



LOSS COSTS – IMPLEMENTATION

JUNE 18, 2020

COMMERCIAL AUTOMOBILE

LI-CA-2020-260

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

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### KEY MESSAGE

Loss costs representing a +1.2% statewide change to be implemented.

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### BACKGROUND

In circular [LI-CA-2020-140](#), we provided you with information about the Commercial Auto loss cost level experience review.

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### CONSIDERATION OF COVID-19

In anticipation of long-term behavioral, social and economic changes as a result of COVID-19, we expect, based on the information currently available, that those changes will have a modest but material impact on prospective loss costs for certain risks, and in this filing we have adjusted loss costs to reflect these changes by applying a factor of 0.98 to loss costs for liability and collision.

While there is still great uncertainty around COVID-19, the above referenced adjustments do not contemplate the possibility of widespread viral resurgence or the renewal of stay-at-home orders during the period in which the newly filed loss costs will be in effect. We have assumed that any recurrence of such extreme and unpredictable circumstances would generally be addressed, as appropriate, by individual carriers.

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### ISO ACTION

We are implementing 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 Minnesota, 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

We do not establish an effective date for Commercial Auto loss costs revisions in this state. Each insurer that elects to utilize this revision is responsible for determining its own effective date.

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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 November 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 and the effective date of any rate change. If you decide to use our prospective loss costs to revise your rates, you are NOT required to file anything with the Insurance Department.

You must document your files in case the Insurance Department wishes to review the information at a later date. In all internal correspondence on this revision, you should refer to ISO Revision Designation Number CA-2020-BRLA1, NOT this circular number.

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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 11-20 (or the earliest possible subsequent date), along with any new and/or revised manual pages.

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## REFERENCE(S)

- [LI-CA-2020-140](#) (03/04/2020) Commercial Auto Experience Level Indications Reviewed By Staff
- [LI-CL-2019-057](#) (12/10/2019) Revised Lead Time Requirements Listing

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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, Rebecca Gordon, am an Actuarial Associate 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:  
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Callers outside the United States, Canada, and the Caribbean may contact us using our global toll-free number (International Access Code + 800 48977489). For information on all ISO products, visit us at [www.verisk.com/iso](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).

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

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PURPOSE

This document:

- revises the advisory prospective loss costs for the major Commercial Automobile classes. These loss costs represent a +1.2% statewide change from the loss costs currently in effect.
  - provides the analyses used to derive these advisory loss costs.
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DEFINITION OF  
THE ISO ADVISORY  
PROSPECTIVE  
LOSS COSTS

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.”

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CONSIDERATION  
OF COVID-19

In anticipation of long-term behavioral, social and economic changes as a result of COVID-19, we expect, based on the information currently available, that those changes will have a modest but material impact on prospective loss costs for certain risks, and in this filing we have adjusted loss costs to reflect these changes by applying a factor of 0.98 to loss costs for liability, PIP, and collision.

While there is still great uncertainty around COVID-19, the above referenced adjustments do not contemplate the possibility of widespread viral resurgence or the renewal of stay-at-home orders during the period in which the newly filed loss costs will be in effect. We have assumed that any recurrence of such extreme and unpredictable circumstances would generally be addressed, as appropriate, by individual carriers.

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OPTIONAL CLASS  
PLAN LOSS COSTS

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.

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CHANGE IN  
FORMAT

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-38.

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PRIVATE  
PASSENGER TYPES  
SPECIFIED CAUSES  
OF LOSS

This filing introduces a Loss Cost for Specified Causes of Loss Coverage for Private Passenger Types Vehicles.

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AUTO DEALERS  
LIABILITY AND  
PIP COVERAGES

The Auto Dealers Liability and PIP coverages are not being reviewed this year.

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	+2.9%	+0.8%
Personal Injury Protection	+1.0%	-1.0%
Physical Damage		
Other than Collision	+7.1%	+7.1%
Collision	+0.5%	-1.5%
Total Trucks, Tractors & Trailers	+2.9%	+1.1%

REVISED LOSS  
COST CHANGES  
(CONT'D)

<u>Private Passenger Types</u>		
Liability		
Single Limit Liability	+4.8%	+2.7%
Personal Injury Protection	+2.2%	+0.2%
Physical Damage		
Other than Collision	+7.8%	+7.8%
Collision	-1.9%	-3.9%
Total Private Passenger Types	+3.4%	+1.7%
<u>Grand Total</u>	+3.0%	+1.2%

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

INDICATED VS.  
FILED

Indicated changes are based on standard ISO methodology, utilizing a 10/01/2020 trend effective date. The filed loss cost level changes are the same as the indicated with the following exceptions: As mentioned on the previous page, the filed loss costs for liability, PIP, and collision have been adjusted by a factor of 0.98 to reflect the impact of COVID-19.

PRIOR ISO  
REVISIONS

The latest selected revisions in this state are:

<u>Filing</u>	CA-2019-BRLA1	CA-2018-BRLA1	CA-2017-BRLA1
Rate Level/ Loss Costs	Loss Costs	Loss Costs	Loss Costs
Effective Date	10/01/2019	10/01/2018	10/01/2017
<u>Changes</u>			
Indicated	+5.0%	+6.3%	+4.3%
Filed	+4.8%	+6.0%	+3.6%
Approved	+4.8%	+6.0%	+3.6%

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.

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HISTORICAL  
SOURCE DATA  
(CONT'D)

- Accident year data through year ended 3/31/2019 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	+3.0%
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.

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TEN LARGEST  
COMPANIES/  
GROUPS  
IN THIS REVIEW

LIABILITY (ASLOB 19.3 & 19.4)

1. Travelers Indemnity Company
2. Western National Mutual Ins. Co.
3. Employers Mutual Casualty Company
4. Federated Mutual Insurance Company
5. Cincinnati Insurance Company
6. Nationwide Mutual Insurance Co.
7. Hartford Accident & Indemnity Co.
8. Liberty Mutual Insurance Company
9. Selective Insurance Co. of America
10. Westfield Insurance Company

PHYSICAL DAMAGE (ASLOB 21.2)

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

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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)  
33.9%

Physical Damage (ASLOB 21.2)  
29.2%

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COMPANY  
DECISION

We encourage each insurer to decide independently whether the judgments made and the procedures or data used by ISO in developing the loss costs contained herein are appropriate for its use. We have included within this document the information upon which ISO relied in order to make such independent judgments.

The data underlying the enclosed material comes from companies reporting to Insurance Services Office, Inc. Therefore, the ISO experience permits the establishment of a much broader statistical ratemaking base than could be employed by using any individual company's data. A broader data base enhances the validity of ratemaking analysis derived therefrom. At the same time, however, an individual company may benefit from a comparison of its own experience to the aggregate ISO experience, and may reach valid conclusions with respect to the manner in which its own costs can be expected to differ from ISO's projections based on the aggregate data.

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

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

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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.

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**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."

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**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.

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**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.

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## OVERVIEW OF ISO ACTUARIAL PROCEDURES – COMMERCIAL AUTOMOBILE

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

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

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**DESCRIPTION** This procedure compares the developed and trended incurred losses and loss adjustment expenses with the aggregate loss costs at current ISO loss cost level, which is the aggregate amount that would have been collected if the current ISO loss costs were used during the experience period. This experience ratio (losses and all loss adjustment expenses divided by aggregate loss costs) is calculated for several years and a weighted average is calculated. The weights are determined as a function of the credibility or volume of claim experience. The average experience ratio is then credibility weighted with the expected experience ratio in order to minimize the impact of random variation in the observed losses. This credibility weighted experience ratio is the indicated statewide advisory loss cost level change in decimal form.

---

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

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

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

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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.

---

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

---

**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.

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

---

COLUMN (1)  
EARNED CAR  
YEARS

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

---

COLUMN (2)  
\$100,000 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.

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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)]

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COLUMN (5)  
CREDIBILITY

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

---

COLUMN (6)  
FORMULA  
EXPERIENCE  
RATIO

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

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

---

COLUMN (7)  
INDEX TO  
STATE

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

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

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

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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.

---

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

---

COLUMN (1)  
EARNED CAR  
YEARS

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

---

COLUMN (2)  
UNDERLYING  
LOSS COST

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

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

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

---

COLUMN (7)  
INDEX TO  
STATE

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

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

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

---

COLUMN (8)  
BASE CLASS  
LOSS COST

Present ISO base class loss cost.

---

COLUMN (9)  
INDICATED BASE  
LOSS COST

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

---

COLUMN (10)  
REVISED BASE  
LOSS COST

Revised base loss cost.

---

COLUMN (11)  
ADVISORY  
LOSS COST  
CHANGE

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

---

## LOSS ADJUSTMENT EXPENSE FACTORS

---

### OBJECTIVE

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

---

### LIABILITY COVERAGES

For the liability coverages, allocated loss adjustment expenses are reported in detail to ISO under the Commercial Statistical Plan. Unallocated loss adjustment expenses must be loaded into the losses. A factor representing the ratio of the sum of the incurred indemnity losses plus all LAE to the sum of the incurred indemnity losses plus allocated LAE was selected based on multistate financial data from a Special Call Submission for available writers.

---

### PHYSICAL DAMAGE COVERAGES

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

---

## AVERAGE ANNUAL CHANGE IN LOSSES (LOSS TREND)

---

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

---

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

---

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

---

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

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

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

---

LIABILITY:  
FREQUENCY  
TREND

---

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

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

---

PHYSICAL  
DAMAGE:  
LOSS TREND

Data Selections

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

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

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

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

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

- Wind and Water losses are removed from our Other Than Collision trend reviews due to the high variability of these types of losses from year to year.

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:

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

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

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

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

PHYSICAL  
DAMAGE:  
LOSS TREND  
(CONT'D)

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

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

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

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

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

	Year 1		Year 2	
	Glass	Fire	Glass	Fire
Type of Loss				
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
	<u>R-Squared</u>	<u>Average Annual Change</u>
16 Point Fit	0.9857	2.8%
12 Point Fit	0.9724	2.9%

## PHYSICAL DAMAGE OCN TREND

---

### 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.

---

### 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.

---

## 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 June 30, 2019. In other words, accident year ended March 31, 2019 includes all losses and allocated loss adjustment expenses paid through June 30, 2019 on accidents occurring from April 1, 2018 to March 31, 2019 and all losses and allocated loss adjustment expenses outstanding on these accidents as of June 30, 2019, 15 months after the inception of the accident year. Similarly, the incurred losses and allocated loss adjustment expenses for accident year ended March 31, 2018 include all loss and loss adjustment expenses paid through June 30, 2019 on accidents occurring from April 1, 2017 to March 31, 2018 and all losses and allocated loss adjustment expenses outstanding on these accidents as of June 30, 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** For Bodily Injury Coverage, states are divided into two multistate groups. One group (No-Fault) consists of states with a no-fault law that has a tort threshold. The other group (Tort) contains the remaining states. The applicable multistate group for this state is used in this document. Losses are developed up to 123 months and are based on \$100,000 CSL data. Three-year averages for Trucks, Tractors & Trailers and Private Passenger Types are calculated for each link ratio based on a "best three of five" approach. Specifically, for the latest five years, the highest and lowest ratios were removed from the calculation and the three year average was calculated using the three remaining factors. Beyond 123 months the loss development is assumed to be unity.

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

---

STATE  
CREDIBILITY  
WEIGHTED  
FACTORS

For Trucks, Tractors & Trailers and Private Passenger Types, statewide loss development factors are credibility weighted with multistate factors. A Bayesian credibility study was done on state 15 to 27 months and 27 to 39 months loss development factors. The study concluded that there is significant statewide variation for bodily injury through 39 months and for property damage through 27 months. For these link ratios, statewide credibility is determined by the formula  $Z = L/(L+K)$ , where Z is the credibility, and L is the 3-year total losses for the particular state (at the earliest of the two evaluations). The complement of credibility is assigned to multistate loss development factors. K is a constant that varies by coverage as follows:

Trucks, Tractors & Trailers

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

Private Passenger Types

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

TRUCKS,  
TRACTORS &  
TRAILERS AND  
PRIVATE  
PASSENGER  
TYPES

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

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

## LOSS DEVELOPMENT FOR PHYSICAL DAMAGE

---

OBJECTIVE	The application of loss development recognizes the important concept that some of the losses for a particular accident year have not been finally determined at the time the experience is compiled.
DESCRIPTION OF EXPERIENCE PERIOD DATA	For Physical Damage, paid losses underlying the statewide loss cost level indications are on an accident year basis and were evaluated as of June 30, 2019. In other words, accident year ended March 31, 2019 includes all losses paid through June 30, 2019 on accidents occurring from April 1, 2018 to March 31, 2019. Similarly, the paid losses for accident year ended March 31, 2018 include all losses paid through June 30, 2019 on accidents occurring from April 1, 2017 to March 31, 2018. 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.

---

## CREDIBILITY PROCEDURE FOR EXPERIENCE LOSS RATIO

---

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

---

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

---

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

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

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

---

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

---

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

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

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

Step 2: Determine the Experience Period Credibility

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

COMMERCIAL AUTOMOBILE 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

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

ALL LIABILITY COVERAGES  
CREDIBILITY TABLE  
NUMBER OF CLAIMS

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

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

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

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

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

COLLISION

Cred	<u>Trucks, Tractors &amp; Trailers</u>			<u>Private Passenger Types</u>		
	0.00*	0	-	11	0	-
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.

MINNESOTA  
CLAIMS PER TERRITORY  
LIABILITY AND PIP

Territory	Trucks, Tractors & Trailers Incurred Claims 5 Years Ending 3/31/2019		Private Passenger Types Incurred Claims 5 Years Ending 3/31/2019	
	Combined BI and PD	PIP	Combined BI and PD	PIP
101	1,781	56	497	66
103	193	16	48	3
104	125	11	11	0
105	1,371	66	326	52
108	855	28	196	35
109	952	45	158	29
112	936	51	178	37
113	1,233	60	185	39
114	227	11	20	4
115	265	9	54	9
116	794	39	141	15
117	1,244	54	174	32
118	29	1	6	0
119	57	1	4	1
120	117	0	17	5
121	72	3	7	2
122	208	7	34	4
123	290	19	68	6
124	50	0	8	0
SW Total	10,799	477	2,132	339

Claims for Trend

BI	PD
<u>431</u>	<u>2,824</u>

MINNESOTA  
CLAIMS PER TERRITORY  
PHYSICAL DAMAGE

Territory	Trucks, Tractors & Trailers Paid Claims 5 Years Ending 3/31/2019		Private Passenger Types Paid Claims 5 Years Ending 3/31/2019	
	OTC	Coll	OTC	Coll
101	876	778	504	591
103	240	150	128	71
104	201	96	53	15
105	998	704	535	405
108	478	453	207	233
109	709	482	267	199
112	1,647	766	395	196
113	1,400	692	400	179
114	298	153	78	34
115	509	182	161	54
116	1,060	567	305	118
117	979	637	290	200
118	23	25	5	2
119	37	39	4	8
120	235	78	52	32
121	67	40	12	9
122	140	116	41	48
123	268	209	164	94
124	39	32	15	8
SW Total	10,204	6,199	3,616	2,496

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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INSURANCE SERVICES OFFICE, INC.

WIND AND WATER PROCEDURE  
OTHER THAN COLLISION  
MINNESOTA

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	183,023	1,260,909	1,077,886	0.170	0.017	18,324	1,279,233
1988	176,330	1,592,777	1,416,447	0.124	0.063	89,236	1,682,013
1989	93,069	1,848,860	1,755,791	0.053	0.134	235,276	2,084,136
1990	176,463	2,151,999	1,975,536	0.089	0.098	193,603	2,345,602
1991	123,491	2,326,401	2,202,910	0.056	0.131	288,581	2,614,982
1992	187,123	2,545,170	2,358,047	0.079	0.108	254,669	2,799,839
1993	129,062	2,238,477	2,109,415	0.061	0.126	265,786	2,504,263
1994	235,980	2,543,650	2,307,670	0.102	0.085	196,152	2,739,802
1995	194,447	2,877,279	2,682,832	0.072	0.115	308,526	3,185,805
1996	218,741	3,653,144	3,434,403	0.064	0.123	422,432	4,075,576
1997	299,141	4,391,527	4,092,386	0.073	0.114	466,532	4,858,059
1998	768,648	6,257,879	5,489,231	0.140	0.047	257,994	6,515,873
1999	5,495,832	12,096,994	6,601,162	0.833	-0.646	-4,264,351	7,832,643
2000	716,461	7,264,283	6,547,822	0.109	0.078	510,730	7,775,013
2001	1,229,036	8,172,173	6,943,137	0.177	0.010	69,431	8,241,604
2002	1,800,764	7,465,822	5,665,058	0.318	-0.131	-742,123	6,723,699
2003	279,523	4,255,318	3,975,795	0.070	0.117	465,168	4,720,486
2004	142,065	2,262,877	2,120,812	0.067	0.120	254,497	2,517,374
2005	157,374	2,162,989	2,005,615	0.078	0.109	218,612	2,381,601
2006	474,974	3,065,722	2,590,748	0.183	0.004	10,363	3,076,085
2007	897,024	3,361,530	2,464,506	0.364	-0.177	-436,218	2,925,312
2008	969,811	3,620,098	2,650,287	0.366	-0.179	-474,401	3,145,697
2009	1,506,039	4,233,499	2,727,460	0.552	-0.365	-995,523	3,237,976
2010	210,938	3,033,280	2,822,342	0.075	0.112	316,102	3,349,382
2011	1,048,363	4,775,530	3,727,167	0.281	-0.094	-350,354	4,425,176
2012	614,206	3,685,705	3,071,499	0.200	-0.013	-39,929	3,645,776
2013	668,795	3,493,114	2,824,319	0.237	-0.050	-141,216	3,351,898
2014	586,694	2,998,419	2,411,725	0.243	-0.056	-135,057	2,863,362
2015	378,455	4,066,712	3,688,257	0.103	0.084	309,814	4,376,526
2016	539,032	4,863,865	4,324,833	0.125	0.062	268,140	5,132,005
2017	819,937	5,078,260	4,258,323	0.193	-0.006	-25,550	5,052,710
2018	1,676,078	6,418,190	4,742,112	0.353	-0.166	-787,191	5,630,999
2019	700,765	5,516,792	4,816,027	0.146	0.041	197,457	5,714,249

(8) NORMAL WIND TO NON W&W RATIO= AVG. (4) 0.187

INSURANCE SERVICES OFFICE, INC.

WIND AND WATER PROCEDURE  
OTHER THAN COLLISION  
MINNESOTA

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	179,311	1,125,077	945,766	0.190	0.114	107,817	1,232,894
1988	272,279	1,515,364	1,243,085	0.219	0.085	105,662	1,621,026
1989	145,569	1,335,523	1,189,954	0.122	0.182	216,572	1,552,095
1990	215,783	1,548,085	1,332,302	0.162	0.142	189,187	1,737,272
1991	115,081	1,614,521	1,499,440	0.077	0.227	340,373	1,954,894
1992	161,364	1,527,603	1,366,239	0.118	0.186	254,120	1,781,723
1993	82,016	1,443,331	1,361,315	0.060	0.244	332,161	1,775,492
1994	105,933	1,608,374	1,502,441	0.071	0.233	350,069	1,958,443
1995	213,907	1,663,557	1,449,650	0.148	0.156	226,145	1,889,702
1996	191,634	1,655,739	1,464,105	0.131	0.173	253,290	1,909,029
1997	223,512	1,877,412	1,653,900	0.135	0.169	279,509	2,156,921
1998	463,481	2,315,585	1,852,104	0.250	0.054	100,014	2,415,599
1999	4,575,751	7,177,869	2,602,118	1.758	-1.454	-3,783,480	3,394,389
2000	354,974	2,813,501	2,458,527	0.144	0.160	393,364	3,206,865
2001	772,406	3,131,354	2,358,948	0.327	-0.023	-54,256	3,077,098
2002	844,108	3,099,333	2,255,225	0.374	-0.070	-157,866	2,941,467
2003	184,998	1,653,713	1,468,715	0.126	0.178	261,431	1,915,144
2004	58,147	827,502	769,355	0.076	0.228	175,413	1,002,915
2005	67,649	809,984	742,335	0.091	0.213	158,117	968,101
2006	329,813	1,283,008	953,195	0.346	-0.042	-40,034	1,242,974
2007	475,916	1,290,522	814,606	0.584	-0.280	-228,090	1,062,432
2008	375,583	1,097,658	722,075	0.520	-0.216	-155,968	941,690
2009	848,446	1,726,614	878,168	0.966	-0.662	-581,347	1,145,267
2010	68,467	945,429	876,962	0.078	0.226	198,193	1,143,622
2011	464,471	1,481,462	1,016,991	0.457	-0.153	-155,600	1,325,862
2012	241,892	1,119,644	877,752	0.276	0.028	24,577	1,144,221
2013	335,600	1,399,286	1,063,686	0.316	-0.012	-12,764	1,386,522
2014	552,114	1,424,018	871,904	0.633	-0.329	-286,856	1,137,162
2015	239,997	1,291,266	1,051,269	0.228	0.076	79,896	1,371,162
2016	300,893	1,345,618	1,044,725	0.288	0.016	16,716	1,362,334
2017	182,784	1,256,463	1,073,679	0.17	0.134	143,873	1,400,336
2018	467,918	1,558,811	1,090,893	0.429	-0.125	-136,362	1,422,449
2019	179,769	1,263,166	1,083,397	0.166	0.138	149,509	1,412,675

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

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).

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COLUMN (2)  
OTC TOTAL  
LOSSES

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

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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.  $\text{Column (2)} - \text{Column (1)}$ .

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

Ratio of Wind and Water losses to Non-Wind and Water losses.  
 $\text{Column (1)} \div \text{Column (3)}$

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COLUMN (5)  
VARIATION FROM  
AVERAGE WIND  
RATIO

Variation from the long term average Wind and Water to non-Wind and Water ratio.  
 $\text{Avg (4)} - \text{Column (4)}$ .

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COLUMN (6)  
WIND AND WATER  
ADJUSTMENT

Wind and Water loss adjustment to bring experience to average Wind and Water level.  
 $\text{Column (3)} * \text{Column (5)}$ .

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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.

---

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 & WATER PROVISIONS' BY TERRITORY

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

Territory	(1) Long-Term Capped* Ratio of Wind & Water to Non-Wind & Water Losses	(2) Non-Wind & Water Losses for Latest Five Years	(3) 'Expected' Wind & Water Losses for Latest Five Years (1) x (2)	(4) 'Expected' Wind & Water Distribution (3) / Total (3)
A	.250	500,000	125,000	.500
B	.750	100,000	75,000	.300
C	.200	250,000	50,000	.200

Territory	(5) Statewide Wind Provision for Year 20XX **	(6) Territory Wind Provision for Year 20XX (4) x (5)	(7) Non-Wind & Water Losses for Year 20XX	(8) Adjusted Total Losses for Year 20XX (6) + (7)
A	100,000	50,000	150,000	200,000
B		30,000	50,000	80,000
C		20,000	80,000	100,000

Territory	(9) Non-Wind & Water Claims for Year 20XX	(10) Five-Year Average Wind & Water Claim Cost	(11) Adjusted Wind & Water Claims for Year 20XX (6) / (10)	(12) Total Adjusted Claims for Year 20XX (9) + (11)
A	200	500	100	300
B	100	400	75	175
C	150	400	50	200

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

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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	\$ 30,539,710	0.8%
Personal Injury Protection	1,180,083	-1.0%
Combined	31,719,793	0.7%
Physical Damage		
Other Than Collision	7,576,837	7.1%
Collision	13,028,996	-1.5%
Combined	20,605,833	1.7%
<b>Total Trucks, Tractors &amp; Trailers</b>	<b>52,325,626</b>	<b>1.1%</b>
<b>PRIVATE PASSENGER TYPES</b>		
Liability		
Single Limit Liability	4,710,176	2.7%
Personal Injury Protection	647,950	0.2%
Combined	5,358,126	2.4%
Physical Damage		
Other Than Collision	1,764,231	7.8%
Collision	2,563,537	-3.9%
Combined	4,327,768	0.9%
<b>Total Private Passenger Types</b>	<b>9,685,894</b>	<b>1.7%</b>
<b>GRAND TOTAL ALL COVERAGES</b>	<b>62,011,520</b>	<b>1.2%</b>
<b>TOTAL LIABILITY</b>	<b>37,077,919</b>	<b>1.0%</b>
<b>TOTAL PHYSICAL DAMAGE</b>	<b>24,933,601</b>	<b>1.5%</b>

(A) An implementation date of 10/01/2020 is assumed for purposes of trending.

(B) Accident Year ending 03/31/2019 Aggregate Loss Cost at Current Level for all coverages. The Liability loss costs are on a Total Limits basis.

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

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR TRUCKS, TRACTORS, AND TRAILERS POLICY COVERAGES

Territory Code	\$100,000 CSL	
	Liability	PIP
101	6.4%	-2.6%
103	0.0%	0.0%
104	3.0%	0.0%
105	-0.3%	0.0%
108	-2.2%	-2.8%
109	6.7%	0.0%
112	-1.8%	0.0%
113	-0.6%	-3.4%
114	0.0%	0.0%
115	3.0%	0.0%
116	-2.8%	0.0%
117	0.0%	0.0%
118	0.6%	0.0%
119	1.6%	0.0%
120	0.0%	0.0%
121	0.0%	0.0%
122	3.8%	0.0%
123	1.6%	0.0%
124	1.9%	0.0%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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	2.5%	1.7%	2.9%
103	5.0%	-0.5%	4.3%
104	8.0%	0.0%	7.9%
105	10.1%	-2.8%	10.8%
108	5.8%	0.0%	5.7%
109	6.6%	-2.7%	7.7%
112	9.7%	-7.0%	9.9%
113	5.1%	0.6%	5.0%
114	7.4%	-8.3%	7.8%
115	17.0%	0.0%	17.3%
116	5.5%	2.2%	4.8%
117	5.0%	1.2%	4.9%
118	7.4%	0.6%	7.1%
119	4.9%	1.8%	4.9%
120	9.4%	-1.4%	10.1%
121	5.3%	-2.5%	5.3%
122	9.1%	-5.1%	8.6%
123	8.9%	-6.6%	9.0%
124	8.8%	-2.1%	9.2%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR TRUCKS, TRACTORS, AND TRAILERS POLICY COVERAGES

Territory Code	Liability \$100,000 CSL	PIP	Physical Damage		Specified Causes of Loss (c)
			Comprehensive (a)	Collision (b)	
101	316	37	125	175	72
103	176	29	169	196	97
104	139	32	190	186	109
105	318	31	142	175	82
108	264	35	128	175	74
109	302	39	145	183	84
112	108	17	192	185	111
113	179	28	184	172	106
114	137	19	217	187	125
115	104	15	165	161	95
116	138	18	153	188	88
117	267	31	148	172	85
118	158	19	131	160	75
119	185	19	150	173	86
120	140	19	151	146	87
121	141	19	139	158	80
122	138	20	132	169	76
123	194	23	147	185	85
124	157	19	123	141	71

(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.

MINNESOTA  
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	PIP
101	7.2%	-1.1%
103	0.0%	0.0%
104	2.5%	-1.3%
105	3.1%	5.3%
108	1.9%	3.3%
109	-0.9%	1.4%
112	1.3%	-2.1%
113	0.6%	1.7%
114	1.9%	0.0%
115	2.9%	-3.2%
116	0.6%	-3.5%
117	3.0%	0.0%
118	2.4%	0.0%
119	2.4%	0.0%
120	1.7%	0.0%
121	2.0%	0.0%
122	5.1%	0.0%
123	0.0%	0.0%
124	2.3%	0.0%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR PRIVATE PASSENGER TYPES POLICY COVERAGES

Territory Code	Physical Damage		Specified Causes of Loss (a)
	Comprehensive	Collision	
101	5.5%	-2.4%	
103	7.4%	-6.3%	
104	11.2%	-5.9%	
105	8.2%	-4.6%	
108	7.1%	0.6%	
109	6.0%	-5.7%	
112	9.9%	-6.8%	
113	7.3%	-5.0%	
114	7.5%	-5.3%	
115	9.9%	-2.8%	
116	8.6%	-5.3%	
117	8.9%	-3.5%	
118	8.2%	-4.2%	
119	8.2%	-4.3%	
120	9.2%	-2.4%	
121	7.8%	-6.5%	
122	7.9%	-3.3%	
123	8.7%	-6.7%	
124	8.2%	-4.4%	

- (a) This filing introduces a loss cost for Specified Causes of Loss coverage for Private Passenger Types vehicles, so there is no loss cost level change to list.

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR PRIVATE PASSENGER TYPES POLICY COVERAGES

Territory Code	Liability \$100,000 CSL	PIP	Physical Damage		Specified Causes of Loss (c)
			Comprehensive (a)	Collision (b)	
101	268	88	115	331	66
103	211	54	174	326	100
104	165	75	198	285	114
105	231	60	119	251	69
108	275	95	121	355	70
109	224	70	124	246	71
112	162	47	200	221	115
113	176	60	177	245	102
114	158	60	215	248	124
115	176	60	210	206	121
116	162	55	151	195	87
117	209	92	147	223	85
118	214	49	119	207	69
119	214	49	105	221	60
120	184	49	131	207	75
121	205	49	139	200	80
122	225	51	164	293	94
123	208	64	150	263	86
124	218	62	105	238	60

(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.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR VAN POOLS POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	PIP
101	6.3%	-4.2%
103	0.0%	0.0%
104	3.0%	0.0%
105	-0.4%	0.0%
108	-2.2%	0.0%
109	6.6%	0.0%
112	-1.8%	0.0%
113	-0.4%	-5.6%
114	0.0%	0.0%
115	2.6%	0.0%
116	-2.8%	0.0%
117	0.0%	0.0%
118	0.4%	0.0%
119	1.8%	0.0%
120	0.0%	0.0%
121	0.0%	0.0%
122	3.5%	0.0%
123	1.4%	0.0%
124	2.2%	0.0%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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
	Comprehensive	Collision	of Loss
101	3.2%	1.8%	2.8%
103	4.9%	-0.4%	4.2%
104	7.8%	0.0%	7.8%
105	9.8%	-3.1%	12.0%
108	6.5%	0.0%	5.6%
109	6.5%	-2.9%	7.5%
112	9.5%	-7.1%	9.7%
113	5.0%	0.5%	4.9%
114	7.3%	-8.5%	8.5%
115	16.7%	0.0%	16.9%
116	5.4%	2.1%	4.7%
117	4.9%	0.9%	4.8%
118	8.1%	0.5%	8.5%
119	4.8%	1.9%	4.8%
120	9.2%	-1.6%	9.9%
121	5.2%	-2.4%	5.1%
122	9.8%	-4.9%	9.9%
123	8.7%	-6.4%	8.7%
124	8.7%	-2.2%	9.1%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR VAN POOLS POLICY COVERAGES

Territory Code	Liability	PIP (b)	Physical Damage		Specified Causes of Loss (e)
	\$100,000 CSL (a)		Comprehensive (c)	Collision (d)	
101	474	23	128	222	73
103	264	18	172	249	99
104	209	20	194	236	111
105	477	19	145	222	84
108	396	22	131	222	75
109	453	24	148	232	86
112	162	11	196	235	113
113	269	17	188	218	108
114	206	12	221	237	128
115	156	9	168	204	97
116	207	11	156	239	90
117	401	19	151	218	87
118	237	12	134	203	77
119	278	12	153	220	88
120	210	12	154	185	89
121	212	12	142	201	82
122	207	12	135	215	78
123	291	14	150	235	87
124	236	12	125	179	72

- (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 0.62 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.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR TAXIS AND LIMOUSINES POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	PIP
101	6.4%	-2.2%
103	0.0%	0.0%
104	3.0%	0.0%
105	-0.3%	0.0%
108	-2.2%	-3.0%
109	6.7%	0.0%
112	-1.8%	0.0%
113	-0.5%	-3.7%
114	0.0%	0.0%
115	3.0%	0.0%
116	-2.7%	0.0%
117	0.0%	0.0%
118	0.7%	0.0%
119	1.7%	0.0%
120	0.0%	0.0%
121	0.0%	0.0%
122	3.8%	0.0%
123	1.6%	0.0%
124	1.9%	0.0%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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
	Comprehensive	Collision	of Loss
101	3.2%	1.8%	2.8%
103	4.9%	-0.4%	4.2%
104	7.8%	0.0%	7.8%
105	9.8%	-3.1%	12.0%
108	6.5%	0.0%	5.6%
109	6.5%	-2.9%	7.5%
112	9.5%	-7.1%	9.7%
113	5.0%	0.5%	4.9%
114	7.3%	-8.5%	8.5%
115	16.7%	0.0%	16.9%
116	5.4%	2.1%	4.7%
117	4.9%	0.9%	4.8%
118	8.1%	0.5%	8.5%
119	4.8%	1.9%	4.8%
120	9.2%	-1.6%	9.9%
121	5.2%	-2.4%	5.1%
122	9.8%	-4.9%	9.9%
123	8.7%	-6.4%	8.7%
124	8.7%	-2.2%	9.1%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR TAXIS AND LIMOUSINES POLICY COVERAGES

Territory Code	Liability \$100,000 CSL (a)	PIP (b)	Physical Damage		Specified Causes of Loss (e)
			Comprehensive (c)	Collision (d)	
101	1959	174	128	222	73
103	1091	136	172	249	99
104	862	150	194	236	111
105	1972	145	145	222	84
108	1637	164	131	222	75
109	1872	183	148	232	86
112	670	80	196	235	113
113	1110	131	188	218	108
114	849	89	221	237	128
115	645	70	168	204	97
116	856	84	156	239	90
117	1655	145	151	218	87
118	980	89	134	203	77
119	1147	89	153	220	88
120	868	89	154	185	89
121	874	89	142	201	82
122	856	94	135	215	78
123	1203	108	150	235	87
124	973	89	125	179	72

- (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 4.69 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.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR SCHOOL AND CHURCH BUSES POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	PIP
101	6.7%	-4.5%
103	0.0%	0.0%
104	2.7%	0.0%
105	0.0%	0.0%
108	-2.7%	-4.8%
109	6.4%	0.0%
112	-3.3%	0.0%
113	-1.0%	-5.9%
114	0.0%	0.0%
115	1.8%	0.0%
116	-2.6%	0.0%
117	0.0%	0.0%
118	1.2%	0.0%
119	2.0%	0.0%
120	0.0%	0.0%
121	0.0%	0.0%
122	4.1%	0.0%
123	1.9%	0.0%
124	1.2%	0.0%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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	3.5%	1.8%	2.0%
103	4.4%	-0.8%	4.6%
104	8.1%	0.0%	7.0%
105	10.0%	-2.6%	9.6%
108	5.9%	0.0%	6.1%
109	7.4%	-2.5%	7.3%
112	8.9%	-7.0%	9.9%
113	4.9%	0.9%	4.2%
114	7.8%	-8.3%	8.6%
115	17.2%	0.0%	17.5%
116	4.9%	1.7%	5.1%
117	5.1%	0.9%	5.3%
118	8.2%	1.0%	8.2%
119	5.0%	0.9%	5.3%
120	9.3%	-1.0%	10.9%
121	5.4%	-1.9%	5.7%
122	8.2%	-5.2%	8.2%
123	8.4%	-7.0%	9.1%
124	8.9%	-2.1%	8.7%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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 of Loss (e)
	\$100,000 CSL (a)	PIP (b)	Comprehensive (c)	Collision (d)	
101	174	21	88	114	50
103	97	17	118	127	68
104	76	18	133	121	76
105	175	18	99	114	57
108	145	20	90	114	52
109	166	22	102	119	59
112	59	10	134	120	78
113	98	16	129	112	74
114	75	11	152	122	88
115	57	9	116	105	67
116	76	10	107	122	62
117	147	18	104	112	60
118	87	11	92	104	53
119	102	11	105	112	60
120	77	11	106	95	61
121	78	11	97	103	56
122	76	11	92	110	53
123	107	13	103	120	60
124	86	11	86	92	50

- (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 0.57 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.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR ALL OTHER BUSES POLICY COVERAGES

Territory Code	\$100,000 CSL Liability	PIP
101	6.4%	-2.4%
103	0.0%	0.0%
104	2.9%	0.0%
105	-0.3%	0.0%
108	-2.2%	-3.0%
109	6.8%	0.0%
112	-1.9%	0.0%
113	-0.6%	-3.2%
114	0.0%	0.0%
115	2.9%	0.0%
116	-3.0%	0.0%
117	0.0%	0.0%
118	0.5%	0.0%
119	1.6%	0.0%
120	0.0%	0.0%
121	0.0%	0.0%
122	3.8%	0.0%
123	1.5%	0.0%
124	2.1%	0.0%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE

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

FOR ALL OTHER BUSES POLICY COVERAGES

Territory Code	Physical Damage		Specified Causes
	Comprehensive	Collision	of Loss
101	3.5%	1.8%	2.0%
103	4.4%	-0.8%	4.6%
104	8.1%	0.0%	7.0%
105	10.0%	-2.6%	9.6%
108	5.9%	0.0%	6.1%
109	7.4%	-2.5%	7.3%
112	8.9%	-7.0%	9.9%
113	4.9%	0.9%	4.2%
114	7.8%	-8.3%	8.6%
115	17.2%	0.0%	17.5%
116	4.9%	1.7%	5.1%
117	5.1%	0.9%	5.3%
118	8.2%	1.0%	8.2%
119	5.0%	0.9%	5.3%
120	9.3%	-1.0%	10.9%
121	5.4%	-1.9%	5.7%
122	8.2%	-5.2%	8.2%
123	8.4%	-7.0%	9.1%
124	8.9%	-2.1%	8.7%

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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 \$100,000 CSL (a)	PIP (b)	Physical Damage		Specified Causes of Loss (e)
			Comprehensive (c)	Collision (d)	
101	1201	202	88	114	50
103	669	158	118	127	68
104	528	175	133	121	76
105	1208	169	99	114	57
108	1003	191	90	114	52
109	1148	213	102	119	59
112	410	93	134	120	78
113	680	153	129	112	74
114	521	104	152	122	88
115	395	82	116	105	67
116	524	98	107	122	62
117	1015	169	104	112	60
118	600	104	92	104	53
119	703	104	105	112	60
120	532	104	106	95	61
121	536	104	97	103	56
122	524	109	92	110	53
123	737	126	103	120	60
124	597	104	86	92	50

- (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 5.46 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.

MINNESOTA  
 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
03/31/17	\$19,607,660	\$22,258,551	1.135	20%	2,278
03/31/18	\$19,551,533	\$19,041,337	0.974	30%	2,146
03/31/19	\$19,195,292	\$19,368,324	1.009	50%	2,134

(6) AVERAGE EXPERIENCE RATIO (SUM OF (3)\*(4)). 1.024

(7) EXPECTED EXPERIENCE RATIO (D). 1.045

(8) CREDIBILITY (E). 0.75

(9) CREDIBILITY WEIGHTED EXPERIENCE RATIO:  
 ( (6) \* (8) ) + ( (7) \* (1.000 - (8)) ). 1.029

(10) INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ). 2.9%

(11) SELECTED CHANGE. 2.9%

(12) FILED CHANGE. 0.8%

(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 10/01/20 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 3 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.

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

	ACC. YEAR ENDING	BODILY INJURY	PROPERTY DAMAGE	COMBINED
(1) INCURRED LOSSES AND	03/31/17	\$6,809,907	\$8,887,759	
ALLOCATED LOSS	03/31/18	\$5,474,915	\$8,095,686	
ADJUSTMENT EXPENSES	03/31/19	\$4,425,839	\$9,213,168	
 (2) DEVELOPED LOSSES AND	 03/31/17	 \$7,935,585	 \$9,815,641	
ALL LOSS ADJUSTMENT	03/31/18	\$6,886,074	\$9,021,023	
EXPENSES (A)	03/31/19	\$6,327,843	\$10,641,209	
 (3) SELECTED ANNUAL LOSS				
TREND (SEE TREND		5.5%	3.9%	4.5%
EXHIBIT IN SECTION C)				
 (4) TRENDED LOSSES AND	 03/31/17	 \$10,371,810	 \$11,886,741	 \$22,258,551
ALL LOSS ADJUSTMENT	03/31/18	\$8,531,846	\$10,509,492	\$19,041,337
EXPENSES (B)	03/31/19	\$7,428,888	\$11,939,436	\$19,368,324

(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.
03/31/17	1.084	1.004
03/31/18	1.170	1.013
03/31/19	1.330	1.050

(B) TRENDED LOSSES ARE EQUAL TO (2) \* ( (1.0 + (3)) \*\* N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF ACCIDENT TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 10/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
03/31/17	10/1/16	5.000
03/31/18	10/1/17	4.000
03/31/19	10/1/18	3.000

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
 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
03/31/15	\$1,091,889	\$946,495	0.867	10%	78
03/31/16	\$1,097,130	\$1,454,399	1.326	15%	106
03/31/17	\$1,137,986	\$1,045,425	0.919	20%	99
03/31/18	\$1,183,578	\$865,638	0.731	25%	82
03/31/19	\$1,180,083	\$1,254,482	1.063	30%	112
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				0.972
(7)	EXPECTED EXPERIENCE RATIO (D).				1.030
(8)	CREDIBILITY (E).				0.35
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000 - (8)) ).				1.010
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).				1.0%
(11)	SELECTED CHANGE.				1.0%
(12)	FILED CHANGE.				-1.0%
(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 10/01/20 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 3 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.

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

	ACC. YEAR ENDING	PIP
(1) INCURRED LOSSES AND	03/31/15	\$715,821
ALLOCATED LOSS	03/31/16	\$1,127,470
ADJUSTMENT EXPENSES	03/31/17	\$818,610
	03/31/18	\$677,856
	03/31/19	\$972,374
(2) DEVELOPED LOSSES AND	03/31/15	\$769,508
ALL LOSS ADJUSTMENT	03/31/16	\$1,218,090
EXPENSES (A)	03/31/17	\$902,006
	03/31/18	\$768,773
	03/31/19	\$1,147,742
(3) SELECTED ANNUAL LOSS		
TREND (SEE TREND		3.0%
EXHIBIT IN SECTION C)		
(4) TRENDED LOSSES AND	03/31/15	\$946,495
ALL LOSS ADJUSTMENT	03/31/16	\$1,454,399
EXPENSES (B)	03/31/17	\$1,045,425
	03/31/18	\$865,638
	03/31/19	\$1,254,482
(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
	03/31/15	1.000
	03/31/16	1.005
	03/31/17	1.025
	03/31/18	1.055
	03/31/19	1.098
(B) TRENDED LOSSES ARE EQUAL TO (2) * ( (1.0 + (3)) ** N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF ACCIDENT TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 10/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.		

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
03/31/15	10/1/14	7.000
03/31/16	10/1/15	6.000
03/31/17	10/1/16	5.000
03/31/18	10/1/17	4.000
03/31/19	10/1/18	3.000

INSURANCE SERVICES OFFICE, INC.

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

COVERAGE	ACCIDENT YEAR	(1) AGGREGATE LOSS COST AT CURRENT LEVEL (B)	(2) INCURRED LOSSES (C)	(3) EXPERIENCE RATIO (2) / (1)	(4) ACCIDENT YEAR WEIGHTS	(5) NUMBER OF PAID CLAIMS
O.T.C.	03/31/17	\$7,579,784	\$8,018,526	1.058	20%	1,950
	03/31/18	\$7,678,033	\$8,358,616	1.089	30%	2,131
	03/31/19	\$7,576,837	\$8,107,694	1.070	50%	2,219
COLL.	03/31/17	\$12,512,919	\$12,279,451	0.981	20%	1,244
	03/31/18	\$13,005,076	\$13,223,982	1.017	30%	1,238
	03/31/19	\$13,028,996	\$13,041,966	1.001	50%	1,431

		O.T.C.	COLLISION
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).	1.074	1.002
(7)	EXPECTED EXPERIENCE RATIO (D).	1.060	1.030
(8)	CREDIBILITY (E).	0.75	0.90
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000 - (8)) ).	1.071	1.005
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).	7.1%	0.5%
(11)	SELECTED CHANGE.	7.1%	0.5%
(12)	FILED CHANGE.	7.1%	-1.5%

- (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 10/01/20 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 3 YEAR TOTAL OF CLAIMS FOR O.T.C. AND A 3 YEAR TOTAL OF CLAIMS FOR COLLISION SHOWN IN COLUMN (5). THE STANDARDS FOR FULL CREDIBILITY ARE 11,000 CLAIMS FOR O.T.C. AND 4,500 CLAIMS FOR COLLISION (SEE CREDIBILITY TABLES IN SECTION C).

INSURANCE SERVICES OFFICE, INC.

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

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) PAID LOSSES	03/31/17	\$5,052,710	\$8,730,055
	03/31/18	\$5,631,000	\$9,878,571
	03/31/19	\$5,714,246	\$10,460,501
(2) DEVELOPED LOSSES AND ALL LOSS ADJUSTMENT EXPENSES (A)	03/31/17	\$5,715,272	\$9,855,097
	03/31/18	\$6,375,756	\$11,084,646
	03/31/19	\$6,618,525	\$11,430,294
(3) SELECTED ANNUAL LOSS TREND (SEE TREND EXHIBIT IN SECTION C)		7.0%	4.5%
(4) TRENDED LOSSES AND ALL LOSS ADJUSTMENT EXPENSES (B)	03/31/17	\$8,018,526	\$12,279,451
	03/31/18	\$8,358,616	\$13,223,982
	03/31/19	\$8,107,694	\$13,041,966

(A) PAID LOSSES ARE ADJUSTED BY THE FOLLOWING:

1 - LOSS ADJUSTMENT EXPENSE FACTORS:

	O.T.C	COLL.
	1.130	1.130

2 - LOSS DEVELOPMENT FACTORS:

YEAR ENDING	O.T.C.	COLL.
03/31/17	1.001	0.999
03/31/18	1.002	0.993
03/31/19	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 10/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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	03/31/17	\$7,246,447	\$11,618,309
AT CURRENT LEVEL	03/31/18	\$7,411,229	\$12,257,376
	03/31/19	\$7,377,641	\$12,456,019
 (2) SELECTED ANNUAL OCN TRENDED (SEE TRENDED EXHIBIT IN SECTION C)		0.9%	1.5%
 (3) TRENDED AGGREGATE LOSS COSTS AT CURRENT LEVEL (A)	03/31/17 03/31/18 03/31/19	\$7,579,784 \$7,678,033 \$7,576,837	\$12,512,919 \$13,005,076 \$13,028,996

(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  
10/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDED BOTH OTC  
AND COLLISION.

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
03/31/17	4/1/16	5.000	5.000
03/31/18	4/1/17	4.000	4.000
03/31/19	4/1/18	3.000	3.000

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
 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
03/31/15	\$3,496,070	\$3,398,142	0.972	10%	496
03/31/16	\$3,377,415	\$3,300,752	0.977	15%	405
03/31/17	\$3,300,445	\$3,489,637	1.057	20%	405
03/31/18	\$3,227,003	\$3,172,029	0.983	25%	406
03/31/19	\$3,098,800	\$3,611,969	1.166	30%	420
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				1.051
(7)	EXPECTED EXPERIENCE RATIO (D).				1.046
(8)	CREDIBILITY (E).				0.40
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000- (8)) ).				1.048
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).				4.8%
(11)	SELECTED CHANGE.				4.8%
(12)	FILED CHANGE.				2.7%
(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 10/01/20 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.

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

	ACC. YEAR ENDING	BODILY INJURY	PROPERTY DAMAGE	COMBINED
(1) INCURRED LOSSES AND	03/31/15	\$956,093	\$1,318,989	
ALLOCATED LOSS	03/31/16	\$1,066,430	\$1,214,213	
ADJUSTMENT EXPENSES	03/31/17	\$1,218,760	\$1,223,865	
	03/31/18	\$945,735	\$1,244,407	
	03/31/19	\$928,285	\$1,481,764	
(2) DEVELOPED LOSSES AND	03/31/15	\$1,030,883	\$1,452,339	
ALL LOSS ADJUSTMENT	03/31/16	\$1,173,926	\$1,336,970	
EXPENSES (A)	03/31/17	\$1,417,601	\$1,351,637	
	03/31/18	\$1,257,615	\$1,385,274	
	03/31/19	\$1,402,058	\$1,752,186	
(3) SELECTED ANNUAL LOSS				
TREND (SEE TREND		5.5%	3.9%	4.6%
EXHIBIT IN SECTION C)				
(4) TRENDED LOSSES AND	03/31/15	\$1,499,935	\$1,898,207	\$3,398,142
ALL LOSS ADJUSTMENT	03/31/16	\$1,618,844	\$1,681,908	\$3,300,752
EXPENSES (B)	03/31/17	\$1,852,805	\$1,636,832	\$3,489,637
	03/31/18	\$1,558,185	\$1,613,844	\$3,172,029
	03/31/19	\$1,646,016	\$1,965,953	\$3,611,969
(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.	
	03/31/15	1.003	1.001	
	03/31/16	1.024	1.001	
	03/31/17	1.082	1.004	
	03/31/18	1.237	1.012	
	03/31/19	1.405	1.075	

(B) TRENDED LOSSES ARE EQUAL TO (2) \* ( (1.0 + (3)) \*\* N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF ACCIDENT TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 10/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
03/31/15	10/1/14	7.000
03/31/16	10/1/15	6.000
03/31/17	10/1/16	5.000
03/31/18	10/1/17	4.000
03/31/19	10/1/18	3.000

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
 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
03/31/15	\$707,854	\$509,634	0.720	10%	60
03/31/16	\$698,240	\$1,088,067	1.558	15%	90
03/31/17	\$686,966	\$604,787	0.880	20%	66
03/31/18	\$678,092	\$670,867	0.989	25%	64
03/31/19	\$647,950	\$595,113	0.918	30%	59
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).				1.004
(7)	EXPECTED EXPERIENCE RATIO (D).				1.029
(8)	CREDIBILITY (E).				0.30
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000- (8)) ).				1.022
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).				2.2%
(11)	SELECTED CHANGE.				2.2%
(12)	FILED CHANGE.				0.2%
(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 10/01/20 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.

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

	ACC. YEAR ENDING	PIP
(1) INCURRED LOSSES AND	03/31/15	\$387,953
ALLOCATED LOSS	03/31/16	\$849,303
ADJUSTMENT EXPENSES	03/31/17	\$480,311
	03/31/18	\$547,396
	03/31/19	\$481,863
(2) DEVELOPED LOSSES AND	03/31/15	\$417,049
ALL LOSS ADJUSTMENT	03/31/16	\$916,653
EXPENSES (A)	03/31/17	\$524,079
	03/31/18	\$598,454
	03/31/19	\$545,975
(3) SELECTED ANNUAL LOSS		
TREND (SEE TREND		2.9%
EXHIBIT IN SECTION C)		
(4) TRENDED LOSSES AND	03/31/15	\$509,634
ALL LOSS ADJUSTMENT	03/31/16	\$1,088,067
EXPENSES (B)	03/31/17	\$604,787
	03/31/18	\$670,867
	03/31/19	\$595,113

(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
03/31/15	1.000
03/31/16	1.004
03/31/17	1.015
03/31/18	1.017
03/31/19	1.054

(B) TRENDED LOSSES ARE EQUAL TO (2) \* ( (1.0 + (3)) \*\* N), WHERE N IS EQUAL TO THE NUMBER OF YEARS PROJECTION FROM THE AVERAGE DATE OF ACCIDENT TO ONE YEAR BEYOND THE ANTICIPATED IMPLEMENTATION DATE OF 10/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD
03/31/15	10/1/14	7.000
03/31/16	10/1/15	6.000
03/31/17	10/1/16	5.000
03/31/18	10/1/17	4.000
03/31/19	10/1/18	3.000

INSURANCE SERVICES OFFICE, INC.

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

COVERAGE O.T.C	ACCIDENT YEAR ENDING	(1)	(2)	(3)	(4)	(5)
		AGGREGATE LOSS COST AT CURRENT LEVEL (B)	INCURRED LOSSES (C)	EXPERIENCE RATIO (2) / (1)	ACCIDENT YEAR WEIGHTS	NUMBER OF PAID CLAIMS
	03/31/15	\$2,194,875	\$2,407,790	1.097	10%	810
	03/31/16	\$2,127,586	\$2,246,038	1.056	15%	757
	03/31/17	\$2,000,605	\$2,167,860	1.084	20%	718
	03/31/18	\$1,887,342	\$2,069,142	1.096	25%	662
	03/31/19	\$1,764,231	\$1,949,573	1.105	30%	669
COLL.	03/31/17	\$2,822,192	\$2,694,394	0.955	20%	473
	03/31/18	\$2,706,119	\$2,260,607	0.835	30%	440
	03/31/19	\$2,563,537	\$2,576,576	1.005	50%	523

		O.T.C.	COLLISION
(6)	AVERAGE EXPERIENCE RATIO (SUM OF (3)*(4)).	1.091	0.945
(7)	EXPECTED EXPERIENCE RATIO (D).	1.054	1.034
(8)	CREDIBILITY (E).	0.65	0.60
(9)	CREDIBILITY WEIGHTED EXPERIENCE RATIO: ( (6) * (8) ) + ( (7) * (1.000- (8)) ).	1.078	0.981
(10)	INDICATED PERCENTAGE CHANGE IN ADVISORY LOSS COST LEVEL ( (9) - 1.000 ).	7.8%	-1.9%
(11)	SELECTED CHANGE.	7.8%	-1.9%
(12)	FILED CHANGE.	7.8%	-3.9%

- (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 10/01/20 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 3 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.

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

	ACC. YEAR ENDING	O.T.C	COLLISION
(1) PAID LOSSES	03/31/15	\$1,371,163	----
	03/31/16	\$1,362,333	----
	03/31/17	\$1,400,336	\$1,961,221
	03/31/18	\$1,422,449	\$1,721,914
	03/31/19	\$1,412,677	\$2,142,500
(2) DEVELOPED LOSSES AND	03/31/15	\$1,549,414	----
ALL LOSS ADJUSTMENT	03/31/16	\$1,539,436	----
EXPENSES (A)	03/31/17	\$1,582,380	\$2,213,964
	03/31/18	\$1,608,975	\$1,932,142
	03/31/19	\$1,613,885	\$2,290,290
(3) SELECTED ANNUAL LOSS			
TREND (SEE TREND		6.5%	4.0%
EXHIBIT IN SECTION C)			
(4) TRENDED LOSSES AND	03/31/15	\$2,407,790	----
ALL LOSS ADJUSTMENT	03/31/16	\$2,246,038	----
EXPENSES (B)	03/31/17	\$2,167,860	\$2,694,394
	03/31/18	\$2,069,142	\$2,260,607
	03/31/19	\$1,949,573	\$2,576,576
(A) PAID LOSSES ARE ADJUSTED BY THE FOLLOWING:			
1 - LOSS ADJUSTMENT EXPENSE FACTORS:		O.T.C	COLL.
		1.130	1.130
2 - LOSS DEVELOPMENT FACTORS:			
	YEAR ENDING	O.T.C.	COLL.
	03/31/15	1.000	-----
	03/31/16	1.000	-----
	03/31/17	1.000	0.999
	03/31/18	1.001	0.993
	03/31/19	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 10/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDING BOTH OTC AND COLLISION.

YEAR ENDING	AVERAGE DATE OF ACCIDENT	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
03/31/15	10/1/14	7.000	-----
03/31/16	10/1/15	6.000	-----
03/31/17	10/1/16	5.000	5.000
03/31/18	10/1/17	4.000	4.000
03/31/19	10/1/18	3.000	3.000

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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	03/31/15	\$2,047,458	----
AT CURRENT LEVEL	03/31/16	\$2,003,377	----
	03/31/17	\$1,903,525	\$2,739,992
	03/31/18	\$1,813,009	\$2,642,694
	03/31/19	\$1,712,846	\$2,518,209
(2) SELECTED ANNUAL OCN TRENDED (SEE TRENDED EXHIBIT IN SECTION C)		1.0%	0.6%
(3) TRENDED AGGREGATE LOSS COSTS AT CURRENT LEVEL (A)	03/31/15	\$2,194,875	----
	03/31/16	\$2,127,586	----
	03/31/17	\$2,000,605	\$2,822,192
	03/31/18	\$1,887,342	\$2,706,119
	03/31/19	\$1,764,231	\$2,563,537
(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 10/01/20 WHICH IS ASSUMED FOR THE PURPOSE OF TRENDED BOTH OTC AND COLLISION.			

YEAR ENDING	AVERAGE DATE OF WRITING	PROJECTION PERIOD OTC	PROJECTION PERIOD COLL
03/31/15	4/1/14	7.000	-----
03/31/16	4/1/15	6.000	-----
03/31/17	4/1/16	5.000	5.000
03/31/18	4/1/17	4.000	4.000
03/31/19	4/1/18	3.000	3.000

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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	ADV
E	YRS YR	UND	COST 5 YRS				INDEX	CLASS	CLASS	CLASS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	LOSS	LOSS	LOSS	LOSS
R	03/31/2019	COST	03/31/2019	RATIO	CRED	RATIO	STATE	COST	COST	COST	COST
								PRES	IND*	REV**	CHG***
101	7824	335.16	410.19	1.224	0.35	1.119	1.054	297	322	316	6.4%
103	1853	183.99	188.52	1.025	0.10	1.058	0.996	176	180	176	0.0%
104	1323	146.52	184.27	1.258	0.10	1.082	1.019	135	142	139	3.0%
105	7797	314.06	319.00	1.016	0.30	1.048	0.987	319	324	318	-0.3%
108	4811	297.59	273.95	0.921	0.25	1.027	0.967	270	269	264	-2.2%
109	5137	292.36	383.62	1.312	0.25	1.125	1.059	283	308	302	6.7%
112	17276	111.04	106.11	0.956	0.25	1.036	0.976	110	110	108	-1.8%
113	13247	184.61	187.04	1.013	0.30	1.047	0.986	180	183	179	-0.6%
114	3777	150.42	153.07	1.018	0.10	1.058	0.996	137	140	137	0.0%
115	5299	103.68	125.12	1.207	0.15	1.084	1.021	101	106	104	3.0%
116	11182	143.65	131.72	0.917	0.25	1.026	0.966	142	141	138	-2.8%
117	9170	257.00	262.66	1.022	0.30	1.050	0.989	267	272	267	0.0%
118	366	163.81	164.31	1.003	0.05	1.059	0.997	157	161	158	0.6%
119	456	193.58	234.21	1.210	0.05	1.069	1.007	182	189	185	1.6%
120	1420	133.68	135.47	1.013	0.10	1.057	0.995	140	143	140	0.0%
121	832	146.89	120.58	0.821	0.05	1.050	0.989	141	144	141	0.0%
122	1530	133.97	183.29	1.368	0.10	1.093	1.029	133	141	138	3.8%
123	2398	195.01	220.44	1.130	0.15	1.072	1.009	191	198	194	1.6%
124	464	169.14	213.16	1.260	0.05	1.072	1.009	154	160	157	1.9%
SW	96162	199.61	211.93	1.062		1.062					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 2.9 PERCENT.

\*\* AS MENTIONED IN THE EXECUTIVE SUMMARY, THE REVISED LOSS COSTS ARE THE INDICATED LOSS COSTS ADJUSTED BY A FACTOR OF .98 TO REFLECT THE IMPACT OF COVID-19.

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
 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)	(10)	(11)	
T E R R	EARNED YRS ENDED 03/31/2019	CAR YR LOSS COST	P.I.P. UND LOSS COST	EXPER COST END 03/31/2019	LOSS 5 YRS EXPER RATIO		FORM CRED	INDEX (6) TO STATE	BASE CLASS LOSS COST PRES	BASE CLASS LOSS COST IND*	BASE CLASS LOSS COST REV**	ADV LOSS COST CHG***
101	7720	19.96	15.47	0.775	0.10	0.904	0.983	38	38	37	-2.6%	
103	1663	14.62	22.50	1.539	0.05	0.949	1.032	29	30	29	0.0%	
104	1399	15.51	20.19	1.302	0.05	0.937	1.018	32	33	32	0.0%	
105	7742	15.72	19.02	1.210	0.10	0.947	1.029	31	32	31	0.0%	
108	5095	18.03	14.88	0.825	0.05	0.913	0.992	36	36	35	-2.8%	
109	4913	20.89	21.10	1.010	0.10	0.927	1.008	39	40	39	0.0%	
112	15479	8.60	7.16	0.833	0.10	0.910	0.989	17	17	17	0.0%	
113	12276	14.54	12.31	0.847	0.10	0.911	0.990	29	29	28	-3.4%	
114	3177	8.79	10.05	1.143	0.05	0.929	1.010	19	19	19	0.0%	
115	4653	7.95	2.66	0.335	0.05	0.889	0.966	15	15	15	0.0%	
116	9586	9.35	10.14	1.084	0.10	0.935	1.016	18	18	18	0.0%	
117	8128	15.28	15.88	1.039	0.10	0.930	1.011	31	32	31	0.0%	
118	361	9.32	3.44	0.369	0.00	0.918	0.998	19	19	19	0.0%	
119	395	9.43	12.93	1.371	0.00	0.918	0.998	19	19	19	0.0%	
120	1261	9.88	0.00	0.000	0.00	0.918	0.998	19	19	19	0.0%	
121	826	8.93	0.32	0.036	0.00	0.918	0.998	19	19	19	0.0%	
122	1252	10.97	9.25	0.843	0.00	0.918	0.998	20	20	20	0.0%	
123	2581	11.22	7.96	0.709	0.05	0.908	0.987	23	23	23	0.0%	
124	381	10.19	0.00	0.000	0.00	0.918	0.998	19	19	19	0.0%	
SW	88888	13.28	12.18	0.918		0.920						

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 1.0 PERCENT.

\*\* AS MENTIONED IN THE EXECUTIVE SUMMARY, THE REVISED LOSS COSTS ARE THE INDICATED LOSS COSTS ADJUSTED BY A FACTOR OF .98 TO REFLECT THE IMPACT OF COVID-19.

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
COMMERCIAL AUTOMOBILE INSURANCE  
SINGLE LIMIT LIABILITY

DETERMINATION OF LOSS COST LEVEL CHANGES BY TERRITORY  
PRIVATE PASSENGER TYPES

	(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	03/31/2019	COST	03/31/2019	RATIO	CRED	RATIO	STATE	COST	COST	COST	COST
								PRES	IND*	REV**	CHG***
101	2255	253.50	325.11	1.282	0.20	1.079	1.043	250	273	268	7.2%
103	349	210.96	127.10	0.602	0.05	1.007	0.973	211	215	211	0.0%
104	139	161.84	53.82	0.333	0.00	1.028	0.993	161	168	165	2.5%
105	1946	227.71	255.05	1.120	0.15	1.042	1.007	224	236	231	3.1%
108	1120	272.45	283.95	1.042	0.10	1.029	0.994	270	281	275	1.9%
109	983	227.70	174.11	0.765	0.10	1.002	0.968	226	229	224	-0.9%
112	2112	160.93	154.73	0.961	0.10	1.021	0.986	160	165	162	1.3%
113	1495	176.14	161.23	0.915	0.10	1.017	0.983	175	180	176	0.6%
114	301	155.16	235.06	1.515	0.00	1.028	0.993	155	161	158	1.9%
115	683	169.60	203.46	1.200	0.05	1.037	1.002	171	180	176	2.9%
116	1338	161.67	137.37	0.850	0.10	1.010	0.976	161	165	162	0.6%
117	1214	204.00	228.11	1.118	0.10	1.037	1.002	203	213	209	3.0%
118	49	215.16	49.93	0.232	0.00	1.028	0.993	209	218	214	2.4%
119	68	202.94	44.32	0.218	0.00	1.028	0.993	209	218	214	2.4%
120	157	183.21	56.85	0.310	0.00	1.028	0.993	181	188	184	1.7%
121	73	208.52	134.31	0.644	0.00	1.028	0.993	201	209	205	2.0%
122	237	213.10	362.10	1.699	0.05	1.062	1.026	214	230	225	5.1%
123	446	215.02	128.52	0.598	0.05	1.007	0.973	208	212	208	0.0%
124	66	219.74	165.65	0.754	0.00	1.028	0.993	213	222	218	2.3%
SW	15031	206.16	212.03	1.028		1.035					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 4.8 PERCENT.

\*\* AS MENTIONED IN THE EXECUTIVE SUMMARY, THE REVISED LOSS COSTS ARE THE INDICATED LOSS COSTS ADJUSTED BY A FACTOR OF .98 TO REFLECT THE IMPACT OF COVID-19.

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
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 YRS YR ENDED 03/31/2019	CAR P.I.P. UND LOSS COST	EXPER LOSS COST 5 YRS END 03/31/2019	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	2268	57.26	53.47	0.934	0.10	0.995	0.987	89	90	88	-1.1%
103	357	34.54	13.99	0.405	0.00	1.002	0.994	54	55	54	0.0%
104	139	47.26	0.00	0.000	0.00	1.002	0.994	76	77	75	-1.3%
105	2011	37.55	58.89	1.568	0.10	1.059	1.051	57	61	60	5.3%
108	957	62.37	82.98	1.330	0.10	1.035	1.027	92	97	95	3.3%
109	988	44.77	55.75	1.245	0.05	1.014	1.006	69	71	70	1.4%
112	1868	33.82	27.29	0.807	0.10	0.983	0.975	48	48	47	-2.1%
113	1447	40.88	44.92	1.099	0.10	1.012	1.004	59	61	60	1.7%
114	324	38.54	31.44	0.816	0.00	1.002	0.994	60	61	60	0.0%
115	605	42.41	22.14	0.522	0.05	0.978	0.970	62	61	60	-3.2%
116	1215	40.34	17.75	0.440	0.05	0.974	0.966	57	56	55	-3.5%
117	1156	60.84	65.17	1.071	0.10	1.009	1.001	92	94	92	0.0%
118	42	32.93	0.00	0.000	0.00	1.002	0.994	49	50	49	0.0%
119	64	33.95	38.18	1.125	0.00	1.002	0.994	49	50	49	0.0%
120	153	33.44	50.03	1.496	0.00	1.002	0.994	49	50	49	0.0%
121	54	31.63	64.88	2.051	0.00	1.002	0.994	49	50	49	0.0%
122	221	33.13	36.27	1.095	0.00	1.002	0.994	51	52	51	0.0%
123	454	42.46	25.57	0.602	0.00	1.002	0.994	64	65	64	0.0%
124	66	44.82	0.00	0.000	0.00	1.002	0.994	62	63	62	0.0%
SW	14389	45.03	45.10	1.002		1.008					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 2.2 PERCENT.

\*\* AS MENTIONED IN THE EXECUTIVE SUMMARY, THE REVISED LOSS COSTS ARE THE INDICATED LOSS COSTS ADJUSTED BY A FACTOR OF .98 TO REFLECT THE IMPACT OF COVID-19.

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
 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	EARNED CAR		EXPER LOSS					BASE	BASE	BASE	ADV
E	YRS YR	UND	COST 5 YRS				INDEX	CLASS	CLASS	CLASS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	LOSS	LOSS	LOSS	LOSS
R	03/31/2019	COST	03/31/2019	RATIO	CRED	RATIO	STATE	COST	COST	COST	COST
								PRES	IND*	REV	CHG**
101	6535	93.82	85.39	0.910	0.25	1.048	0.959	122	125	125	2.5%
103	1455	107.19	94.26	0.879	0.10	1.073	0.982	161	169	169	5.0%
104	1174	119.01	141.37	1.188	0.10	1.103	1.009	176	190	190	8.0%
105	7351	92.28	108.80	1.179	0.30	1.120	1.025	129	142	142	10.1%
108	4098	88.84	90.96	1.024	0.20	1.080	0.988	121	128	128	5.8%
109	4440	109.43	117.17	1.071	0.25	1.088	0.995	136	145	145	6.6%
112	11133	107.96	125.71	1.164	0.35	1.119	1.024	175	192	192	9.7%
113	10134	117.71	122.66	1.042	0.35	1.076	0.984	175	184	184	5.1%
114	2718	129.69	145.39	1.121	0.15	1.098	1.005	202	217	217	7.4%
115	3762	82.16	129.83	1.580	0.20	1.191	1.090	141	165	165	17.0%
116	8473	93.66	96.08	1.026	0.30	1.074	0.983	145	153	153	5.5%
117	7708	94.88	94.97	1.001	0.25	1.071	0.980	141	148	148	5.0%
118	312	98.73	173.02	1.752	0.00	1.094	1.001	122	131	131	7.4%
119	385	86.17	53.77	0.624	0.05	1.071	0.980	143	150	150	4.9%
120	1048	90.79	119.43	1.315	0.10	1.116	1.021	138	151	151	9.4%
121	636	91.77	59.29	0.646	0.05	1.072	0.981	132	139	139	5.3%
122	1388	78.65	98.65	1.254	0.10	1.110	1.016	121	132	132	9.1%
123	2153	93.89	112.32	1.196	0.15	1.109	1.015	135	147	147	8.9%
124	407	72.82	105.41	1.448	0.05	1.112	1.017	113	123	123	8.8%
SW	75310	100.61	110.02	1.094		1.093					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 7.1 PERCENT.

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
 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	EARNED CAR		EXPER LOSS					BASE	BASE	BASE	ADV
E	YRS YR	UND	COST 5 YRS				INDEX	CLASS	CLASS	CLASS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	LOSS	LOSS	LOSS	LOSS
R	03/31/2019	COST	03/31/2019	RATIO	CRED	RATIO	STATE	COST	COST	COST	COST
								PRES	IND*	REV**	CHG***
101	6609	182.51	194.52	1.066	0.40	1.010	1.037	172	179	175	1.7%
103	1389	175.90	187.83	1.068	0.15	0.986	1.012	197	200	196	-0.5%
104	1115	179.68	209.13	1.164	0.10	0.991	1.017	186	190	186	0.0%
105	7454	178.33	169.45	0.950	0.35	0.964	0.990	180	179	175	-2.8%
108	4127	186.86	192.62	1.031	0.30	0.990	1.016	175	179	175	0.0%
109	4487	214.28	200.88	0.937	0.30	0.962	0.988	188	187	183	-2.7%
112	10834	168.72	142.85	0.847	0.40	0.922	0.947	199	189	185	-7.0%
113	10021	163.27	169.63	1.039	0.35	0.995	1.022	171	176	172	0.6%
114	2642	189.52	104.63	0.552	0.15	0.909	0.933	204	191	187	-8.3%
115	3776	136.82	141.78	1.036	0.20	0.985	1.011	161	164	161	0.0%
116	8234	175.71	189.68	1.080	0.35	1.010	1.037	184	192	188	2.2%
117	7702	162.88	170.21	1.045	0.35	0.998	1.025	170	175	172	1.2%
118	313	236.68	327.15	1.382	0.05	0.993	1.020	159	163	160	0.6%
119	383	162.23	273.27	1.684	0.05	1.008	1.035	170	177	173	1.8%
120	1043	135.95	142.16	1.046	0.10	0.979	1.005	148	149	146	-1.4%
121	610	194.59	143.79	0.739	0.05	0.960	0.986	162	161	158	-2.5%
122	1409	150.39	109.32	0.727	0.15	0.935	0.960	178	172	169	-5.1%
123	2139	222.88	163.13	0.732	0.20	0.924	0.949	198	189	185	-6.6%
124	399	120.65	116.18	0.963	0.05	0.972	0.998	144	144	141	-2.1%
SW	74686	174.45	169.56	0.972		0.974					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 0.5 PERCENT.

\*\* AS MENTIONED IN THE EXECUTIVE SUMMARY, THE REVISED LOSS COSTS ARE THE INDICATED LOSS COSTS ADJUSTED BY A FACTOR OF .98 TO REFLECT THE IMPACT OF COVID-19.

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
 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	EARNED CAR		EXPER LOSS					BASE	BASE	BASE	ADV
E	YRS YR	UND	COST 5 YRS				INDEX	CLASS	CLASS	CLASS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	LOSS	LOSS	LOSS	LOSS
R	03/31/2019	COST	03/31/2019	RATIO	CRED	RATIO	STATE	COST	COST	COST	COST
								PRES	IND*	REV	CHG**
101	2040	131.19	129.17	0.985	0.20	1.079	0.980	109	115	115	5.5%
103	311	181.96	192.70	1.059	0.10	1.098	0.997	162	174	174	7.4%
104	120	192.85	337.01	1.748	0.05	1.134	1.030	178	198	198	11.2%
105	1794	145.16	162.53	1.120	0.25	1.107	1.005	110	119	119	8.2%
108	743	128.91	137.34	1.065	0.15	1.096	0.995	113	121	121	7.1%
109	857	144.91	138.04	0.953	0.15	1.080	0.981	117	124	124	6.0%
112	1043	202.38	241.89	1.195	0.20	1.121	1.018	182	200	200	9.9%
113	1040	181.30	193.93	1.070	0.20	1.096	0.995	165	177	177	7.3%
114	275	195.54	192.98	0.987	0.05	1.096	0.995	200	215	215	7.5%
115	351	199.22	256.84	1.289	0.10	1.121	1.018	191	210	210	9.9%
116	812	154.38	178.32	1.155	0.15	1.110	1.008	139	151	151	8.6%
117	976	153.15	176.06	1.150	0.15	1.109	1.007	135	147	147	8.9%
118	41	129.30	74.96	0.580	0.00	1.102	1.001	110	119	119	8.2%
119	31	109.94	44.66	0.406	0.00	1.102	1.001	97	105	105	8.2%
120	116	154.25	217.72	1.411	0.05	1.117	1.015	120	131	131	9.2%
121	41	150.81	104.12	0.690	0.00	1.102	1.001	129	139	139	7.8%
122	198	172.72	178.45	1.033	0.05	1.099	0.998	152	164	164	7.9%
123	411	159.02	189.99	1.195	0.10	1.111	1.009	138	150	150	8.7%
124	62	96.64	117.42	1.215	0.00	1.102	1.001	97	105	105	8.2%
SW	11262	156.65	172.64	1.102		1.101					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF 7.8 PERCENT.

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

INSURANCE SERVICES OFFICE, INC.

MINNESOTA  
 COMMERCIAL AUTOMOBILE INSURANCE  
 PHYSICAL DAMAGE - COLLISION

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
T	EARNED CAR		EXPER LOSS					BASE	BASE	BASE	ADV
E	YRS YR	UND	COST 5 YRS				INDEX	CLASS	CLASS	CLASS	LOSS
R	ENDED	LOSS	END	EXPER		FORM	(6) TO	LOSS	LOSS	LOSS	LOSS
R	03/31/2019	COST	03/31/2019	RATIO	CRED	RATIO	STATE	COST	COST	COST	COST
								PRES	IND*	REV**	CHG***
101	2023	294.98	313.63	1.063	0.40	1.030	1.017	339	338	331	-2.4%
103	314	277.75	229.15	0.825	0.10	0.990	0.977	348	333	326	-6.3%
104	121	229.48	167.52	0.730	0.05	0.994	0.981	303	291	285	-5.9%
105	1732	248.96	249.67	1.003	0.30	1.007	0.994	263	256	251	-4.6%
108	745	291.44	354.78	1.217	0.25	1.060	1.046	353	362	355	0.6%
109	828	233.97	220.35	0.942	0.20	0.995	0.982	261	251	246	-5.7%
112	999	189.65	170.49	0.899	0.20	0.986	0.973	237	226	221	-6.8%
113	1014	203.82	199.41	0.978	0.20	1.002	0.989	258	250	245	-5.0%
114	270	196.11	148.85	0.759	0.05	0.996	0.983	262	253	248	-5.3%
115	353	160.20	185.87	1.160	0.10	1.023	1.010	212	210	206	-2.8%
116	818	165.10	153.93	0.932	0.15	0.997	0.984	206	199	195	-5.3%
117	892	196.01	208.81	1.065	0.20	1.019	1.006	231	228	223	-3.5%
118	39	173.40	33.27	0.192	0.00	1.008	0.995	216	211	207	-4.2%
119	31	184.46	369.57	2.004	0.00	1.008	0.995	231	225	221	-4.3%
120	119	186.89	262.59	1.405	0.05	1.028	1.015	212	211	207	-2.4%
121	41	192.77	108.29	0.562	0.05	0.986	0.973	214	204	200	-6.5%
122	189	249.93	282.10	1.129	0.10	1.020	1.007	303	299	293	-3.3%
123	387	244.27	206.12	0.844	0.15	0.983	0.970	282	268	263	-6.7%
124	50	196.76	117.96	0.600	0.00	1.008	0.995	249	243	238	-4.4%
SW	10965	233.79	235.64	1.008		1.013					

\* KEYED TO A STATEWIDE LOSS COST CHANGE OF -1.9 PERCENT.

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\*\*\* 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>					3 YR. <u>AVG</u>	5 YR. <u>AVG</u>
	(000's)						
<u>ITEM</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>		
(1) Direct Losses Incurred	4,534,035	5,191,223	5,663,590	6,258,279	6,443,423		
(2) Allocated Loss Adjustment Expenses Incurred	480,175	580,765	638,270	676,653	650,817		
(3) Unallocated Loss Adjustment Expense Incurred	449,751	472,235	480,388	510,398	519,189		
(4) Unallocated LAE as a Ratio to Losses + Allocated LAE (3)/[(1)+(2)]	9.0%	8.2%	7.6%	7.4%	7.3%	7.4%	7.9%
(5) Selected Factor							7.5%

	<u>Property Damage</u>					3 YR. <u>AVG</u>	5 YR. <u>AVG</u>
	(000's)						
<u>ITEM</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>		
(1) Direct Losses Incurred	955,051	1,027,893	1,143,065	1,144,298	1,236,531		
(2) Allocated Loss Adjustment Expenses Incurred	63,839	74,267	61,197	65,225	63,477		
(3) Unallocated Loss Adjustment Expense Incurred	125,980	125,216	123,301	129,471	135,429		
(4) Unallocated LAE as a Ratio to Losses + Allocated LAE (3)/[(1)+(2)]	12.4%	11.4%	10.2%	10.7%	10.4%	10.5%	11.0%
(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>ITEM</u>		<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>AVG</u>	<u>AVG</u>
(1)	Direct Losses Incurred	4,018,641	4,299,932	4,813,793	5,446,118	5,531,658		
(2)	Loss Adjustment Expenses Incurred	658,105	579,036	622,719	702,553	716,345		
(3)	Losses + LAE Incurred as Ratio to Losses Incurred [(1)+(2)]/(1)	1.164	1.135	1.129	1.129	1.129	1.129	1.137
(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	MINNESOTA				MULTISTATE*			
	BODILY INJURY (\$100000 LIMITS)		PROPERTY DAMAGE (\$100000 LIMITS)		BODILY INJURY (\$100000 LIMITS)		PROPERTY DAMAGE (\$100000 LIMITS)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT	ACTUAL	EXPONENTIAL FIT
3/31/2016	20723.14	20508.58	3908.13	4048.67	21452.49	21338.63	4097.81	4094.24
6/30/2016	21721.84	20837.25	4019.64	4070.57	21640.70	21626.08	4157.45	4137.34
9/30/2016	19766.52	21171.19	4095.67	4092.58	22032.66	21917.40	4185.35	4180.90
12/31/2016	20824.77	21510.49	4289.48	4114.72	22305.11	22212.64	4228.88	4224.91
3/31/2017	22220.34	21855.22	4257.23	4136.98	22511.43	22511.86	4273.58	4269.39
6/30/2017	22392.79	22205.47	4248.03	4159.35	22784.19	22815.11	4296.48	4314.33
9/30/2017	23553.75	22561.34	4296.92	4181.85	22751.25	23122.44	4347.40	4359.75
12/31/2017	23295.88	22922.92	4123.39	4204.47	23154.91	23433.92	4380.42	4405.65
3/31/2018	22872.36	23290.28	4008.62	4227.21	23561.65	23749.59	4423.60	4452.02
6/30/2018	23113.61	23663.54	4140.51	4250.07	24127.67	24069.51	4490.97	4498.89
9/30/2018	24090.38	24042.78	4279.49	4273.06	24648.04	24393.74	4558.73	4546.25
12/31/2018	24539.58	24428.09	4408.70	4296.17	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) MINNESOTA	6.6%	2.2%
	(B) MULTISTATE	5.5%	4.3%
(10)	CREDIBILITY	0.00	0.20
(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  
MINNESOTA

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 0.68*(1C) + 0.32*(1D). BASED ON RESPECTIVE WEIGHT OF MEDICAL AND INCOME FROM PRICING.				3.0%
(3) SELECTED ANNUAL PERCENT CHANGE IN CLAIM FREQUENCY				0.0%
(4) AVERAGE ANNUAL PERCENT CHANGE IN CLAIM RATIOS (1.0 + (2)) * (1.0 + (3))				3.0%
* 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.

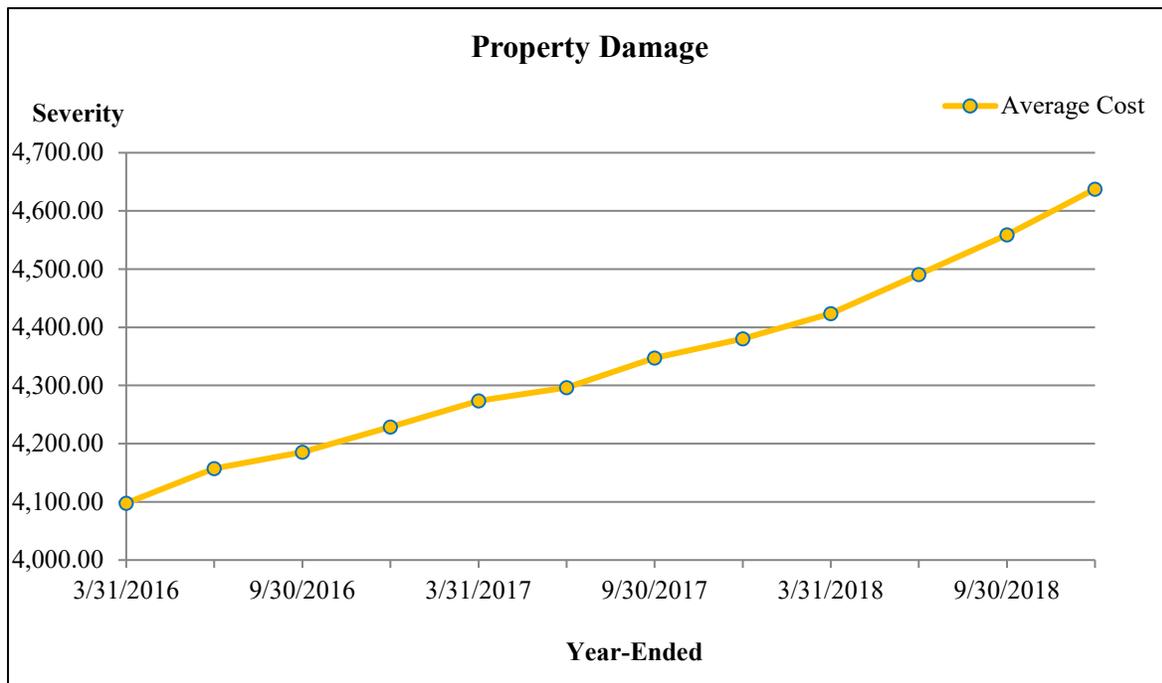
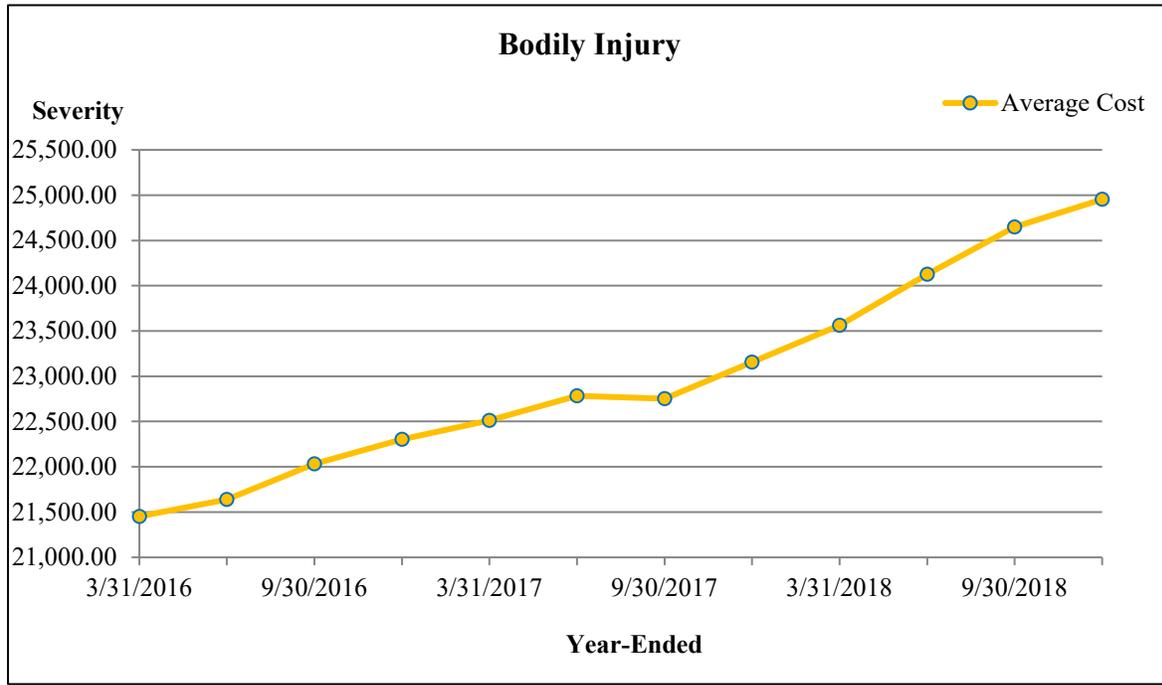
CLAIM COST TREND DATA FOR PIP  
PRIVATE PASSENGER TYPES  
MINNESOTA

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 0.84*(1C) + 0.16*(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%

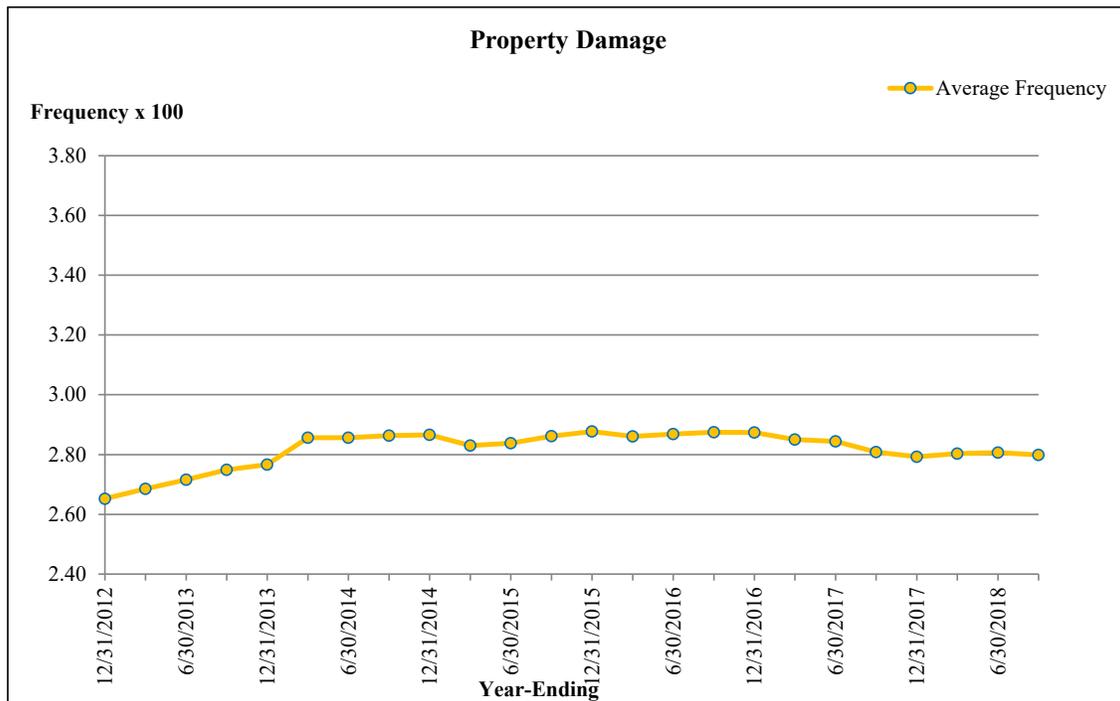
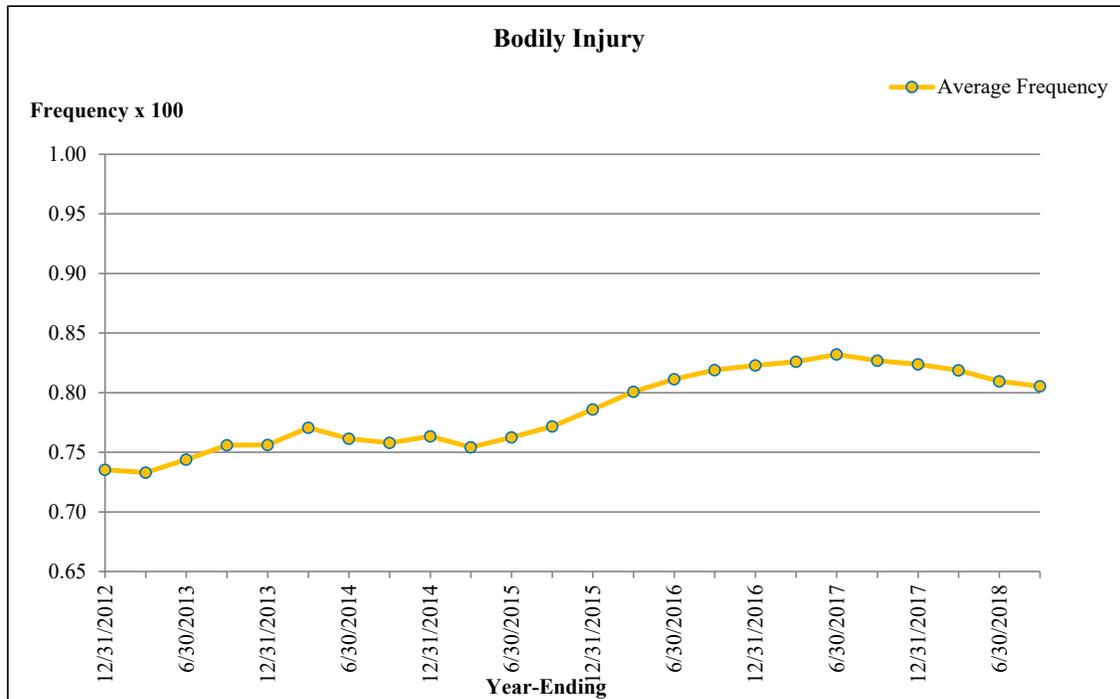
\* EXCLUDES MASSACHUSETTS

@ 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.

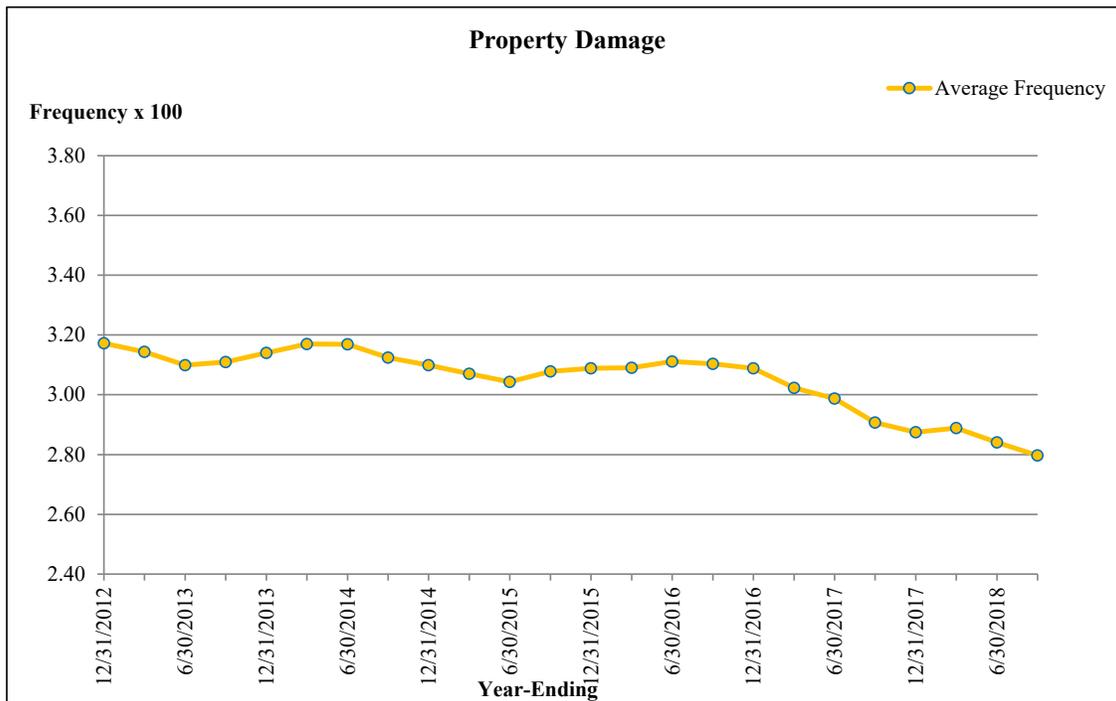
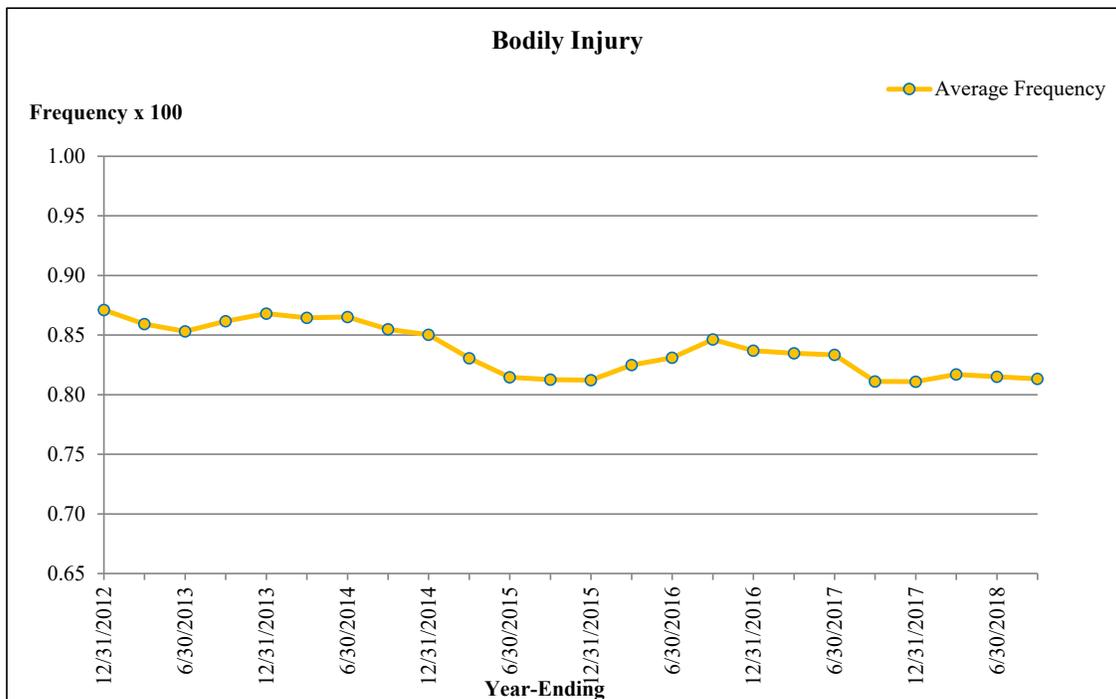
Commercial Automobile Liability  
 Incurred Claim Frequency Experience  
 Trucks, Tractors, and Trailers  
 Multistate\*



\*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)

Year Ending:	\$250 Deductible		\$500 Deductible		\$1,000 Deductible	
	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%

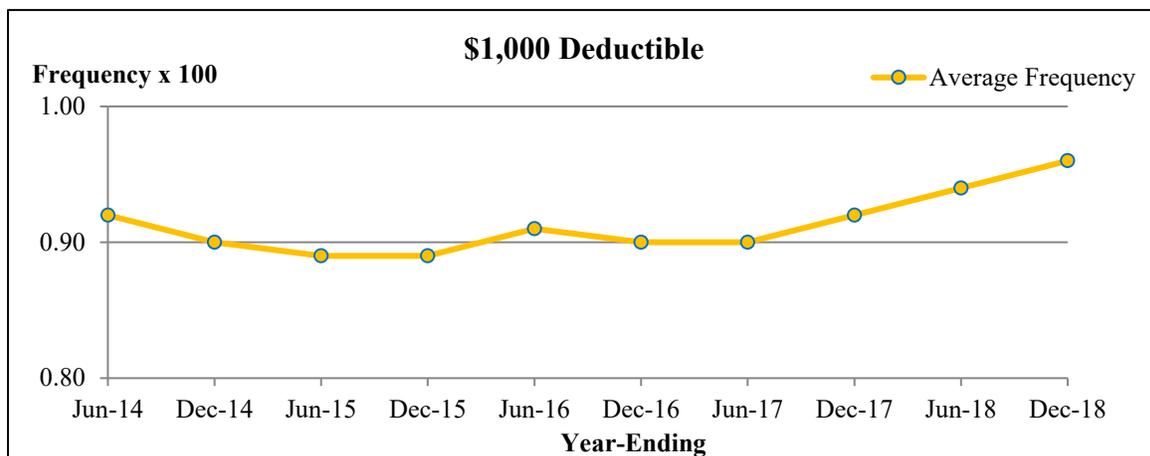
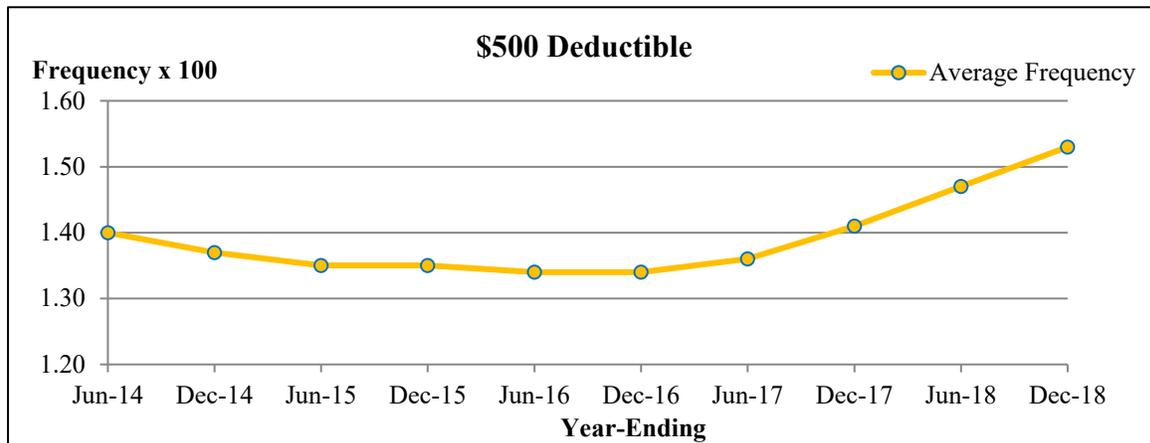
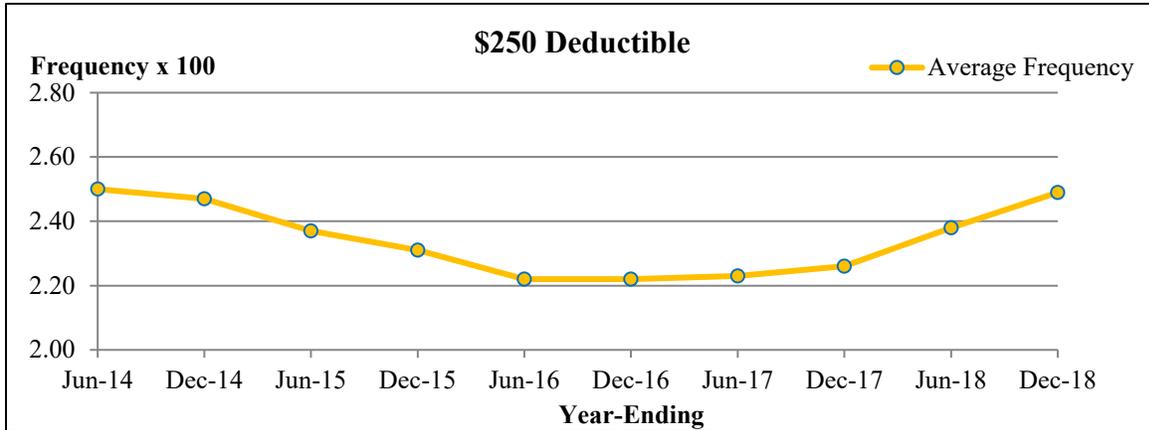
\* Multistate data excludes Massachusetts

\*\* 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)

Year Ending:	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
	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%

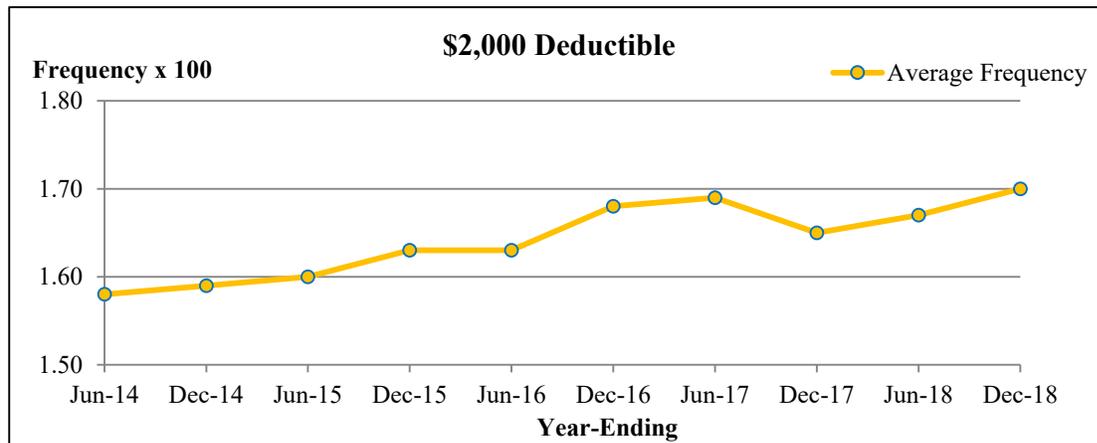
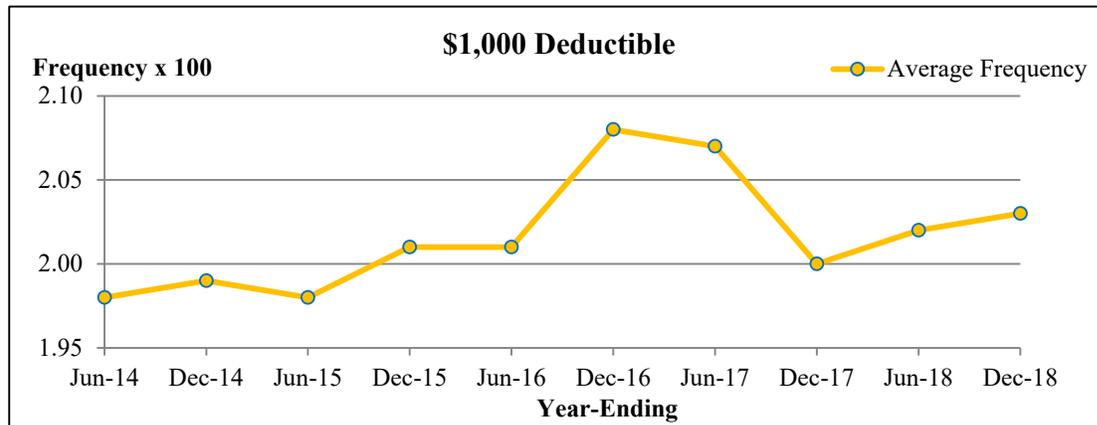
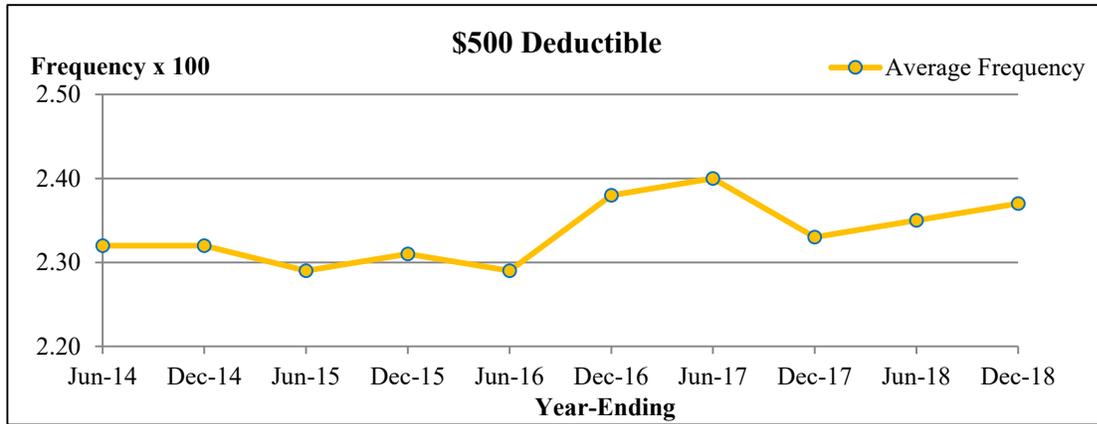
\* Multistate data excludes Massachusetts

\*\* 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)

Year Ending:	\$250 Deductible		\$500 Deductible		\$1,000 Deductible	
	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%

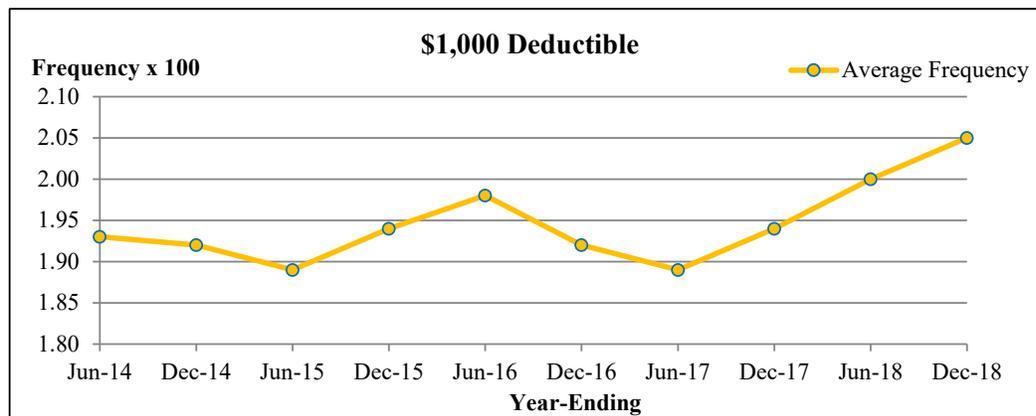
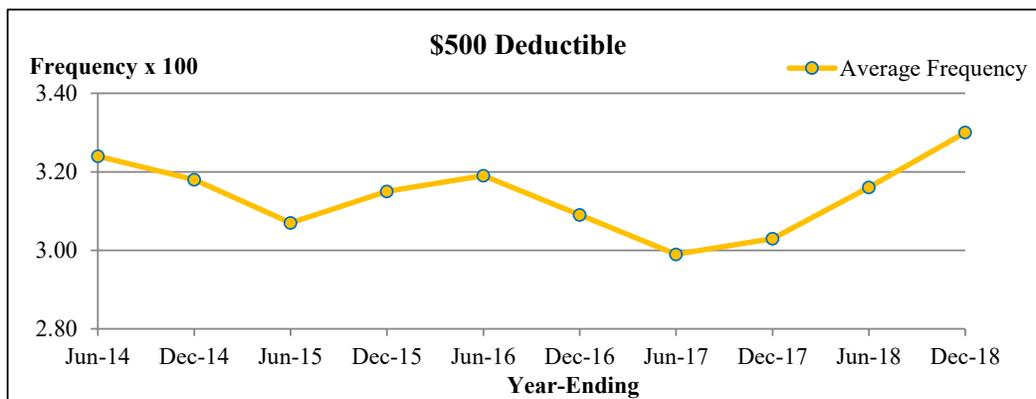
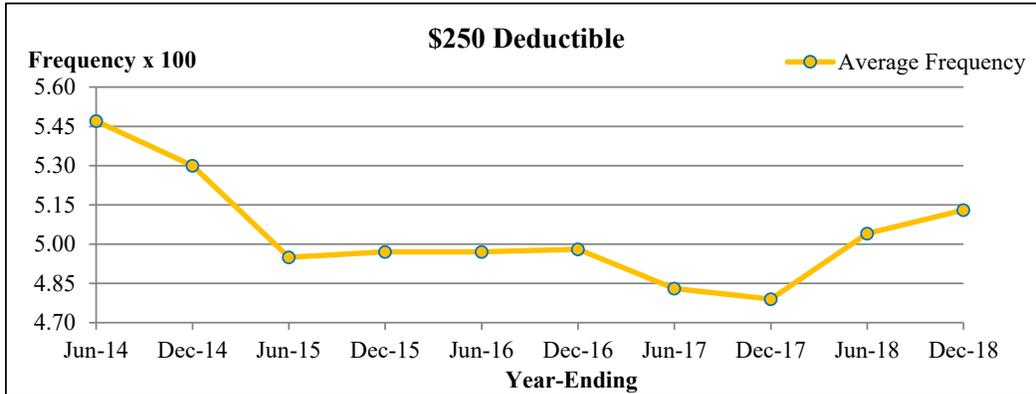
\* Multistate data excludes Massachusetts

\*\* 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)

Year Ending:	\$500 Deductible		\$1,000 Deductible		\$2,000 Deductible	
	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%

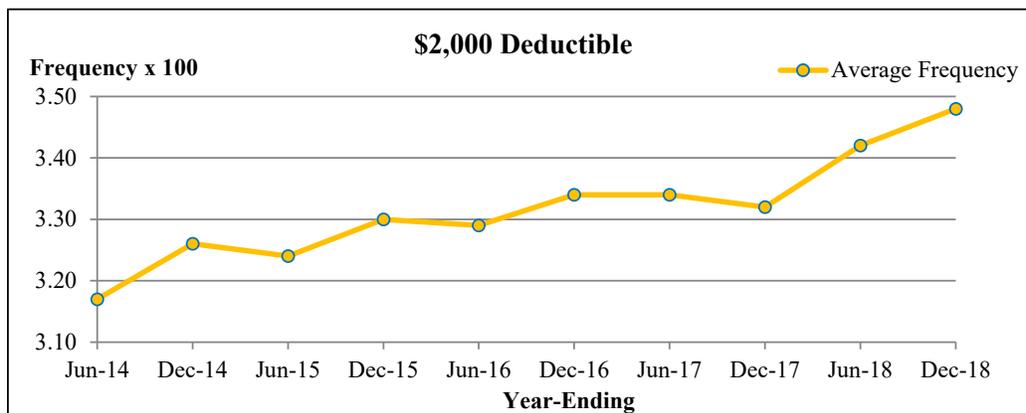
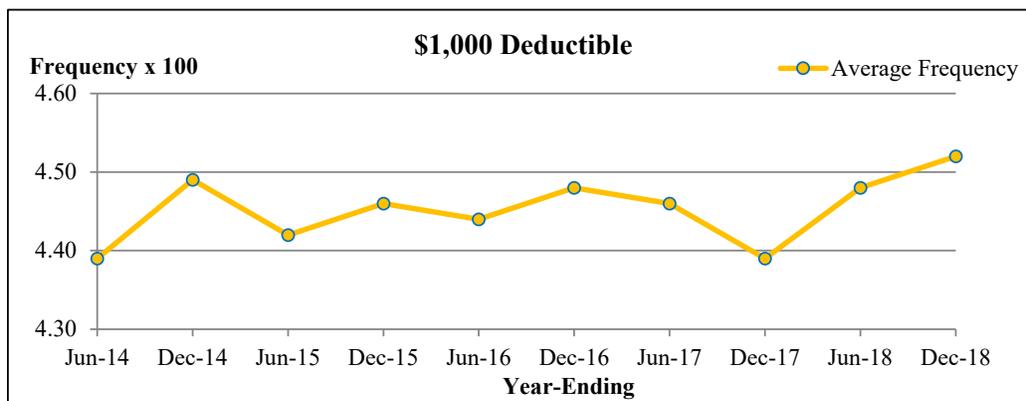
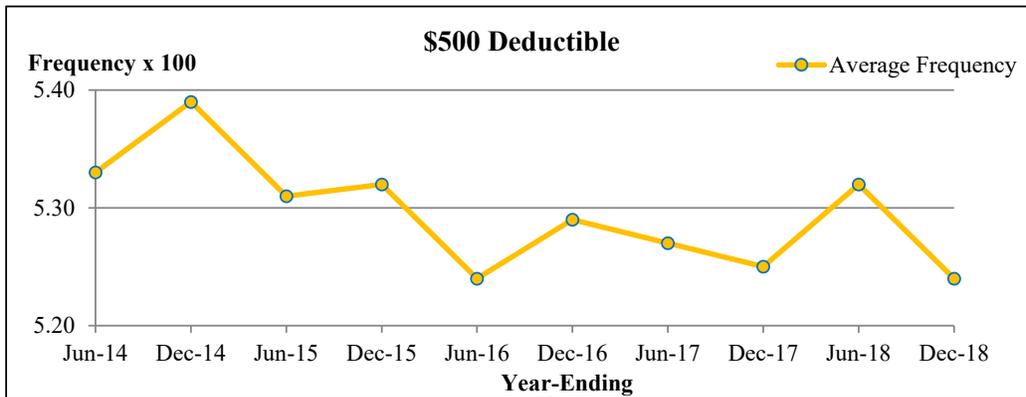
\* Multistate data excludes Massachusetts

\*\* 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.

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

Accident Year <u>Ending</u>	\$100,000 Basic Limit			Loss Development Factors		
	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>15 to 27 Months</u>	<u>27 to 39 Months</u>	
12/31/2007	6,409,567	8,121,209	7,913,685	1.267	0.974	
12/31/2008	4,450,861	5,846,213	6,227,429	1.314	1.065	
12/31/2009	4,113,518	5,087,359	5,666,691	1.237	1.114	
12/31/2010	3,908,032	5,279,529	5,528,138	1.351	1.047	
12/31/2011	4,115,394	4,858,287	5,780,357	1.181	1.190	
12/31/2012	4,251,558	5,745,262	6,096,979	1.351	1.061	
12/31/2013	5,242,592	5,899,489	6,105,316	1.125	1.035	
12/31/2014	4,997,544	5,268,380	5,943,475	1.054	1.128	
12/31/2015	5,072,092	5,410,587	5,747,074	1.067	1.062	
12/31/2016	5,819,453	6,822,279	7,329,328	1.172	1.074	
12/31/2017	4,058,404	5,017,970		1.236		
12/31/2018	4,078,051					
(1) Average Factor (Best 3 of 5) :				(A) State	1.121	1.066
				(B) Multistate	1.393	1.154
(2) Credibility					0.940	0.850
(3) Credibility Weighted Factors					1.137	1.079

## Property Damage

Accident Year <u>Ending</u>	\$100,000 Basic Limit			Loss Development Factors		
	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>15 to 27 Months</u>	<u>27 to 39 Months</u>	
12/31/2007	7,660,675	7,640,551	7,561,957	0.997	0.990	
12/31/2008	6,302,838	6,280,147	6,326,267	0.996	1.007	
12/31/2009	5,663,115	5,651,901	5,709,800	0.998	1.010	
12/31/2010	5,944,659	6,214,616	6,318,075	1.045	1.017	
12/31/2011	6,719,686	6,712,234	6,721,891	0.999	1.001	
12/31/2012	5,837,514	6,149,719	6,138,438	1.053	0.998	
12/31/2013	7,272,217	7,571,233	7,474,982	1.041	0.987	
12/31/2014	6,684,593	6,872,750	6,852,088	1.028	0.997	
12/31/2015	7,076,565	7,341,227	7,426,556	1.037	1.012	
12/31/2016	8,080,626	8,486,911	8,471,558	1.050	0.998	
12/31/2017	7,049,043	7,251,836		1.029		
12/31/2018	7,947,324					
(1) Average Factor (Best 3 of 5) :				(A) State	1.036	0.998
				(B) Multistate	1.045	1.009
(2) Credibility					0.940	0.000
(3) Credibility Weighted Factors					1.037	1.009

## Summary of Factors

	<u>Bodily Injury</u>	<u>Property Damage</u>
39 to Ultimate **	1.084	1.004
27 to Ultimate	1.170	1.013
15 to Ultimate	1.330	1.050

\*\* 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: ( Best 3 of 5 )	1.393	1.154	1.058	1.015

## 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: ( Best 3 of 5 )	1.045	1.009	1.003	1.001

## Summary of Factors

63 to Ult:	(75:63) (75:Ult) =	1.000
51 to Ult:	(63:51) (75:63) (75:Ult) =	1.001
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.004
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.013
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.

MINNESOTA  
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>
3/31/2010	592,518	667,311	680,351	668,494	672,841
3/31/2011	1,010,939	973,551	970,258	978,883	996,861
3/31/2012	1,011,002	960,296	926,966	925,979	931,624
3/31/2013	816,953	738,436	784,053	844,364	836,457
3/31/2014	1,070,140	1,056,368	1,090,407	1,082,016	1,093,102
3/31/2015	608,251	657,374	703,624	715,819	715,819
3/31/2016	1,038,955	1,086,928	1,079,894	1,127,470	
3/31/2017	769,362	887,475	818,610		
3/31/2018	680,570	677,856			
3/31/2019	972,374				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
3/31/2010	1.126	1.020	0.983	1.007
3/31/2011	0.963	0.997	1.009	1.018
3/31/2012	0.950	0.965	0.999	1.006
3/31/2013	0.904	1.062	1.077	0.991
3/31/2014	0.987	1.032	0.992	1.010
3/31/2015	1.081	1.070	1.017	1.000
3/31/2016	1.046	0.994	1.044	
3/31/2017	1.154	0.922		
3/31/2018	0.996			

## Average Factor:

(Best 3 of 5)	1.041	1.029	1.020	1.005
(Latest 3)	1.065	0.995	1.018	1.000
(Latest 5)	1.053	1.016	1.026	1.005

## Selected Factor:

1.041	1.029	1.020	1.005
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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) =	1.005
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.025
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.055
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.098

(A) Includes Basic Benefits Losses.

## INSURANCE SERVICES OFFICE, INC.

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

Accident Year <u>Ending</u>	\$100,000 Basic Limit			Loss Development Factors		
	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>15 to 27 Months</u>	<u>27 to 39 Months</u>	
12/31/2007	1,671,911	2,213,003	2,257,023	1.324	1.020	
12/31/2008	1,335,012	1,522,550	1,531,763	1.140	1.006	
12/31/2009	1,831,536	1,941,278	2,182,951	1.060	1.124	
12/31/2010	856,173	1,317,117	1,497,659	1.538	1.137	
12/31/2011	809,123	786,748	866,968	0.972	1.102	
12/31/2012	682,649	1,027,330	1,341,350	1.505	1.306	
12/31/2013	828,708	1,194,580	1,237,982	1.441	1.036	
12/31/2014	655,587	658,602	792,020	1.005	1.203	
12/31/2015	1,003,678	929,295	1,079,447	0.926	1.162	
12/31/2016	1,273,780	1,168,271	1,201,013	0.917	1.028	
12/31/2017	722,655	929,979		1.287		
12/31/2018	816,383					
(1) Average Factor (Best 3 of 5) :				(A) State	1.073	1.134
				(B) Multistate	1.404	1.158
(2) Credibility					0.810	0.620
(3) Credibility Weighted Factors					1.136	1.143

## Property Damage

Accident Year <u>Ending</u>	\$100,000 Basic Limit			Loss Development Factors		
	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>15 to 27 Months</u>	<u>27 to 39 Months</u>	
12/31/2007	1,591,019	1,505,851	1,507,281	0.946	1.001	
12/31/2008	1,665,007	1,679,620	1,696,330	1.009	1.010	
12/31/2009	1,312,823	1,315,145	1,316,965	1.002	1.001	
12/31/2010	1,223,584	1,301,601	1,309,322	1.064	1.006	
12/31/2011	1,422,852	1,432,238	1,433,097	1.007	1.001	
12/31/2012	1,319,361	1,335,153	1,350,630	1.012	1.012	
12/31/2013	1,345,007	1,424,485	1,425,312	1.059	1.001	
12/31/2014	1,217,697	1,227,454	1,227,454	1.008	1.000	
12/31/2015	1,263,140	1,386,538	1,387,275	1.098	1.001	
12/31/2016	1,203,274	1,250,447	1,251,543	1.039	1.001	
12/31/2017	1,079,365	1,192,689		1.105		
12/31/2018	1,427,852					
(1) Average Factor (Best 3 of 5) :				(A) State	1.065	1.001
				(B) Multistate	1.045	1.008
(2) Credibility					0.860	0.000
(3) Credibility Weighted Factors					1.062	1.008

## Summary of Factors

	<u>Bodily Injury</u>	<u>Property Damage</u>
39 to Ultimate **	1.082	1.004
27 to Ultimate	1.237	1.012
15 to Ultimate	1.405	1.075

\*\* 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: 1.404 1.158 1.057 1.021  
( Best 3 of 5 )

## 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.

MINNESOTA  
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>
3/31/2010	395,219	394,798	388,063	367,287	367,631
3/31/2011	738,954	805,892	770,180	774,113	764,669
3/31/2012	611,535	610,239	608,732	615,607	621,735
3/31/2013	719,997	750,483	706,927	722,250	724,582
3/31/2014	486,224	511,536	494,746	490,396	490,396
3/31/2015	332,549	363,107	379,992	384,592	387,953
3/31/2016	770,992	829,441	841,554	849,303	
3/31/2017	479,641	469,346	480,311		
3/31/2018	592,127	547,396			
3/31/2019	481,863				

## Ratios

Accident Year <u>Ending</u>	<u>27:15</u>	<u>39:27</u>	<u>51:39</u>	<u>63:51</u>
3/31/2010	0.999	0.983	0.946	1.001
3/31/2011	1.091	0.956	1.005	0.988
3/31/2012	0.998	0.998	1.011	1.010
3/31/2013	1.042	0.942	1.022	1.003
3/31/2014	1.052	0.967	0.991	1.000
3/31/2015	1.092	1.047	1.012	1.009
3/31/2016	1.076	1.015	1.009	
3/31/2017	0.979	1.023		
3/31/2018	0.924			

## Average Factor:

(Best 3 of 5)	1.036	1.002	1.011	1.004
(Latest 3)	0.993	1.028	1.004	1.004
(Latest 5)	1.025	0.999	1.009	1.002

## Selected Factor:

1.036	1.002	1.011	1.004
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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) =	1.004
39 to Ult:	(51:39) (63:51) (75:63) (75:Ult) =	1.015
27 to Ult:	(39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.017
15 to Ult:	(27:15) (39:27) (51:39) (63:51) (75:63) (75:Ult) =	1.054

(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 <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	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 <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	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	4.69
	School and Church Buses	0.55	0.57
	Other Buses	3.80	5.46
	Van Pools	1.50	0.62
<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	0.500	
	PPT principally operated by employees	0.555	
	T&L Other Than Owner Operated	0.712	
	Van Pool Furnished by Employer	0.555	
<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.		

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DIVISION ONE  
AUTOMOBILE  
LOSS COST PAGES**

**MINNESOTA (22)  
TERRITORY 101**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 316	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 37	<b>Covered By Workers' Compensation</b> \$ 19
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 268	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 88	<b>Principally Operated By Employees</b> \$ 49
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 1959	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 174	<b>Other Than Owner Operated</b> \$ 124
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 174	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 21	
<b>– OTHER BUSES</b>						
\$ 1201	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 202	
<b>– VAN POOLS</b>						
\$ 474	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 13	<b>All Other</b> \$ 23
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 431	Refer to Rule 49.				<b>All Autos</b> \$ 43	
<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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DIVISION ONE  
AUTOMOBILE  
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LIABILITY Limit Of Liab. \$100,000	MEDICAL PAYMENTS Limit Per Person				PERSONAL INJURY PROTECTION Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 176	N/A	N/A	N/A	N/A	Not Covered By Workers' Compensation \$ 29	Covered By Workers' Compensation \$ 15
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 211	N/A	N/A	N/A	N/A	Not Principally Operated By Employees \$ 54	Principally Operated By Employees \$ 30
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 1091	N/A	N/A	N/A	N/A	Owner Operated \$ 136	Other Than Owner Operated \$ 97
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 97	N/A	N/A	N/A	N/A	All Autos \$ 17	
<b>– OTHER BUSES</b>						
\$ 669	N/A	N/A	N/A	N/A	All Autos \$ 158	
<b>– VAN POOLS</b>						
\$ 264	N/A	N/A	N/A	N/A	Employer Furnished \$ 10	All Other \$ 18
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 261	Refer to Rule 49.				All Autos \$ 31	
<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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**MINNESOTA (22)  
TERRITORY 104**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 139	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 32	<b>Covered By Workers' Compensation</b> \$ 16
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 165	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 75	<b>Principally Operated By Employees</b> \$ 42
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 862	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 150	<b>Other Than Owner Operated</b> \$ 107
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 76	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 18	
<b>– OTHER BUSES</b>						
\$ 528	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 175	
<b>– VAN POOLS</b>						
\$ 209	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 11	<b>All Other</b> \$ 20
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 197	Refer to Rule 49.				<b>All Autos</b> \$ 35	
<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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DIVISION ONE  
AUTOMOBILE  
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LIABILITY Limit Of Liab. \$100,000	MEDICAL PAYMENTS Limit Per Person				PERSONAL INJURY PROTECTION Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 318	N/A	N/A	N/A	N/A	Not Covered By Workers' Compensation \$ 31	Covered By Workers' Compensation \$ 16
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 231	N/A	N/A	N/A	N/A	Not Principally Operated By Employees \$ 60	Principally Operated By Employees \$ 33
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 1972	N/A	N/A	N/A	N/A	Owner Operated \$ 145	Other Than Owner Operated \$ 103
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 175	N/A	N/A	N/A	N/A	All Autos \$ 18	
<b>– OTHER BUSES</b>						
\$ 1208	N/A	N/A	N/A	N/A	All Autos \$ 169	
<b>– VAN POOLS</b>						
\$ 477	N/A	N/A	N/A	N/A	Employer Furnished \$ 11	All Other \$ 19
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 402	Refer to Rule 49.				All Autos \$ 34	
<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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**MINNESOTA (22)  
TERRITORY 108**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 264	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 35	<b>Covered By Workers' Compensation</b> \$ 18
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 275	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 95	<b>Principally Operated By Employees</b> \$ 53
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 1637	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 164	<b>Other Than Owner Operated</b> \$ 117
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 145	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 20	
<b>– OTHER BUSES</b>						
\$ 1003	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 191	
<b>– VAN POOLS</b>						
\$ 396	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 12	<b>All Other</b> \$ 22
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 444	Refer to Rule 49.				<b>All Autos</b> \$ 41	
<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 Limit Of Liab. \$100,000	MEDICAL PAYMENTS Limit Per Person				PERSONAL INJURY PROTECTION Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 302	N/A	N/A	N/A	N/A	Not Covered By Workers' Compensation \$ 39	Covered By Workers' Compensation \$ 20
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 224	N/A	N/A	N/A	N/A	Not Principally Operated By Employees \$ 70	Principally Operated By Employees \$ 39
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 1872	N/A	N/A	N/A	N/A	Owner Operated \$ 183	Other Than Owner Operated \$ 130
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 166	N/A	N/A	N/A	N/A	All Autos \$ 22	
<b>– OTHER BUSES</b>						
\$ 1148	N/A	N/A	N/A	N/A	All Autos \$ 213	
<b>– VAN POOLS</b>						
\$ 453	N/A	N/A	N/A	N/A	Employer Furnished \$ 13	All Other \$ 24
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 395	Refer to Rule 49.				All Autos \$ 44	
<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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**MINNESOTA (22)  
TERRITORY 112**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 108	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 17	<b>Covered By Workers' Compensation</b> \$ 9
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 162	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 47	<b>Principally Operated By Employees</b> \$ 26
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 670	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 80	<b>Other Than Owner Operated</b> \$ 57
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 59	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 10	
<b>– OTHER BUSES</b>						
\$ 410	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 93	
<b>– VAN POOLS</b>						
\$ 162	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 6	<b>All Other</b> \$ 11
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 171	Refer to Rule 49.				<b>All Autos</b> \$ 20	
<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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AUTOMOBILE  
LOSS COST PAGES

LIABILITY Limit Of Liab. \$100,000	MEDICAL PAYMENTS Limit Per Person				PERSONAL INJURY PROTECTION Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 179	N/A	N/A	N/A	N/A	Not Covered By Workers' Compensation \$ 28	Covered By Workers' Compensation \$ 14
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 176	N/A	N/A	N/A	N/A	Not Principally Operated By Employees \$ 60	Principally Operated By Employees \$ 33
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 1110	N/A	N/A	N/A	N/A	Owner Operated \$ 131	Other Than Owner Operated \$ 93
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 98	N/A	N/A	N/A	N/A	All Autos \$ 16	
<b>– OTHER BUSES</b>						
\$ 680	N/A	N/A	N/A	N/A	All Autos \$ 153	
<b>– VAN POOLS</b>						
\$ 269	N/A	N/A	N/A	N/A	Employer Furnished \$ 9	All Other \$ 17
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 256	Refer to Rule 49.				All Autos \$ 33	
<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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**MINNESOTA (22)  
TERRITORY 114**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 137	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 19	<b>Covered By Workers' Compensation</b> \$ 10
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 158	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 60	<b>Principally Operated By Employees</b> \$ 33
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 849	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 89	<b>Other Than Owner Operated</b> \$ 63
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 75	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 11	
<b>– OTHER BUSES</b>						
\$ 521	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 104	
<b>– VAN POOLS</b>						
\$ 206	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 7	<b>All Other</b> \$ 12
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 193	Refer to Rule 49.				<b>All Autos</b> \$ 22	
<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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AUTOMOBILE  
LOSS COST PAGES

LIABILITY Limit Of Liab. \$100,000	MEDICAL PAYMENTS Limit Per Person				PERSONAL INJURY PROTECTION Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 104	N/A	N/A	N/A	N/A	Not Covered By Workers' Compensation \$ 15	Covered By Workers' Compensation \$ 8
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 176	N/A	N/A	N/A	N/A	Not Principally Operated By Employees \$ 60	Principally Operated By Employees \$ 33
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 645	N/A	N/A	N/A	N/A	Owner Operated \$ 70	Other Than Owner Operated \$ 50
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 57	N/A	N/A	N/A	N/A	All Autos \$ 9	
<b>– OTHER BUSES</b>						
\$ 395	N/A	N/A	N/A	N/A	All Autos \$ 82	
<b>– VAN POOLS</b>						
\$ 156	N/A	N/A	N/A	N/A	Employer Furnished \$ 5	All Other \$ 9
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 159	Refer to Rule 49.				All Autos \$ 17	
<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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**MINNESOTA (22)  
TERRITORY 116**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 138	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 18	<b>Covered By Workers' Compensation</b> \$ 9
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 162	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 55	<b>Principally Operated By Employees</b> \$ 31
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 856	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 84	<b>Other Than Owner Operated</b> \$ 60
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 76	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 10	
<b>– OTHER BUSES</b>						
\$ 524	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 98	
<b>– VAN POOLS</b>						
\$ 207	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 6	<b>All Other</b> \$ 11
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 186	Refer to Rule 49.				<b>All Autos</b> \$ 21	
<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 Limit Of Liab. \$100,000	MEDICAL PAYMENTS Limit Per Person				PERSONAL INJURY PROTECTION Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 267	N/A	N/A	N/A	N/A	Not Covered By Workers' Compensation \$ 31	Covered By Workers' Compensation \$ 16
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 209	N/A	N/A	N/A	N/A	Not Principally Operated By Employees \$ 92	Principally Operated By Employees \$ 51
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 1655	N/A	N/A	N/A	N/A	Owner Operated \$ 145	Other Than Owner Operated \$ 103
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 147	N/A	N/A	N/A	N/A	All Autos \$ 18	
<b>– OTHER BUSES</b>						
\$ 1015	N/A	N/A	N/A	N/A	All Autos \$ 169	
<b>– VAN POOLS</b>						
\$ 401	N/A	N/A	N/A	N/A	Employer Furnished \$ 11	All Other \$ 19
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 364	Refer to Rule 49.				All Autos \$ 35	
<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 Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 158	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 19	<b>Covered By Workers' Compensation</b> \$ 10
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 214	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 49	<b>Principally Operated By Employees</b> \$ 27
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 980	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 89	<b>Other Than Owner Operated</b> \$ 63
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 87	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 11	
<b>– OTHER BUSES</b>						
\$ 600	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 104	
<b>– VAN POOLS</b>						
\$ 237	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 7	<b>All Other</b> \$ 12
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 232	Refer to Rule 49.				<b>All Autos</b> \$ 21	
<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 Limit Of Liab. \$100,000	MEDICAL PAYMENTS Limit Per Person				PERSONAL INJURY PROTECTION Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 185	N/A	N/A	N/A	N/A	Not Covered By Workers' Compensation \$ 19	Covered By Workers' Compensation \$ 10
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 214	N/A	N/A	N/A	N/A	Not Principally Operated By Employees \$ 49	Principally Operated By Employees \$ 27
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 1147	N/A	N/A	N/A	N/A	Owner Operated \$ 89	Other Than Owner Operated \$ 63
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 102	N/A	N/A	N/A	N/A	All Autos \$ 11	
<b>– OTHER BUSES</b>						
\$ 703	N/A	N/A	N/A	N/A	All Autos \$ 104	
<b>– VAN POOLS</b>						
\$ 278	N/A	N/A	N/A	N/A	Employer Furnished \$ 7	All Other \$ 12
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 272	Refer to Rule 49.				All Autos \$ 21	
<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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**MINNESOTA (22)  
TERRITORY 120**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 140	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 19	<b>Covered By Workers' Compensation</b> \$ 10
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 184	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 49	<b>Principally Operated By Employees</b> \$ 27
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 868	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 89	<b>Other Than Owner Operated</b> \$ 63
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 77	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 11	
<b>– OTHER BUSES</b>						
\$ 532	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 104	
<b>– VAN POOLS</b>						
\$ 210	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 7	<b>All Other</b> \$ 12
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 191	Refer to Rule 49.				<b>All Autos</b> \$ 21	
<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 Limit Of Liab. \$100,000	MEDICAL PAYMENTS Limit Per Person				PERSONAL INJURY PROTECTION Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 141	N/A	N/A	N/A	N/A	Not Covered By Workers' Compensation \$ 19	Covered By Workers' Compensation \$ 10
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 205	N/A	N/A	N/A	N/A	Not Principally Operated By Employees \$ 49	Principally Operated By Employees \$ 27
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 874	N/A	N/A	N/A	N/A	Owner Operated \$ 89	Other Than Owner Operated \$ 63
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 78	N/A	N/A	N/A	N/A	All Autos \$ 11	
<b>– OTHER BUSES</b>						
\$ 536	N/A	N/A	N/A	N/A	All Autos \$ 104	
<b>– VAN POOLS</b>						
\$ 212	N/A	N/A	N/A	N/A	Employer Furnished \$ 7	All Other \$ 12
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 222	Refer to Rule 49.				All Autos \$ 21	
<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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**MINNESOTA (22)  
TERRITORY 122**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 138	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 20	<b>Covered By Workers' Compensation</b> \$ 10
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 225	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 51	<b>Principally Operated By Employees</b> \$ 28
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 856	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 94	<b>Other Than Owner Operated</b> \$ 67
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 76	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 11	
<b>– OTHER BUSES</b>						
\$ 524	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 109	
<b>– VAN POOLS</b>						
\$ 207	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 7	<b>All Other</b> \$ 12
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 214	Refer to Rule 49.				<b>All Autos</b> \$ 22	
<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 Limit Of Liab. \$100,000	MEDICAL PAYMENTS Limit Per Person				PERSONAL INJURY PROTECTION Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 194	N/A	N/A	N/A	N/A	Not Covered By Workers' Compensation \$ 23	Covered By Workers' Compensation \$ 12
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 208	N/A	N/A	N/A	N/A	Not Principally Operated By Employees \$ 64	Principally Operated By Employees \$ 36
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 1203	N/A	N/A	N/A	N/A	Owner Operated \$ 108	Other Than Owner Operated \$ 77
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 107	N/A	N/A	N/A	N/A	All Autos \$ 13	
<b>– OTHER BUSES</b>						
\$ 737	N/A	N/A	N/A	N/A	All Autos \$ 126	
<b>– VAN POOLS</b>						
\$ 291	N/A	N/A	N/A	N/A	Employer Furnished \$ 8	All Other \$ 14
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 272	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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**MINNESOTA (22)  
TERRITORY 124**

LIABILITY	MEDICAL PAYMENTS				PERSONAL INJURY PROTECTION	
Limit Of Liab. \$100,000	Limit Per Person				Basic Limits	
	500	1000	2000	5000		
<b>RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS</b>						
\$ 157	N/A	N/A	N/A	N/A	<b>Not Covered By Workers' Compensation</b> \$ 19	<b>Covered By Workers' Compensation</b> \$ 10
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>						
\$ 218	N/A	N/A	N/A	N/A	<b>Not Principally Operated By Employees</b> \$ 62	<b>Principally Operated By Employees</b> \$ 34
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS –</b>						
<b>– TAXICABS AND LIMOUSINES</b>						
\$ 973	N/A	N/A	N/A	N/A	<b>Owner Operated</b> \$ 89	<b>Other Than Owner Operated</b> \$ 63
<b>– SCHOOL AND CHURCH BUSES</b>						
\$ 86	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 11	
<b>– OTHER BUSES</b>						
\$ 597	N/A	N/A	N/A	N/A	<b>All Autos</b> \$ 104	
<b>– VAN POOLS</b>						
\$ 236	N/A	N/A	N/A	N/A	<b>Employer Furnished</b> \$ 7	<b>All Other</b> \$ 12
<b>RULE 49. AUTO DEALERS – PREMIUM DEVELOPMENT</b>						
\$ 234	Refer to Rule 49.				<b>All Autos</b> \$ 21	
<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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 72	\$ 125	\$ 175
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 66	\$ 115	\$ 331
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 73	\$ 128	\$ 222
– SCHOOL AND CHURCH BUSES			
	\$ 50	\$ 88	\$ 114
– OTHER BUSES			
	\$ 50	\$ 88	\$ 114
– VAN POOLS			
	\$ 73	\$ 128	\$ 222
<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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**MINNESOTA (22)  
TERRITORY 103**

<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			
	\$ 97	\$ 169	\$ 196
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 100	\$ 174	\$ 326
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 99	\$ 172	\$ 249
– SCHOOL AND CHURCH BUSES			
	\$ 68	\$ 118	\$ 127
– OTHER BUSES			
	\$ 68	\$ 118	\$ 127
– VAN POOLS			
	\$ 99	\$ 172	\$ 249
<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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 109	\$ 190	\$ 186
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 114	\$ 198	\$ 285
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 111	\$ 194	\$ 236
– SCHOOL AND CHURCH BUSES			
	\$ 76	\$ 133	\$ 121
– OTHER BUSES			
	\$ 76	\$ 133	\$ 121
– VAN POOLS			
	\$ 111	\$ 194	\$ 236
<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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**MINNESOTA (22)  
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			
	\$ 82	\$ 142	\$ 175
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 69	\$ 119	\$ 251
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 84	\$ 145	\$ 222
– SCHOOL AND CHURCH BUSES			
	\$ 57	\$ 99	\$ 114
– OTHER BUSES			
	\$ 57	\$ 99	\$ 114
– VAN POOLS			
	\$ 84	\$ 145	\$ 222
<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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 74	\$ 128	\$ 175
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 70	\$ 121	\$ 355
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 75	\$ 131	\$ 222
– SCHOOL AND CHURCH BUSES			
	\$ 52	\$ 90	\$ 114
– OTHER BUSES			
	\$ 52	\$ 90	\$ 114
– VAN POOLS			
	\$ 75	\$ 131	\$ 222
<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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**MINNESOTA (22)  
TERRITORY 109**

<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			
	\$ 84	\$ 145	\$ 183
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 71	\$ 124	\$ 246
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 86	\$ 148	\$ 232
– SCHOOL AND CHURCH BUSES			
	\$ 59	\$ 102	\$ 119
– OTHER BUSES			
	\$ 59	\$ 102	\$ 119
– VAN POOLS			
	\$ 86	\$ 148	\$ 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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 111	\$ 192	\$ 185
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 115	\$ 200	\$ 221
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 113	\$ 196	\$ 235
– SCHOOL AND CHURCH BUSES			
	\$ 78	\$ 134	\$ 120
– OTHER BUSES			
	\$ 78	\$ 134	\$ 120
– VAN POOLS			
	\$ 113	\$ 196	\$ 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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**MINNESOTA (22)  
TERRITORY 113**

<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			
	\$ 106	\$ 184	\$ 172
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 102	\$ 177	\$ 245
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 108	\$ 188	\$ 218
– SCHOOL AND CHURCH BUSES			
	\$ 74	\$ 129	\$ 112
– OTHER BUSES			
	\$ 74	\$ 129	\$ 112
– VAN POOLS			
	\$ 108	\$ 188	\$ 218
<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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 125	\$ 217	\$ 187
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 124	\$ 215	\$ 248
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 128	\$ 221	\$ 237
– SCHOOL AND CHURCH BUSES			
	\$ 88	\$ 152	\$ 122
– OTHER BUSES			
	\$ 88	\$ 152	\$ 122
– VAN POOLS			
	\$ 128	\$ 221	\$ 237
<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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**MINNESOTA (22)  
TERRITORY 115**

<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			
	\$ 95	\$ 165	\$ 161
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 121	\$ 210	\$ 206
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 97	\$ 168	\$ 204
– SCHOOL AND CHURCH BUSES			
	\$ 67	\$ 116	\$ 105
– OTHER BUSES			
	\$ 67	\$ 116	\$ 105
– VAN POOLS			
	\$ 97	\$ 168	\$ 204
<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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 88	\$ 153	\$ 188
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 87	\$ 151	\$ 195
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 90	\$ 156	\$ 239
– SCHOOL AND CHURCH BUSES			
	\$ 62	\$ 107	\$ 122
– OTHER BUSES			
	\$ 62	\$ 107	\$ 122
– VAN POOLS			
	\$ 90	\$ 156	\$ 239
<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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**MINNESOTA (22)  
TERRITORY 117**

<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	\$ 172
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 85	\$ 147	\$ 223
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 87	\$ 151	\$ 218
– SCHOOL AND CHURCH BUSES			
	\$ 60	\$ 104	\$ 112
– OTHER BUSES			
	\$ 60	\$ 104	\$ 112
– VAN POOLS			
	\$ 87	\$ 151	\$ 218
<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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 75	\$ 131	\$ 160
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 69	\$ 119	\$ 207
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 77	\$ 134	\$ 203
– SCHOOL AND CHURCH BUSES			
	\$ 53	\$ 92	\$ 104
– OTHER BUSES			
	\$ 53	\$ 92	\$ 104
– VAN POOLS			
	\$ 77	\$ 134	\$ 203
<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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**MINNESOTA (22)  
TERRITORY 119**

<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			
	\$ 86	\$ 150	\$ 173
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 60	\$ 105	\$ 221
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 88	\$ 153	\$ 220
– SCHOOL AND CHURCH BUSES			
	\$ 60	\$ 105	\$ 112
– OTHER BUSES			
	\$ 60	\$ 105	\$ 112
– VAN POOLS			
	\$ 88	\$ 153	\$ 220
<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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 87	\$ 151	\$ 146
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 75	\$ 131	\$ 207
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 89	\$ 154	\$ 185
– SCHOOL AND CHURCH BUSES			
	\$ 61	\$ 106	\$ 95
– OTHER BUSES			
	\$ 61	\$ 106	\$ 95
– VAN POOLS			
	\$ 89	\$ 154	\$ 185
<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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**MINNESOTA (22)  
TERRITORY 121**

<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			
	\$ 80	\$ 139	\$ 158
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 80	\$ 139	\$ 200
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 82	\$ 142	\$ 201
– SCHOOL AND CHURCH BUSES			
	\$ 56	\$ 97	\$ 103
– OTHER BUSES			
	\$ 56	\$ 97	\$ 103
– VAN POOLS			
	\$ 82	\$ 142	\$ 201
<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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 76	\$ 132	\$ 169
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 94	\$ 164	\$ 293
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 78	\$ 135	\$ 215
– SCHOOL AND CHURCH BUSES			
	\$ 53	\$ 92	\$ 110
– OTHER BUSES			
	\$ 53	\$ 92	\$ 110
– VAN POOLS			
	\$ 78	\$ 135	\$ 215
<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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**MINNESOTA (22)  
TERRITORY 123**

<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	\$ 147	\$ 185
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 86	\$ 150	\$ 263
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 87	\$ 150	\$ 235
– SCHOOL AND CHURCH BUSES			
	\$ 60	\$ 103	\$ 120
– OTHER BUSES			
	\$ 60	\$ 103	\$ 120
– VAN POOLS			
	\$ 87	\$ 150	\$ 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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PHYSICAL DAMAGE Original Cost New Range \$15,001 – 20,000			
	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			
	\$ 71	\$ 123	\$ 141
<b>RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS</b>			
	\$ 60	\$ 105	\$ 238
<b>RULE 40. PUBLIC AUTO CLASSIFICATIONS</b>			
– TAXICABS AND LIMOUSINES			
	\$ 72	\$ 125	\$ 179
– SCHOOL AND CHURCH BUSES			
	\$ 50	\$ 86	\$ 92
– OTHER BUSES			
	\$ 50	\$ 86	\$ 92
– VAN POOLS			
	\$ 72	\$ 125	\$ 179
<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>			

## Supplementary Information – Minnesota

### 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 Minnesota

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 – Minnesota

### 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 – Minnesota

### Minnesota 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>
Minnesota Claim Cost Trends		
Bodily Injury (\$100,000 Limit)	+6.6%	-0.8%
Property Damage (\$100,000 Limit)	+2.2%	+6.5%
Credibility-Weighted Claim Cost Trends		
Bodily Injury (\$100,000 Limit)	+5.5%	+3.8%
Property Damage (\$100,000 Limit)	+3.9%	+5.1%
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%	+5.1%
Private Passenger Types		
Bodily Injury (\$100,000 Limit)	+5.5%	+3.8%
Property Damage (\$100,000 Limit)	+3.9%	+5.1%

Minnesota bodily injury severity trend receives 0% weight when combined with multistate trend in the filing, property damage trend receives 20% weight.

If the prior trends were used to calculate the indicated changes in this document, the Truck, Tractors & Trailers Liability indication would have been +3.0% rather than +2.9%. For the Private Passenger Types coverage, the indication would have been +4.5% instead of +4.8%.

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

	Current Trends <u>Data through 06/30/2019</u>	Previous Trends <u>Data through 06/30/2018</u>
Minnesota Claim Cost Trends		
Trucks, Tractors & Trailers	+3.0%	+3.4%
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		
	+3.0%	+3.4%
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 +1.8% instead of +1.0%. For the Private Passenger Types PIP coverage, the indication would have been +3.6% rather than +2.2%.

## Supplementary Information – Minnesota

### Physical Damage Loss Trend

	<u>Coverage</u>	Current Trends	Previous Trends
		<u>Data through 12/31/2018</u>	<u>Data through 12/31/2017</u>
Trucks, Tractors & Trailers	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

	<u>Coverage</u>	Current Trends	Previous Trends
		<u>Data through 12/31/2018</u>	<u>Data through 12/31/2017</u>
Trucks, Tractors & Trailers	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 +6.7%, instead of +7.1%, and +7.5%, instead of +7.8%, respectively.

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 +1.9 %, instead of +0.5%, and -0.8%, instead of -1.9%, respectively.

## Supplementary Information – Minnesota

### Loss Development

#### Methodology

For the Trucks, Tractors & Trailers and Private Passenger Types Liability coverages, we continue to employ a credibility-weighted combination of Minnesota 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	1.170	1.195
15 to Ultimate	1.330	1.355
Trucks, Tractors and Trailers PD		
39 to Ultimate	1.004	1.003
27 to Ultimate	1.013	1.011
15 to Ultimate	1.050	1.049
Private Passenger Types BI		
39 to Ultimate	1.082	1.090
27 to Ultimate	1.237	1.239
15 to Ultimate	1.405	1.441
Private Passenger Types PD		
39 to Ultimate	1.004	1.004
27 to Ultimate	1.012	1.012
15 to Ultimate	1.075	1.045

**Supplementary Information – Minnesota****Other Factors**

Unallocated Loss Adjustment Expense factors:

	<u>Data through 12/31/2018</u>	<u>Data through 12/31/2017</u>
Bodily Injury	1.075	1.075
Property Damage	1.100	1.100
Physical Damage	1.130	1.130

**Indicated vs. Filed Changes**

An overall change of +3.0% is indicated when each of the coverage indications is weighted by its respective loss cost volume. Staff will file the indications, which reflect a 10/01/2020 proposed effective date, with the following exceptions: The filed loss costs for liability, PIP, and collision have been adjusted by a factor of 0.98 to reflect the impact of COVID-19

<u>Coverage</u>	<u>Indicated Change</u>	<u>Filed Change</u>
Trucks, Tractors & Trailers Liability	+2.9%	+0.8%
Trucks, Tractors & Trailers PIP	+1.0%	-1.0%
Trucks, Tractors & Trailers Collision	+0.5%	-1.5%
Private Passenger Types Liability	+4.8%	+2.7%
Private Passenger Types PIP	+2.2%	+0.2%
Private Passenger Types Collision	-1.9%	-3.9%

The overall filed change is +1.2%.

**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.