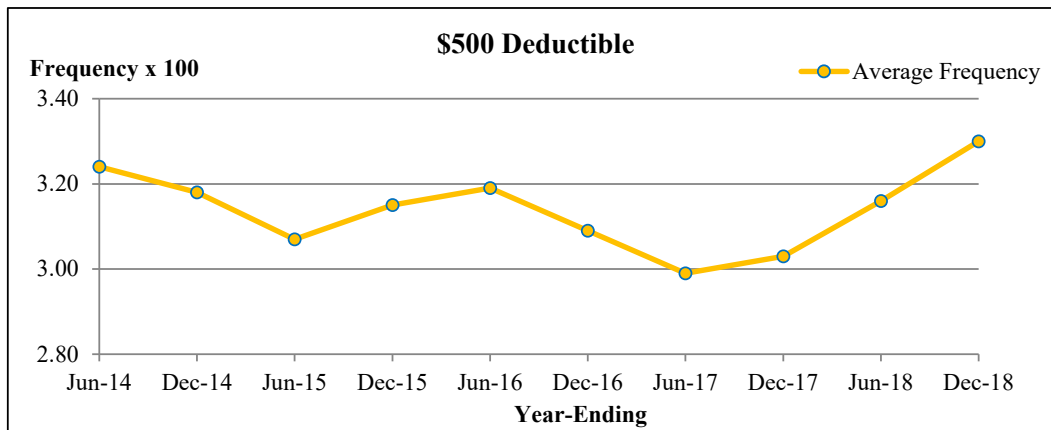
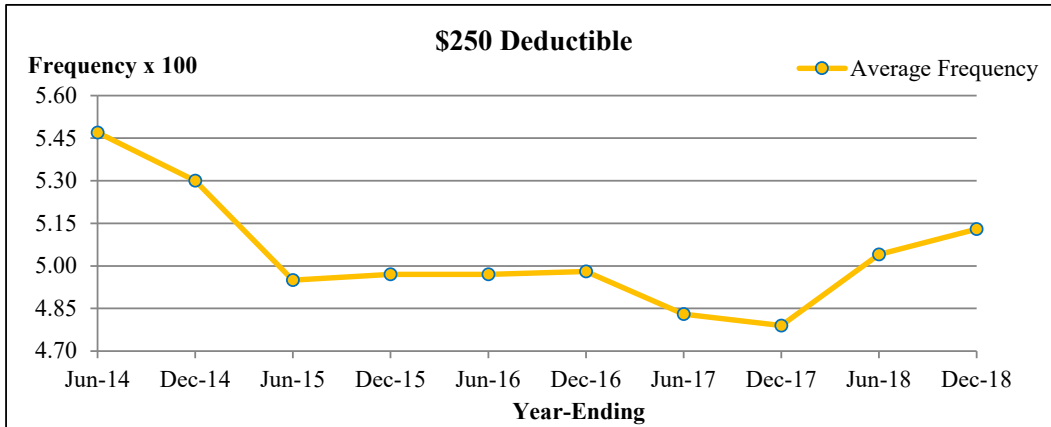
\*\* Change based on years ending 12/31/xxxx

\*\*\* Deductibles above \$1,000, totaling 2.7% of losses, are excluded from trend calculations.



## INSURANCE SERVICES OFFICE, INC.

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



\*Excludes Massachusetts

Selected Other Than Collision Frequency Trend Factor: 0.0%

## INSURANCE SERVICES OFFICE, INC.

Multistate\*  
Private Passenger Types Physical Damage  
Other Than Collision

Severity Trend

Year Ending:	\$250 Deductible	\$500 Deductible	\$1,000 Deductible
6/30/2014	1,366.03	1,928.14	2,657.81
12/31/2014	1,462.11	2,016.19	2,772.23
6/30/2015	1,556.40	2,079.78	2,801.32
12/31/2015	1,642.60	2,188.48	2,872.90
6/30/2016	1,754.27	2,304.25	3,008.71
12/31/2016	1,752.96	2,315.04	3,012.76
6/30/2017	1,788.88	2,365.29	3,054.54
12/31/2017	1,880.66	2,537.30	3,344.40
6/30/2018	1,843.29	2,585.74	3,464.52
12/31/2018	1,777.16	2,602.52	3,519.67

Average Annual Change Using Exponential Fits:

10 point fit:	6.5%	7.1%	6.5%
8 point fit:	4.2%	6.7%	7.1%
6 point fit:	1.5%	5.9%	7.7%

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

\* Multistate data excludes Massachusetts

## INSURANCE SERVICES OFFICE, INC.

Multistate\*  
Private Passenger Types 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**
6/30/2014	5.33		4.39		3.17	
12/31/2014	5.39		4.49		3.26	
6/30/2015	5.31		4.42		3.24	
12/31/2015	5.32	-1.3%	4.46	-0.7%	3.30	1.2%
6/30/2016	5.24		4.44		3.29	
12/31/2016	5.29	-0.6%	4.48	0.4%	3.34	1.2%
6/30/2017	5.27		4.46		3.34	
12/31/2017	5.25	-0.8%	4.39	-2.0%	3.32	-0.6%
6/30/2018	5.32		4.48		3.42	
12/31/2018	5.24	-0.2%	4.52	3.0%	3.48	4.8%

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

Deductible:	Percent of Losses
\$100	0.3%
\$200	0.2%
\$250	2.2%
\$500	43.8%
\$1,000	51.0%
\$2,000	1.6%
\$3,000	0.2%
\$5,000	0.7%

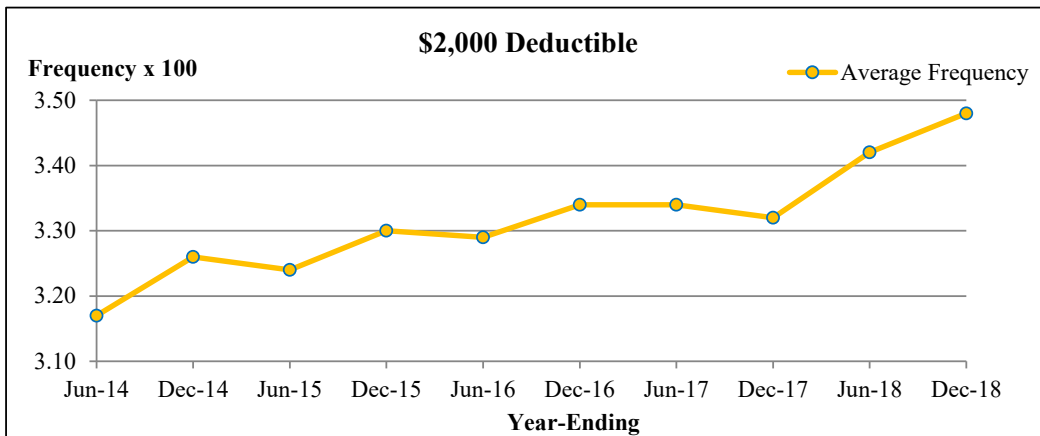
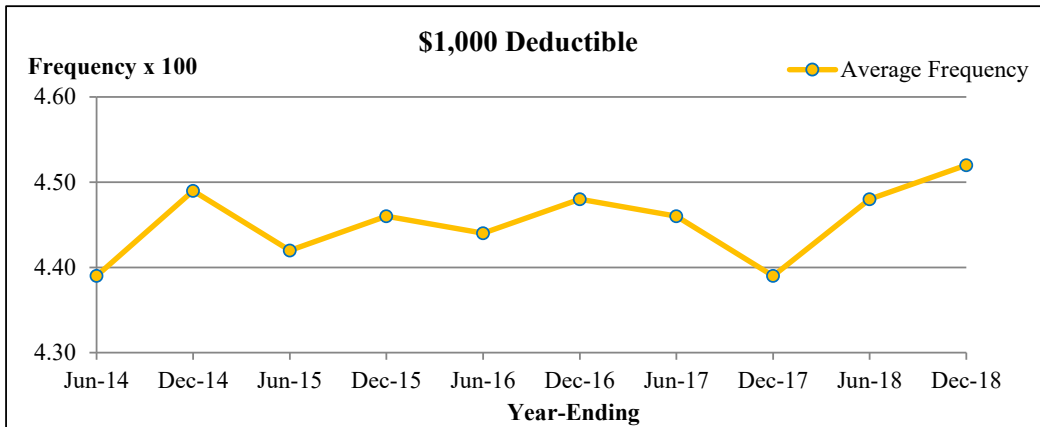
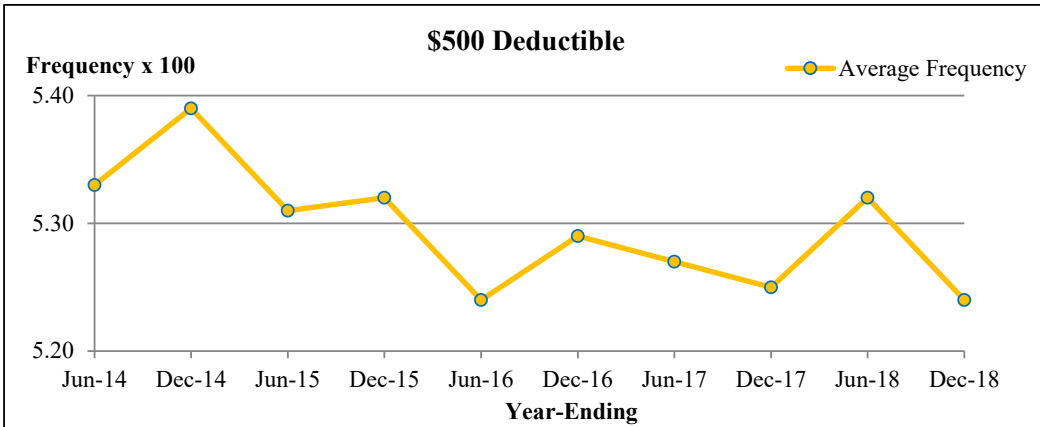
\* Multistate data excludes Massachusetts

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

\*\*\* Deductibles above \$2,000, totaling 0.9% of losses, are excluded from trend calculations.

## INSURANCE SERVICES OFFICE, INC.

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



\*Excludes Massachusetts

Selected Collision Frequency Trend Factor: 0.0%

## INSURANCE SERVICES OFFICE, INC.

Multistate\*  
Private Passenger Types Physical Damage  
Collision

Severity Trend

Year Ending:	\$500 Deductible	\$1,000 Deductible	\$2,000 Deductible
6/30/2014	5,156.37	5,594.21	6,157.26
12/31/2014	5,357.24	5,728.50	6,314.77
6/30/2015	5,488.01	5,894.43	6,480.44
12/31/2015	5,597.55	6,037.33	6,575.33
6/30/2016	5,763.57	6,147.42	6,699.19
12/31/2016	5,906.51	6,216.56	6,778.85
6/30/2017	5,881.16	6,234.50	6,756.30
12/31/2017	5,949.76	6,353.81	6,847.15
6/30/2018	6,296.12	6,571.80	7,066.71
12/31/2018	6,507.32	6,866.24	7,355.27

Average Annual Change Using Exponential Fits:

10 point fit:	4.7%	4.1%	3.4%
8 point fit:	4.6%	3.9%	3.2%
6 point fit:	4.7%	4.3%	3.5%

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

\* Multistate data excludes Massachusetts

## INSURANCE SERVICES OFFICE, INC.

MULTISTATE  
TRUCKS, TRACTORS & TRAILERS  
PHYSICAL DAMAGE  
OCN TREND CALCULATION

AVERAGE OCN RELATIVITIES

YEAR ENDING	OTHER THAN COLLISION	COLLISION
6/30/2014	1.238	1.376
12/31/2014	1.243	1.385
6/30/2015	1.249	1.393
12/31/2015	1.255	1.403
6/30/2016	1.261	1.414
12/31/2016	1.266	1.423
6/30/2017	1.272	1.434
12/31/2017	1.279	1.446
6/30/2018	1.285	1.458
12/31/2018	1.289	1.466

EXPONENTIAL TREND (AVERAGE ANNUAL CHANGE)

9 POINTS	0.9%	1.5%
7 POINTS	0.9%	1.5%
5 POINTS	0.9%	1.5%
Selected Other Than Collision Physical Damage Annual OCN Trend:		0.9%
Selected Collision Physical Damage Annual OCN Trend:		1.5%

Data excludes the following state: Massachusetts

## INSURANCE SERVICES OFFICE, INC.

MULTISTATE  
PRIVATE PASSENGER TYPES  
PHYSICAL DAMAGE  
OCN TREND CALCULATION

AVERAGE OCN RELATIVITIES

YEAR ENDING	OTHER THAN COLLISION	COLLISION
6/30/2014	1.315	1.156
12/31/2014	1.320	1.158
6/30/2015	1.325	1.161
12/31/2015	1.332	1.165
6/30/2016	1.339	1.169
12/31/2016	1.347	1.173
6/30/2017	1.354	1.177
12/31/2017	1.360	1.180
6/30/2018	1.365	1.182
12/31/2018	1.372	1.185

EXPONENTIAL TREND (AVERAGE ANNUAL CHANGE)

9 POINTS	1.0%	0.6%
7 POINTS	1.0%	0.6%
5 POINTS	0.9%	0.5%
Selected Other Than Collision Physical Damage Annual OCN Trend:		1.0%
Selected Collision Physical Damage Annual OCN Trend:		0.6%

Data excludes the following state: Massachusetts

## INSURANCE SERVICES OFFICE, INC.

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

Accident Year	\$100,000 Basic Limit			Loss Development Factors	
<u>Ending</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	15 to 27 <u>Months</u>	27 to 39 <u>Months</u>
12/31/2007	1,138,813	1,464,475	1,072,071	1.286	0.732
12/31/2008	1,024,048	761,781	903,911	0.744	1.187
12/31/2009	782,248	808,343	949,658	1.033	1.175
12/31/2010	1,191,025	1,187,107	1,288,914	0.997	1.086
12/31/2011	1,477,173	1,558,525	1,649,931	1.055	1.059
12/31/2012	1,329,458	1,461,837	1,382,618	1.100	0.946
12/31/2013	1,567,979	1,975,905	1,921,215	1.260	0.972
12/31/2014	887,513	1,009,464	1,084,435	1.137	1.074
12/31/2015	1,280,218	1,532,994	1,523,785	1.197	0.994
12/31/2016	1,224,974	942,800	926,968	0.770	0.983
12/31/2017	1,658,448	1,268,128		0.765	
12/31/2018	986,518				
(1) Average Factor (Best 3 of 5) :				(A) State	1.035
				(B) Multistate	0.983
(2) Credibility					1.393
(3) Credibility Weighted Factors					1.154
					0.820
					0.540
					1.099
					1.062

## Property Damage

Accident Year	\$100,000 Basic Limit			Loss Development Factors	
<u>Ending</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	15 to 27 <u>Months</u>	27 to 39 <u>Months</u>
12/31/2007	1,677,580	1,538,026	1,450,281	0.917	0.943
12/31/2008	1,667,066	1,709,119	1,708,107	1.025	0.999
12/31/2009	1,725,252	1,584,568	1,583,781	0.918	1.000
12/31/2010	1,988,661	1,903,125	1,947,855	0.957	1.024
12/31/2011	2,922,656	2,988,493	2,921,165	1.023	0.977
12/31/2012	3,408,153	3,515,644	3,614,959	1.032	1.028
12/31/2013	2,949,556	3,164,648	3,113,635	1.073	0.984
12/31/2014	3,328,030	3,468,089	3,476,582	1.042	1.002
12/31/2015	2,694,965	2,790,304	2,755,795	1.035	0.988
12/31/2016	2,055,813	2,103,562	2,118,354	1.023	1.007
12/31/2017	1,900,205	1,922,703		1.012	
12/31/2018	2,123,644				
(1) Average Factor (Best 3 of 5) :				(A) State	1.033
				(B) Multistate	0.999
(2) Credibility					1.045
(3) Credibility Weighted Factors					1.009
					0.820
					0.000
					1.035
					1.009

## Summary of Factors

	Bodily <u>Injury</u>	Property <u>Damage</u>
39 to Ultimate **	1.084	1.004
27 to Ultimate	1.151	1.013
15 to Ultimate	1.265	1.048

\*\* Multistate factors



## INSURANCE SERVICES OFFICE, INC.

Basic Limits Loss Development  
Trucks, Tractors and Trailers - Bodily Injury  
No Fault States  
Incurred Losses and Expenses

Accident Year <u>Ending</u>	\$100,000 Basic Limit				
	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
12/31/2007	131,415,218	176,058,424	194,744,343	203,918,004	206,831,184
12/31/2008	114,878,534	154,595,558	171,793,399	180,304,674	182,279,698
12/31/2009	105,045,929	139,833,866	157,616,290	165,591,146	168,819,309
12/31/2010	110,655,796	151,426,641	170,540,087	180,181,303	183,428,699
12/31/2011	122,878,460	166,652,657	189,562,212	203,418,911	203,717,704
12/31/2012	121,333,075	170,582,247	197,042,867	204,993,102	206,753,746
12/31/2013	132,137,684	183,877,518	210,612,444	225,648,737	229,550,076
12/31/2014	141,332,577	195,246,759	226,585,738	237,397,140	241,726,458
12/31/2015	149,302,677	218,498,166	249,209,205	263,186,880	
12/31/2016	166,698,637	230,821,588	267,993,516		
12/31/2017	172,989,099	242,430,506			
12/31/2018	189,224,301				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2007	1.340	1.106	1.047	1.014
12/31/2008	1.346	1.111	1.050	1.011
12/31/2009	1.331	1.127	1.051	1.019
12/31/2010	1.368	1.126	1.057	1.018
12/31/2011	1.356	1.137	1.073	1.001
12/31/2012	1.406	1.155	1.040	1.009
12/31/2013	1.392	1.145	1.071	1.017
12/31/2014	1.381	1.161	1.048	1.018
12/31/2015	1.463	1.141	1.056	
12/31/2016	1.385	1.161		
12/31/2017	1.401			
Average Factor:	1.393	1.154	1.058	1.015
( Best 3 of 5 )				

## Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.009
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.024
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.084
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.250
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.742

## INSURANCE SERVICES OFFICE, INC.

Basic Limits Loss Development  
Trucks, Tractors and Trailers - Bodily Injury  
No Fault States  
Incurred Losses and Expenses

Accident Year <u>Ending</u>	\$100,000 Basic Limit <u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2007	208,119,745	209,315,655	209,266,167	209,303,811	209,359,281
12/31/2008	183,710,219	184,571,981	184,680,927	184,688,976	184,565,628
12/31/2009	169,497,368	169,381,917	169,549,392	169,640,378	169,600,405
12/31/2010	183,192,192	183,726,911	184,037,513	184,028,779	
12/31/2011	205,058,238	204,910,362	205,151,763		
12/31/2012	207,932,110	208,453,966			
12/31/2013	231,235,523				

## 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>
12/31/2007	1.006	1.006	1.000	1.000	1.000
12/31/2008	1.008	1.005	1.001	1.000	0.999
12/31/2009	1.004	0.999	1.001	1.001	1.000
12/31/2010	0.999	1.003	1.002	1.000	
12/31/2011	1.007	0.999	1.001		
12/31/2012	1.006	1.003			
12/31/2013	1.007				
Average Factor: ( Best 3 of 5 )	1.006	1.002	1.001	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)	=	1.001
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.003

## INSURANCE SERVICES OFFICE, INC.

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

Accident Year <u>Ending</u>	\$100,000 Basic Limit <u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
12/31/2007	453,578,766	469,739,966	473,077,220	472,712,914	473,098,460
12/31/2008	404,661,210	414,935,982	417,270,996	417,514,888	418,271,866
12/31/2009	344,659,574	353,667,486	355,921,303	356,479,783	356,213,694
12/31/2010	358,561,523	371,121,418	374,062,959	374,883,916	375,081,017
12/31/2011	396,648,288	409,088,285	412,330,516	413,783,506	414,594,474
12/31/2012	396,400,012	410,519,962	413,551,050	414,340,760	414,996,640
12/31/2013	422,343,833	437,334,375	442,923,912	443,743,458	444,214,878
12/31/2014	447,785,527	467,713,496	471,176,837	472,601,704	473,298,743
12/31/2015	475,784,542	497,912,958	502,880,070	504,250,770	
12/31/2016	505,559,237	527,555,729	532,888,321		
12/31/2017	514,794,984	542,551,154			
12/31/2018	570,729,230				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2007	1.036	1.007	0.999	1.001
12/31/2008	1.025	1.006	1.001	1.002
12/31/2009	1.026	1.006	1.002	0.999
12/31/2010	1.035	1.008	1.002	1.001
12/31/2011	1.031	1.008	1.004	1.002
12/31/2012	1.036	1.007	1.002	1.002
12/31/2013	1.035	1.013	1.002	1.001
12/31/2014	1.045	1.007	1.003	1.001
12/31/2015	1.047	1.010	1.003	
12/31/2016	1.044	1.010		
12/31/2017	1.054			
Average Factor:	1.045	1.009	1.003	1.001
( 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) =	1.001
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) =	1.013
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.059

## INSURANCE SERVICES OFFICE, INC.

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

Accident Year <u>Ending</u>	\$100,000 Basic Limit <u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>
12/31/2007	473,825,003	473,687,543	473,720,995	473,697,052
12/31/2008	418,229,625	418,270,326	418,414,204	418,285,323
12/31/2009	356,393,139	356,393,033	356,615,417	356,705,304
12/31/2010	375,150,876	374,996,154	375,087,116	375,162,341
12/31/2011	414,717,965	414,781,494	414,868,974	
12/31/2012	415,331,657	415,703,661		
12/31/2013	444,303,596			

## Ratios

Accident Year <u>Ending</u>	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>
12/31/2007	1.002	1.000	1.000	1.000
12/31/2008	1.000	1.000	1.000	1.000
12/31/2009	1.001	1.000	1.001	1.000
12/31/2010	1.000	1.000	1.000	1.000
12/31/2011	1.000	1.000	1.000	
12/31/2012	1.001	1.001		
12/31/2013	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

## INSURANCE SERVICES OFFICE, INC.

## NORTH DAKOTA

No-Fault Insurance - Trucks, Tractors and Trailers (A)  
Loss Development

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>
12/31/2009	234,602	213,272	203,787	203,787	192,304
12/31/2010	243,461	218,703	219,530	213,972	213,972
12/31/2011	220,637	204,225	189,898	189,938	219,938
12/31/2012	323,222	301,211	293,044	290,250	290,106
12/31/2013	537,698	495,626	460,163	458,582	466,382
12/31/2014	264,483	273,567	281,454	282,269	282,212
12/31/2015	297,579	314,558	342,265	344,980	
12/31/2016	282,200	299,191	291,922		
12/31/2017	235,809	206,267			
12/31/2018	199,624				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2009	0.909	0.956	1.000	0.944
12/31/2010	0.898	1.004	0.975	1.000
12/31/2011	0.926	0.930	1.000	1.158
12/31/2012	0.932	0.973	0.990	1.000
12/31/2013	0.922	0.928	0.997	1.017
12/31/2014	1.034	1.029	1.003	1.000
12/31/2015	1.057	1.088	1.008	
12/31/2016	1.060	0.976		
12/31/2017	0.875			

## Average Factor:

(Best 3 of 5)	1.004	0.993	1.000	1.006
(Latest 3)	0.997	1.031	1.003	1.006
(Latest 5)	0.990	0.999	1.000	1.035

Selected Factor:	1.004	0.993	1.000	1.006
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## Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.000
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.006
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.006
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.999
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.003

(A) Includes Basic Benefits Losses.

## INSURANCE SERVICES OFFICE, INC.

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

Accident Year Ending	\$100,000 Basic Limit			Loss Development Factors	
	15 Months	27 Months	39 Months	15 to 27 Months	27 to 39 Months
12/31/2007	202,589	251,550	154,050	1.242	0.612
12/31/2008	134,797	278,748	323,716	2.068	1.161
12/31/2009	14,664	4,964	4,964	0.339	1.000
12/31/2010	125,621	156,699	78,102	1.247	0.498
12/31/2011	148,346	134,010	132,048	0.903	0.985
12/31/2012	68,174	38,621	41,465	0.567	1.074
12/31/2013	13,503	7,290	7,290	0.540	1.000
12/31/2014	114,032	195,785	202,962	1.717	1.037
12/31/2015	112,845	83,697	83,697	0.742	1.000
12/31/2016	60,511	80,011	92,511	1.322	1.156
12/31/2017	51,570	61,099		1.185	
12/31/2018	115,747				
(1) Average Factor (Best 3 of 5) :					
				(A) State	1.083
				(B) Multistate	1.037
(2) Credibility					1.404
(3) Credibility Weighted Factors					1.158
					0.240
					0.170
					1.327
					1.137

## Property Damage

Accident Year Ending	\$100,000 Basic Limit			Loss Development Factors	
	15 Months	27 Months	39 Months	15 to 27 Months	27 to 39 Months
12/31/2007	218,637	216,407	207,982	0.990	0.961
12/31/2008	238,125	279,996	279,996	1.176	1.000
12/31/2009	200,588	214,460	214,460	1.069	1.000
12/31/2010	175,528	170,111	182,533	0.969	1.073
12/31/2011	157,664	173,696	159,766	1.102	0.920
12/31/2012	256,395	312,301	308,693	1.218	0.988
12/31/2013	220,895	215,229	215,229	0.974	1.000
12/31/2014	228,640	235,948	235,948	1.032	1.000
12/31/2015	213,985	234,446	234,446	1.096	1.000
12/31/2016	240,206	238,294	238,294	0.992	1.000
12/31/2017	221,570	223,200		1.007	
12/31/2018	116,560				
(1) Average Factor (Best 3 of 5) :					
				(A) State	1.010
				(B) Multistate	1.000
(2) Credibility					1.045
(3) Credibility Weighted Factors					1.008
					0.530
					0.000
					1.026
					1.008

## Summary of Factors

	Bodily Injury	Property Damage
39 to Ultimate **	1.082	1.004
27 to Ultimate	1.230	1.012
15 to Ultimate	1.632	1.038

\*\* Multistate factors

## INSURANCE SERVICES OFFICE, INC.

Basic Limits Loss Development  
 Private Passenger Types - Bodily Injury  
 No Fault States  
 Incurred Losses and Expenses

Accident Year <u>Ending</u>	\$100,000 Basic Limit <u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
12/31/2007	29,626,743	40,579,773	46,270,280	48,182,761	49,137,656
12/31/2008	28,517,180	38,060,182	43,461,513	45,321,199	46,318,925
12/31/2009	28,117,800	39,517,298	45,030,332	47,072,574	47,163,510
12/31/2010	31,777,293	44,385,590	49,465,744	53,113,728	54,278,363
12/31/2011	32,405,824	46,530,239	52,238,324	54,454,928	55,516,771
12/31/2012	34,599,845	45,601,779	53,276,162	56,174,743	57,630,797
12/31/2013	34,299,874	48,228,706	54,778,769	59,696,315	60,991,563
12/31/2014	33,499,870	47,380,333	55,890,607	58,865,440	59,899,543
12/31/2015	31,505,027	46,314,677	52,703,592	56,036,879	
12/31/2016	38,100,564	52,314,303	61,159,868		
12/31/2017	33,637,526	46,786,833			
12/31/2018	31,967,478				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2007	1.370	1.140	1.041	1.020
12/31/2008	1.335	1.142	1.043	1.022
12/31/2009	1.405	1.140	1.045	1.002
12/31/2010	1.397	1.114	1.074	1.022
12/31/2011	1.436	1.123	1.042	1.019
12/31/2012	1.318	1.168	1.054	1.026
12/31/2013	1.406	1.136	1.090	1.022
12/31/2014	1.414	1.180	1.053	1.018
12/31/2015	1.470	1.138	1.063	
12/31/2016	1.373	1.169		
12/31/2017	1.391			
Average Factor: ( Best 3 of 5 )	1.404	1.158	1.057	1.021

## Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.003
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.024
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.082
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.253
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.760

## INSURANCE SERVICES OFFICE, INC.

Basic Limits Loss Development  
 Private Passenger Types - Bodily Injury  
 No Fault States  
 Incurred Losses and Expenses

Accident Year <u>Ending</u>	\$100,000 Basic Limit <u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2007	49,879,173	49,928,285	49,770,875	49,781,121	49,783,088
12/31/2008	46,576,962	46,983,302	46,949,168	46,891,902	46,897,023
12/31/2009	47,237,436	47,113,409	47,092,536	47,171,211	47,176,881
12/31/2010	54,706,247	54,776,004	54,687,318	54,765,130	
12/31/2011	55,458,331	55,506,325	55,495,745		
12/31/2012	58,125,021	57,865,737			
12/31/2013	60,589,106				

## 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>
12/31/2007	1.015	1.001	0.997	1.000	1.000
12/31/2008	1.006	1.009	0.999	0.999	1.000
12/31/2009	1.002	0.997	1.000	1.002	1.000
12/31/2010	1.008	1.001	0.998	1.001	
12/31/2011	0.999	1.001	1.000		
12/31/2012	1.009	0.996			
12/31/2013	0.993				
Average Factor: ( Best 3 of 5 )	1.003	1.000	0.999	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)	=	1.000
75 to Ult:	(87:75) (99:87) (111:99) (123:111) (123:Ult)	=	1.000



## INSURANCE SERVICES OFFICE, INC.

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

Accident Year <u>Ending</u>	\$100,000 Basic Limit <u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
12/31/2007	88,217,477	90,127,510	90,485,562	90,819,605	90,861,489
12/31/2008	83,958,499	86,601,082	86,797,411	86,855,151	86,833,617
12/31/2009	78,718,247	81,132,797	81,453,911	81,724,545	81,685,214
12/31/2010	79,918,898	82,738,957	83,056,280	83,251,080	83,234,839
12/31/2011	85,441,799	88,035,482	88,605,150	89,040,457	89,253,120
12/31/2012	87,896,204	91,282,849	91,913,860	92,122,374	92,085,827
12/31/2013	88,760,482	92,620,605	93,239,528	93,532,881	93,549,792
12/31/2014	87,916,075	92,108,244	92,577,330	92,843,486	92,903,680
12/31/2015	91,168,401	95,223,290	96,053,523	96,398,494	
12/31/2016	95,873,624	100,107,250	101,241,339		
12/31/2017	90,719,422	95,657,774			
12/31/2018	96,240,312				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2007	1.022	1.004	1.004	1.000
12/31/2008	1.031	1.002	1.001	1.000
12/31/2009	1.031	1.004	1.003	1.000
12/31/2010	1.035	1.004	1.002	1.000
12/31/2011	1.030	1.006	1.005	1.002
12/31/2012	1.039	1.007	1.002	1.000
12/31/2013	1.043	1.007	1.003	1.000
12/31/2014	1.048	1.005	1.003	1.001
12/31/2015	1.044	1.009	1.004	
12/31/2016	1.044	1.011		
12/31/2017	1.054			
Average Factor: ( Best 3 of 5 )	1.045	1.008	1.003	1.000

## Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.001
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) =	1.058

## INSURANCE SERVICES OFFICE, INC.

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

Accident Year <u>Ending</u>	\$100,000 Basic Limit <u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>
12/31/2007	90,949,656	90,840,041	90,843,403	90,844,292
12/31/2008	86,830,882	86,802,173	86,800,373	86,798,574
12/31/2009	81,693,663	81,725,681	81,715,760	81,706,953
12/31/2010	83,438,417	83,428,317	83,427,420	83,372,138
12/31/2011	89,339,108	89,403,496	89,403,525	
12/31/2012	92,187,822	92,130,655		
12/31/2013	93,540,610			

## Ratios

Accident Year <u>Ending</u>	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>
12/31/2007	1.001	0.999	1.000	1.000
12/31/2008	1.000	1.000	1.000	1.000
12/31/2009	1.000	1.000	1.000	1.000
12/31/2010	1.002	1.000	1.000	0.999
12/31/2011	1.001	1.001	1.000	
12/31/2012	1.001	0.999		
12/31/2013	1.000			
Average Factor: ( Best 3 of 5 )	1.001	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

## INSURANCE SERVICES OFFICE, INC.

## NORTH DAKOTA

No-Fault Insurance - Private Passenger Types (A)  
Loss Development

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>
12/31/2009	42,593	36,467	37,378	37,378	37,378
12/31/2010	59,678	71,687	71,794	71,794	71,794
12/31/2011	22,318	16,701	16,701	16,701	16,701
12/31/2012	50,990	53,220	59,306	59,306	59,306
12/31/2013	37,279	46,780	49,640	48,046	48,046
12/31/2014	26,150	21,283	21,283	21,283	21,283
12/31/2015	22,471	14,022	14,022	14,022	
12/31/2016	48,144	39,802	39,802		
12/31/2017	31,963	34,419			
12/31/2018	59,230				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2009	0.856	1.025	1.000	1.000
12/31/2010	1.201	1.001	1.000	1.000
12/31/2011	0.748	1.000	1.000	1.000
12/31/2012	1.044	1.114	1.000	1.000
12/31/2013	1.255	1.061	0.968	1.000
12/31/2014	0.814	1.000	1.000	1.000
12/31/2015	0.624	1.000	1.000	
12/31/2016	0.827	1.000		
12/31/2017	1.077			

## Average Factor:

(Best 3 of 5)	0.906	1.020	1.000	1.000
(Latest 3)	0.843	1.000	0.989	1.000
(Latest 5)	0.919	1.035	0.994	1.000

Selected Factor:	0.906	1.020	1.000	1.000
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## 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) =	1.020
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.924

(A) Includes Basic Benefits Losses.

## INSURANCE SERVICES OFFICE, INC.

Physical Damage Loss Development  
Trucks, Tractors and Trailers - 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>
12/31/2007	141,522,276	145,069,053	144,817,899	144,711,804	144,646,931
12/31/2008	171,013,107	174,320,692	174,311,746	174,229,528	174,203,296
12/31/2009	141,551,003	143,657,672	143,943,827	144,040,822	144,069,848
12/31/2010	163,525,914	166,553,181	166,726,703	166,571,590	166,703,162
12/31/2011	186,150,891	189,182,048	189,404,166	189,492,002	189,446,108
12/31/2012	209,105,866	213,371,965	213,362,467	213,446,208	213,705,968
12/31/2013	170,684,329	174,742,867	175,182,720	175,556,520	175,523,843
12/31/2014	180,159,469	184,752,951	184,883,833	184,752,485	184,705,503
12/31/2015	177,284,933	181,084,061	181,187,579	181,662,577	
12/31/2016	228,360,717	233,053,109	233,235,102		
12/31/2017	241,691,033	247,462,565			
12/31/2018	232,734,585				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2007	1.025	0.998	0.999	1.000
12/31/2008	1.019	1.000	1.000	1.000
12/31/2009	1.015	1.002	1.001	1.000
12/31/2010	1.019	1.001	0.999	1.001
12/31/2011	1.016	1.001	1.000	1.000
12/31/2012	1.020	1.000	1.000	1.001
12/31/2013	1.024	1.003	1.002	1.000
12/31/2014	1.025	1.001	0.999	1.000
12/31/2015	1.021	1.001	1.003	
12/31/2016	1.021	1.001		
12/31/2017	1.024			
Average Factor: ( Best 3 of 5 )	1.023	1.001	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) =	1.002
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.025

## INSURANCE SERVICES OFFICE, INC.

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>
12/31/2007	144,728,816	144,666,655	144,653,099	144,565,639	144,586,432
12/31/2008	174,380,600	174,348,870	174,354,858	174,440,876	174,441,339
12/31/2009	143,919,576	143,918,677	143,934,901	144,011,838	144,001,352
12/31/2010	166,799,002	166,855,302	166,847,170	166,844,994	
12/31/2011	189,436,240	189,425,268	189,412,395		
12/31/2012	213,680,136	213,746,174			
12/31/2013	175,578,683				

## 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>
12/31/2007	1.001	1.000	1.000	0.999	1.000
12/31/2008	1.001	1.000	1.000	1.000	1.000
12/31/2009	0.999	1.000	1.000	1.001	1.000
12/31/2010	1.001	1.000	1.000	1.000	
12/31/2011	1.000	1.000	1.000		
12/31/2012	1.000	1.000			
12/31/2013	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

## INSURANCE SERVICES OFFICE, INC.

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>
12/31/2007	423,085,317	415,150,351	413,292,385	412,914,282	412,587,929
12/31/2008	420,539,888	413,640,818	413,017,146	412,298,354	411,379,544
12/31/2009	351,773,999	345,262,899	344,320,006	343,910,074	344,030,262
12/31/2010	376,691,346	369,039,300	367,624,184	367,541,695	367,536,589
12/31/2011	406,198,898	397,827,255	395,595,841	395,263,424	395,343,844
12/31/2012	399,816,675	393,104,795	390,822,370	390,120,621	390,294,747
12/31/2013	423,314,142	414,708,995	413,129,300	413,852,064	412,636,165
12/31/2014	467,412,929	458,132,237	455,293,072	454,900,521	454,594,817
12/31/2015	501,663,305	487,123,978	484,164,823	483,161,035	
12/31/2016	537,118,437	522,157,950	517,652,719		
12/31/2017	561,736,034	542,984,108			
12/31/2018	610,316,140				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2007	0.981	0.996	0.999	0.999
12/31/2008	0.984	0.998	0.998	0.998
12/31/2009	0.981	0.997	0.999	1.000
12/31/2010	0.980	0.996	1.000	1.000
12/31/2011	0.979	0.994	0.999	1.000
12/31/2012	0.983	0.994	0.998	1.000
12/31/2013	0.980	0.996	1.002	0.997
12/31/2014	0.980	0.994	0.999	0.999
12/31/2015	0.971	0.994	0.998	
12/31/2016	0.972	0.991		
12/31/2017	0.967			
Average Factor: ( Best 3 of 5 )	0.974	0.994	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) =	0.993
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.967

## INSURANCE SERVICES OFFICE, INC.

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>
12/31/2007	412,506,266	412,477,701	412,424,363	412,405,054	412,467,525
12/31/2008	412,408,793	412,281,298	412,245,518	412,267,846	412,365,073
12/31/2009	343,804,459	343,719,389	343,704,867	343,722,129	343,712,917
12/31/2010	367,453,193	367,364,091	367,322,826	367,298,542	
12/31/2011	395,318,329	395,347,733	395,322,899		
12/31/2012	390,285,109	390,211,607			
12/31/2013	412,541,783				

## 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>
12/31/2007	1.000	1.000	1.000	1.000	1.000
12/31/2008	1.003	1.000	1.000	1.000	1.000
12/31/2009	0.999	1.000	1.000	1.000	1.000
12/31/2010	1.000	1.000	1.000	1.000	
12/31/2011	1.000	1.000	1.000		
12/31/2012	1.000	1.000			
12/31/2013	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

## INSURANCE SERVICES OFFICE, INC.

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>
12/31/2007	46,557,889	47,282,510	47,128,139	47,159,440	47,281,418
12/31/2008	55,276,971	55,712,839	55,567,520	55,552,069	55,542,828
12/31/2009	50,559,306	50,563,933	50,561,876	50,495,364	50,488,170
12/31/2010	55,049,683	55,135,618	55,121,654	55,118,331	55,135,813
12/31/2011	71,674,738	71,778,446	71,651,334	71,690,455	71,692,691
12/31/2012	79,520,364	78,693,615	78,754,369	78,787,194	78,807,770
12/31/2013	56,923,773	57,385,208	57,603,148	57,612,663	57,604,841
12/31/2014	59,183,291	60,015,446	60,101,420	60,044,399	60,082,113
12/31/2015	50,567,693	51,119,630	51,003,475	51,024,459	
12/31/2016	63,595,106	64,222,635	64,203,403		
12/31/2017	74,529,690	74,687,286			
12/31/2018	61,735,361				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2007	1.016	0.997	1.001	1.003
12/31/2008	1.008	0.997	1.000	1.000
12/31/2009	1.000	1.000	0.999	1.000
12/31/2010	1.002	1.000	1.000	1.000
12/31/2011	1.001	0.998	1.001	1.000
12/31/2012	0.990	1.001	1.000	1.000
12/31/2013	1.008	1.004	1.000	1.000
12/31/2014	1.014	1.001	0.999	1.001
12/31/2015	1.011	0.998	1.000	
12/31/2016	1.010	1.000		
12/31/2017	1.002			
Average Factor: ( Best 3 of 5 )	1.010	1.001	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) =	1.001
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.011



## INSURANCE SERVICES OFFICE, INC.

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

Accident Year Ending	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
12/31/2007	47,213,496	47,211,461	47,210,385	47,209,023	47,223,478
12/31/2008	55,525,573	55,526,983	55,525,237	55,525,716	55,534,760
12/31/2009	50,489,215	50,489,359	50,492,986	50,498,949	50,495,252
12/31/2010	55,069,099	55,071,861	55,103,683	55,103,177	
12/31/2011	71,706,426	71,713,041	71,707,312		
12/31/2012	78,813,584	78,812,598			
12/31/2013	57,613,295				

## Ratios

Accident Year Ending	<u>75:63</u>	<u>87:75</u>	<u>99:87</u>	<u>111:99</u>	<u>123:111</u>
12/31/2007	0.999	1.000	1.000	1.000	1.000
12/31/2008	1.000	1.000	1.000	1.000	1.000
12/31/2009	1.000	1.000	1.000	1.000	1.000
12/31/2010	0.999	1.000	1.001	1.000	
12/31/2011	1.000	1.000	1.000		
12/31/2012	1.000	1.000			
12/31/2013	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

## INSURANCE SERVICES OFFICE, INC.

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>
12/31/2007	153,841,653	148,961,397	148,165,833	147,825,298	147,811,309
12/31/2008	156,139,320	150,433,560	149,723,606	149,502,649	149,464,691
12/31/2009	146,054,839	140,865,025	140,212,638	140,125,486	140,070,737
12/31/2010	148,710,771	141,537,292	140,858,894	140,667,583	140,651,206
12/31/2011	158,979,627	152,064,908	151,584,143	151,370,324	151,326,633
12/31/2012	158,782,545	152,448,680	151,778,455	151,627,278	151,571,270
12/31/2013	159,223,131	152,021,423	150,932,101	150,943,530	150,886,640
12/31/2014	165,993,306	158,855,414	158,619,370	158,380,142	158,343,002
12/31/2015	175,484,651	166,751,053	165,446,576	165,066,386	
12/31/2016	176,164,839	167,711,729	166,386,353		
12/31/2017	172,232,300	163,709,434			
12/31/2018	187,731,302				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
12/31/2007	0.968	0.995	0.998	1.000
12/31/2008	0.963	0.995	0.999	1.000
12/31/2009	0.964	0.995	0.999	1.000
12/31/2010	0.952	0.995	0.999	1.000
12/31/2011	0.957	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	0.957	0.999	0.998	1.000
12/31/2015	0.950	0.992	0.998	
12/31/2016	0.952	0.992		
12/31/2017	0.951			
Average Factor: ( Best 3 of 5 )	0.953	0.994	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) =	0.993
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	0.946

## INSURANCE SERVICES OFFICE, INC.

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>
12/31/2007	147,780,444	147,759,306	147,744,393	147,737,378	147,738,335
12/31/2008	149,429,620	149,390,005	149,380,475	149,380,012	149,372,490
12/31/2009	140,006,123	139,984,463	139,977,928	139,967,703	139,955,036
12/31/2010	140,600,658	140,587,382	140,586,764	140,588,289	
12/31/2011	151,255,385	151,225,731	151,213,338		
12/31/2012	151,524,488	151,500,822			
12/31/2013	150,847,725				

## 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>
12/31/2007	1.000	1.000	1.000	1.000	1.000
12/31/2008	1.000	1.000	1.000	1.000	1.000
12/31/2009	1.000	1.000	1.000	1.000	1.000
12/31/2010	1.000	1.000	1.000	1.000	
12/31/2011	1.000	1.000	1.000		
12/31/2012	1.000	1.000			
12/31/2013	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

## INSURANCE SERVICES OFFICE, INC.

<b>(1)</b>	<b>Public Automobiles Liability</b>	Differentials to Base Loss Cost CSL Liab	PIP
	Taxis & Limos	6.20	5.41
	School and Church Buses	0.55	0.66
	Other Buses	3.80	6.30
	Van Pools	1.50	0.72
<b>(2)</b>	<b>Public Automobiles Physical Damage</b>		
	Taxis, Limos and Van Pools		
	Other Than Collision:	1.02	
	Collision	1.27	
	School, Church, and Other Buses		
	Other Than Collision:	0.70	
	Collision	0.65	
<b>(3)</b>	<b>PIP Relativities</b>		
	Class of Business		
	TTT Covered by Workers' Compensation	0.700	
	PPT principally operated by employees	0.600	
	T&L Other Than Owner Operated	0.780	
	Van Pool Furnished by Employer	0.590	
<b>(4)</b>	<b>Specified Cause of Loss Relativity</b>	0.576	
	This factor is now being used for Private Passenger Types as well as Trucks, Tractors and Trailers.		
<b>(5)</b>	The loss cost for hired autos is set forth in Section D. It applies in all territories and is calculated as 0.15% of the statewide \$100,000 Combined Single Limit average loss cost for all Trucks, Tractors & Trailers.		

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LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
	Limit Per Person					
Limit Of Liab. \$100,000	500	1000	2000	5000	Basic Limits	
RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS						
					Not Covered By Workers' Compensation	Covered By Workers' Compensation
\$ 137	N/A	N/A	N/A	N/A	\$ 13	\$ 9
RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS						
					Not Principally Operated By Employees	Principally Operated By Employees
\$ 215	N/A	N/A	N/A	N/A	\$ 25	\$ 15
RULE 40. PUBLIC AUTO CLASSIFICATIONS – – TAXICABS AND LIMOUSINES						
					Owner Operated	Other Than Owner Operated
\$ 849	N/A	N/A	N/A	N/A	\$ 70	\$ 55
– SCHOOL AND CHURCH BUSES						
\$ 75	N/A	N/A	N/A	N/A	All Autos \$ 9	
– OTHER BUSES						
\$ 521	N/A	N/A	N/A	N/A	All Autos \$ 82	
– VAN POOLS						
\$ 206	N/A	N/A	N/A	N/A	Employer Furnished	All Other
					\$ 5	\$ 9
RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT						
\$ 358	Refer to Rule 49.				All Autos \$ 26	
<ul style="list-style-type: none"><li>For liability increased limits factors, refer to Rule 100.</li><li>For liability fleet factors, refer to Rules 22. and 39.</li><li>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 49.</li></ul>						

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LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
	Limit Per Person					
Limit Of Liab. \$100,000	500	1000	2000	5000	Basic Limits	
RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS						
					Not Covered By Workers' Compensation	Covered By Workers' Compensation
\$ 84	N/A	N/A	N/A	N/A	\$ 12	\$ 8
RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS						
					Not Principally Operated By Employees	Principally Operated By Employees
\$ 103	N/A	N/A	N/A	N/A	\$ 24	\$ 14
RULE 40. PUBLIC AUTO CLASSIFICATIONS – – TAXICABS AND LIMOUSINES						
					Owner Operated	Other Than Owner Operated
\$ 521	N/A	N/A	N/A	N/A	\$ 65	\$ 51
– SCHOOL AND CHURCH BUSES						
					All Autos	
\$ 46	N/A	N/A	N/A	N/A	\$ 8	
– OTHER BUSES						
					All Autos	
\$ 319	N/A	N/A	N/A	N/A	\$ 76	
– VAN POOLS						
					Employer Furnished	All Other
\$ 126	N/A	N/A	N/A	N/A	\$ 5	\$ 9
RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT						
					All Autos	
\$ 211	Refer to Rule 49.				\$ 24	
<ul style="list-style-type: none"><li>• For liability increased limits factors, refer to Rule 100.</li><li>• For liability fleet factors, refer to Rules 22. and 39.</li><li>• 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 49.</li></ul>						

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**NORTH DAKOTA (33)  
TERRITORY 104**

LIABILITY		MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000		Limit Per Person				Basic Limits	
	500	1000	2000	5000			
RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS							
					Not Covered By Workers' Compensation	Covered By Workers' Compensation	
\$ 160	N/A	N/A	N/A	N/A	\$ 14	\$ 10	
RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS							
					Not Principally Operated By Employees	Principally Operated By Employees	
\$ 171	N/A	N/A	N/A	N/A	\$ 26	\$ 16	
RULE 40. PUBLIC AUTO CLASSIFICATIONS – – TAXICABS AND LIMOUSINES							
					Owner Operated	Other Than Owner Operated	
\$ 992	N/A	N/A	N/A	N/A	\$ 76	\$ 59	
– SCHOOL AND CHURCH BUSES							
					All Autos		
\$ 88	N/A	N/A	N/A	N/A	\$ 9		
– OTHER BUSES							
					All Autos		
\$ 608	N/A	N/A	N/A	N/A	\$ 88		
– VAN POOLS							
					Employer Furnished	All Other	
\$ 240	N/A	N/A	N/A	N/A	\$ 6	\$ 10	
RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT							
					All Autos		
\$ 383	Refer to Rule 49.				\$ 26		
<ul style="list-style-type: none"><li>• For liability increased limits factors, refer to Rule 100.</li><li>• For liability fleet factors, refer to Rules 22. and 39.</li><li>• 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 49.</li></ul>							

LIABILITY		MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000		Limit Per Person				Basic Limits	
	500	1000	2000	5000			
RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS							
					Not Covered By Workers' Compensation	Covered By Workers' Compensation	
\$ 108	N/A	N/A	N/A	N/A	\$ 20	\$ 14	
RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS							
					Not Principally Operated By Employees	Principally Operated By Employees	
\$ 110	N/A	N/A	N/A	N/A	\$ 19	\$ 11	
RULE 40. PUBLIC AUTO CLASSIFICATIONS – – TAXICABS AND LIMOUSINES							
					Owner Operated	Other Than Owner Operated	
\$ 670	N/A	N/A	N/A	N/A	\$ 108	\$ 84	
– SCHOOL AND CHURCH BUSES							
\$ 59	N/A	N/A	N/A	N/A	All Autos \$ 13		
– OTHER BUSES							
\$ 410	N/A	N/A	N/A	N/A	All Autos \$ 126		
– VAN POOLS							
\$ 162	N/A	N/A	N/A	N/A	Employer Furnished \$ 8	All Other \$ 14	
RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT							
\$ 279	Refer to Rule 49.				All Autos \$ 38		
<ul style="list-style-type: none"><li>For liability increased limits factors, refer to Rule 100.</li><li>For liability fleet factors, refer to Rules 22. and 39.</li><li>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 49.</li></ul>							



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**NORTH DAKOTA (33)  
TERRITORY 106**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
	Limit Per Person					
Limit Of Liab. \$100,000	500	1000	2000	5000	Basic Limits	
RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS						
					Not Covered By Workers' Compensation	Covered By Workers' Compensation
\$ 129	N/A	N/A	N/A	N/A	\$ 14	\$ 10
RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS						
					Not Principally Operated By Employees	Principally Operated By Employees
\$ 119	N/A	N/A	N/A	N/A	\$ 20	\$ 12
RULE 40. PUBLIC AUTO CLASSIFICATIONS – – TAXICABS AND LIMOUSINES						
					Owner Operated	Other Than Owner Operated
\$ 800	N/A	N/A	N/A	N/A	\$ 76	\$ 59
– SCHOOL AND CHURCH BUSES						
\$ 71	N/A	N/A	N/A	N/A	All Autos \$ 9	
– OTHER BUSES						
\$ 490	N/A	N/A	N/A	N/A	All Autos \$ 88	
– VAN POOLS						
\$ 194	N/A	N/A	N/A	N/A	Employer Furnished \$ 6	All Other \$ 10
RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT						
\$ 311	Refer to Rule 49.				All Autos \$ 26	
<ul style="list-style-type: none"><li>For liability increased limits factors, refer to Rule 100.</li><li>For liability fleet factors, refer to Rules 22. and 39.</li><li>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 49.</li></ul>						

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<b>PHYSICAL DAMAGE</b> <b>Original Cost New Range</b> <b>\$15,001 – 20,000</b>			
	<b>Specified Causes Of Loss</b>	<b>Comp.</b>	<b>\$500 Ded. Coll.</b>
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>			
– Local And Intermediate – All Vehicles			
– Long Distance – Light Trucks And Trailers Used With Light Trucks			
	\$ 64	\$ 111	\$ 164
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 72	\$ 125	\$ 211
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 65	\$ 113	\$ 208
– SCHOOL AND CHURCH BUSES			
	\$ 45	\$ 78	\$ 107
– OTHER BUSES			
	\$ 45	\$ 78	\$ 107
– VAN POOLS			
	\$ 65	\$ 113	\$ 208
<ul style="list-style-type: none"> <li>• For physical damage fleet factors, refer to Rules <b>22.</b> and <b>39.</b></li> <li>• For additional coverages, refer to the Additional Coverages Table in Rules <b>23.</b> and <b>40.</b></li> <li>• For Deductible factors, refer to Rule <b>98.</b></li> <li>• For Original Cost New and Age Group factors, refer to Rule <b>101.</b></li> <li>• For Stated Amount factors, refer to Rule <b>101.</b></li> </ul>			

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**NORTH DAKOTA (33)  
TERRITORY 102**

<b>PHYSICAL DAMAGE</b> <b>Original Cost New Range</b> <b>\$15,001 – 20,000</b>			
	Specified Causes Of Loss	Comp.	\$500 Ded. Coll.
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>			
– Local And Intermediate – All Vehicles			
– Long Distance – Light Trucks And Trailers Used With Light Trucks			
	\$ 95	\$ 165	\$ 183
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 102	\$ 177	\$ 226
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 97	\$ 168	\$ 232
– SCHOOL AND CHURCH BUSES			
	\$ 67	\$ 116	\$ 119
– OTHER BUSES			
	\$ 67	\$ 116	\$ 119
– VAN POOLS			
	\$ 97	\$ 168	\$ 232
<ul style="list-style-type: none"> <li>• For physical damage fleet factors, refer to Rules <b>22.</b> and <b>39.</b></li> <li>• For additional coverages, refer to the Additional Coverages Table in Rules <b>23.</b> and <b>40.</b></li> <li>• For Deductible factors, refer to Rule <b>98.</b></li> <li>• For Original Cost New and Age Group factors, refer to Rule <b>101.</b></li> <li>• For Stated Amount factors, refer to Rule <b>101.</b></li> </ul>			

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<b>PHYSICAL DAMAGE</b> <b>Original Cost New Range</b> <b>\$15,001 – 20,000</b>			
	<b>Specified Causes Of Loss</b>	<b>Comp.</b>	<b>\$500 Ded. Coll.</b>
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>			
– Local And Intermediate – All Vehicles			
– Long Distance – Light Trucks And Trailers Used With Light Trucks			
	\$ 128	\$ 222	\$ 184
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 119	\$ 206	\$ 219
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 131	\$ 226	\$ 234
– SCHOOL AND CHURCH BUSES			
	\$ 90	\$ 155	\$ 120
– OTHER BUSES			
	\$ 90	\$ 155	\$ 120
– VAN POOLS			
	\$ 131	\$ 226	\$ 234
<ul style="list-style-type: none"> <li>• For physical damage fleet factors, refer to Rules <b>22.</b> and <b>39.</b></li> <li>• For additional coverages, refer to the Additional Coverages Table in Rules <b>23.</b> and <b>40.</b></li> <li>• For Deductible factors, refer to Rule <b>98.</b></li> <li>• For Original Cost New and Age Group factors, refer to Rule <b>101.</b></li> <li>• For Stated Amount factors, refer to Rule <b>101.</b></li> </ul>			

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**NORTH DAKOTA (33)  
TERRITORY 105**

<b>PHYSICAL DAMAGE</b> <b>Original Cost New Range</b> <b>\$15,001 – 20,000</b>			
	<b>Specified Causes Of Loss</b>	<b>Comp.</b>	<b>\$500 Ded. Coll.</b>
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>			
– Local And Intermediate – All Vehicles			
– Long Distance – Light Trucks And Trailers Used With Light Trucks			
	\$ 78	\$ 136	\$ 149
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 81	\$ 140	\$ 182
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 80	\$ 139	\$ 189
– SCHOOL AND CHURCH BUSES			
	\$ 55	\$ 95	\$ 97
– OTHER BUSES			
	\$ 55	\$ 95	\$ 97
– VAN POOLS			
	\$ 80	\$ 139	\$ 189
<ul style="list-style-type: none"> <li>• For physical damage fleet factors, refer to Rules <b>22.</b> and <b>39.</b></li> <li>• For additional coverages, refer to the Additional Coverages Table in Rules <b>23.</b> and <b>40.</b></li> <li>• For Deductible factors, refer to Rule <b>98.</b></li> <li>• For Original Cost New and Age Group factors, refer to Rule <b>101.</b></li> <li>• For Stated Amount factors, refer to Rule <b>101.</b></li> </ul>			

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<b>PHYSICAL DAMAGE</b> <b>Original Cost New Range</b> <b>\$15,001 – 20,000</b>			
	<b>Specified Causes Of Loss</b>	<b>Comp.</b>	<b>\$500 Ded. Coll.</b>
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>			
– Local And Intermediate – All Vehicles			
– Long Distance – Light Trucks And Trailers Used With Light Trucks			
	\$ 85	\$ 148	\$ 185
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 76	\$ 132	\$ 243
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 87	\$ 151	\$ 235
– SCHOOL AND CHURCH BUSES			
	\$ 60	\$ 104	\$ 120
– OTHER BUSES			
	\$ 60	\$ 104	\$ 120
– VAN POOLS			
	\$ 87	\$ 151	\$ 235
<ul style="list-style-type: none"> <li>• For physical damage fleet factors, refer to Rules <b>22.</b> and <b>39.</b></li> <li>• For additional coverages, refer to the Additional Coverages Table in Rules <b>23.</b> and <b>40.</b></li> <li>• For Deductible factors, refer to Rule <b>98.</b></li> <li>• For Original Cost New and Age Group factors, refer to Rule <b>101.</b></li> <li>• For Stated Amount factors, refer to Rule <b>101.</b></li> </ul>			

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**90. HIRED AUTOS**

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<b>Cost Of Hire Basis – All Territories Liability Base Loss Cost</b>
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\$ 0.14 <del>5</del>
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**Table 90.B.3.b.(LC) Cost Of Hire Basis Liability Loss Cost**

## Supplementary Information – North 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 North 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>
03/31/2015	+1.5%	+3.3%
06/30/2015	+2.2%	+3.5%
09/30/2015	+1.9%	+3.7%
12/31/2015	+2.3%	+4.6%
03/31/2016	+2.9%	+4.8%
06/30/2016	+2.9%	+5.2%
09/30/2016	+2.6%	+5.5%
12/31/2016	+2.7%	+5.7%
03/31/2017	+2.7%	+5.7%
06/30/2017	+2.8%	+5.6%
09/30/2017	+3.0%	+5.4%
12/31/2017	+3.8%	+4.8%
03/31/2018	+4.2%	+4.5%
06/30/2018	+4.4%	+4.3%
09/30/2018	+5.1%	+4.2%
12/31/2018	+5.5%	+4.3%

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 – North 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 Change<sup>1</sup></u>	<u>CPI – Hospital &amp; Other Related Services Annual Rate of Change</u>
October 2007 - September 2008	3.2%	6.6%
October 2008 - September 2009	3.5%	6.6%
October 2009 - September 2010	3.4%	7.3%
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%

### 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.

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<sup>1</sup> 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 – North Dakota

### North Dakota Trends

#### **Trucks, Tractors & Trailers and Private Passenger Types Liability**

	Current Trends <u>Data through 12/31/2018</u>	Previous Trends <u>Data through 12/31/2017</u>
North Dakota Claim Cost Trends		
Bodily Injury (\$100,000 Limit)	15.7%	-1.9%
Property Damage (\$100,000 Limit)	-3.6%	-6.9%
Credibility-Weighted Claim Cost Trends		
Bodily Injury (\$100,000 Limit)	5.5%	3.8%
Property Damage (\$100,000 Limit)	3.9%	4.2%
Selected Claim Frequency Trends		
Trucks, Tractors & Trailers		
Bodily Injury	0.0%	0.0%
Property Damage	0.0%	0.0%
Private Passenger Types		
Bodily Injury	0.0%	0.0%
Property Damage	0.0%	0.0%
Selected Pure Premium Trends		
Trucks, Tractors & Trailers		
Bodily Injury (\$100,000 Limit)	5.5%	3.8%
Property Damage (\$100,000 Limit)	3.9%	4.2%
Private Passenger Types		
Bodily Injury (\$100,000 Limit)	5.5%	3.8%
Property Damage (\$100,000 Limit)	3.9%	4.2%

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

If the prior trends were used to calculate the indicated changes in this document, the Truck, Tractors & Trailers Liability indication would have been -7.6% rather than -6.9%. For the Private Passenger Types coverage, the indication would have been 0.7% instead of 1.7%.

#### **No-Fault Coverage (PIP)**

	Current Trends <u>Data through 06/30/2019</u>	Previous Trends <u>Data through 06/30/2018</u>
North Dakota Claim Cost Trends		
Trucks, Tractors & Trailers	2.9%	3.8%
Private Passenger Types	2.9%	3.6%
Selected Claim Frequency Trends		
Trucks, Tractors & Trailers	0.0%	0.0%
Private Passenger Types	0.0%	0.0%
Selected Pure Premium Trends		
Trucks, Tractors & Trailers	2.9%	3.8%
Private Passenger Types	2.9%	3.6%

If the prior trends were used to calculate the indicated change in this document, the Truck, Tractors & Trailers PIP indication would have been -1.1% instead of -2.5%. For the Private Passenger Types PIP coverage, the indication would have been -0.3% rather than -1.1%.

## Supplementary Information – North Dakota

### Physical Damage Loss Trend

		Current Trends <u>Data through 12/31/2018</u>	Previous Trends <u>Data through 12/31/2017</u>
Trucks, Tractors & Trailers	<u>Coverage</u>		
	OTC	+7.0%	+7.0%
	Collision	+4.5%	+5.0%
Private Passenger Types	OTC	+6.5%	+6.5%
	Collision	+4.0%	+4.5%

### Physical Damage OCN Trend

		Current Trends <u>Data through 12/31/2018</u>	Previous Trends <u>Data through 12/31/2017</u>
Trucks, Tractors & Trailers	<u>Coverage</u>		
	OTC	+0.9%	+1.0%
	Collision	+1.5%	+1.6%
Private Passenger Types	OTC	+1.0%	+1.1%
	Collision	+0.6%	+0.6%

The loss trend has remained the same for Trucks, Tractors & Trailers OTC and Private Passenger Types OTC. The OCN trend has decreased by 0.1 points for Trucks, Tractors & Trailers OTC and has decreased by 0.1 points for Private Passenger Types OTC. If the prior loss and OCN trends were used, the Trucks, Tractors and Trailers and Private Passenger Types OTC indications in this document would have 11.6%, instead of 11.9%, for both coverages.

The loss trend has decreased by 0.5 points for Trucks, Tractors & Trailers collision and for Private Passenger Types collision. The OCN trend has decreased by 0.1 points for Trucks, Tractors, & Trailers collision and has remained the same for Private Passenger Types collision. If the prior loss and OCN trends were used, the Trucks, Tractors & Trailers and Private Passenger Types collision indications in this document would have been -5.4%, instead of -6.5%, and 4.1%, instead of 3.1%, respectively.

## Supplementary Information – North Dakota

### Loss Development

#### Methodology

For the Trucks, Tractors & Trailers and Private Passenger Types Liability coverages, we continue to employ a credibility-weighted combination of North 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. 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	1.084	1.094
27 to Ultimate	1.151	1.169
15 to Ultimate	1.265	1.357
Trucks, Tractors and Trailers PD		
39 to Ultimate	1.004	1.003
27 to Ultimate	1.013	1.011
15 to Ultimate	1.048	1.047
Private Passenger Types BI		
39 to Ultimate	1.082	1.090
27 to Ultimate	1.230	1.240
15 to Ultimate	1.632	1.543
Private Passenger Types PD		
39 to Ultimate	1.004	1.004
27 to Ultimate	1.012	1.012
15 to Ultimate	1.038	1.057

## Supplementary Information – North Dakota

### Other Factors

Unallocated Loss Adjustment Expense factors:

	<u>Data through 12/31/2017</u>	<u>Data through 12/31/2016</u>
Bodily Injury	1.075	1.080
Property Damage	1.100	1.105
Physical Damage	1.130	1.140

### Indicated vs. Filed Changes

An overall change of -2.5% is indicated when each of the coverage indications is weighted by its respective loss cost volume. Staff will file the indications, which reflect a 07/01/2020 proposed effective date, with the following exceptions:

<u>Coverage</u>	<u>Indicated Change</u>	<u>Filed Change</u>
Trucks, Tractors & Trailers PIP	-2.5%	N.C.
Private Passenger Types Liability	1.7%	N.C.
Private Passenger Types PIP	-1.1%	-10.0%

The overall filed change is -2.5%.

### Notes

- The Auto Dealers Liability and PIP coverages are not being reviewed this year.
- The Auto Dealers and Garagekeepers physical damage coverages are not being reviewed this year.
- Both of the Trucks, Tractors & Trailers and Private Passenger Types OTC indications of 11.9%, are due to the poor experience in the latest three years.