



# Indiana

Advisory Loss Costs, Advisory Rates,  
Assigned Risk Rates, and  
Rating Values Filing

Proposed Effective January 1, 2020



September 24, 2019

Steve Robertson  
Commissioner of Insurance  
Indiana Department of Insurance  
311 W. Washington St., Suite 300  
Indianapolis, IN 46204-2787

**RE: Workers Compensation Advisory Loss Costs, Rates, and Rating Values:  
Indiana Voluntary and Assigned Risk Markets**

Dear Commissioner Robertson:

In accordance with the applicable statutes and regulations in the state of Indiana, I am filing for your consideration and approval the workers compensation advisory loss costs, advisory rates, and rating values for the Indiana voluntary market and assigned risk rates and rating values for the Indiana assigned risk market.

This filing proposes a 6.9% decrease to the overall voluntary loss cost level and a 6.7% decrease to the overall voluntary and assigned risk rate level to become effective on January 1, 2020 for new and renewal business.

Included with this filing is a proposed increase to the assigned risk surcharge from 25% to 30%. In conjunction with this change, an increase to the premium threshold (i.e., from \$2,500 to \$2,750) for which the assigned risk surcharge would be applicable is also being proposed. For several years, actuarial indications have suggested a need for additional premium from assigned risk policies (see Appendix D of the proposed filing). However, despite this indicated premium need for the past several years, a change to the surcharge has not been proposed in recognition of the negative implications such a change would have on employers in the assigned risk market. The additional rate need continues to grow, and now is projected at more than 11% (i.e., for the assigned risk market to be self-funded). By increasing the surcharge in tandem with the proposed 6.7% rate decrease, the overall premium impact to risks in the assigned risk market would be lessened.<sup>1</sup>

Please note the following in connection with this filing:

1. As a result of Item B-1397, effective July 1, 2007, a single combined rate is still calculated for Class Codes 7710 and 7711 via a payroll-weighted average of the separately indicated rates for these two class codes.
2. As a result of Item B-1435, effective January 1, 2018:
  - a. Class Codes 4053, 4061, and 4062 are combined to reflect the final year of a three-year transition program, and Class Codes 4053 and 4061 are discontinued.
  - b. Class Codes 4683 and 4716 are combined to reflect the final year of a three-year transition program, and Class Code 4716 is discontinued.
3. As a result of Item B-1436, effective January 1, 2019:

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<sup>1</sup> Based on NCCI data for 2018, approximately 2,500 policies would be subject to the increased surcharge. However, due to the increase in premium eligibility from \$2,500 to \$2,750, approximately 220 risks in the assigned risk market would no longer be subject to an assigned risk surcharge.



INDIANA COMPENSATION RATING BUREAU  
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- a. Class Codes 8825 and 8826 are combined to reflect the final year of a two-year transition program, and Class Code 8825 is discontinued.
- b. Class Code 8829 is discontinued and the rate for Class Code 8824 is payroll-weighted to reflect the combined experience of Class Codes 8824 and 8829.
4. As a result of Item B-1437, effective January 1, 2020:
  - a. Class Codes 2286 and 2220 are combined to reflect the first year of a two-year transition program. In the second year of the transition, Class Code 2286 will be discontinued.
  - b. Class Codes 2670 and 2688 are combined to reflect the first year of a two-year transition program. In the second year of the transition, Class Code 2670 will be discontinued.
  - c. Class Code 4360 is discontinued and the rate for Class Code 7610 is payroll-weighted to reflect the combined experience of Class Codes 4360 and 7610.
  - d. Class Code 5508 is discontinued and the rate for Class Code 5507 is payroll-weighted to reflect the combined experience of Class Codes 5508 and 5507.
  - e. Class Code 4670 is discontinued.
5. As a result of Item R-1417, the retrospective rating plan parameters were updated.
6. As a result of Item 01-IN-2017, effective January 1, 2018, class code 7732 is established and has a rate of \$122.00 and a loss cost of \$89.00 per volunteer. This rate and loss cost will remain in effect until, at least, the 1/1/2021 filing.

Our desire is to make this filing as clear as possible. For additional information, we would be glad to meet with you at your convenience.

We make this filing on behalf of the members and subscribers of the Indiana Compensation Rating Bureau. All persons on the "Interested Persons List" have been notified of the captioned filing.

We respectfully request that the filing be "Filed" electronically via the NAIC SERFF system within thirty days.

Sincerely,

Karen H. Byrd, AIC  
President & CEO

Actuarial content prepared by:

Robert Moss, ACAS, MAAA  
Assistant Actuary, NCCI

Enclosure



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## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Actuarial Certification**

I, Rob Moss, am an Assistant Actuary for the National Council on Compensation Insurance, Inc. I am an Associate of the Casualty Actuarial Society and a member of the American Academy of Actuaries, and I meet the Qualification Standards of the American Academy of Actuaries to provide the actuarial report contained herein.

The information contained in this report has been prepared under my direction in accordance with applicable Actuarial Standards of Practice as promulgated by the Actuarial Standards Board. The Actuarial Standards Board is vested by the U.S.-based actuarial organizations with the responsibility for promulgating Actuarial Standards of Practice for actuaries providing professional services in the United States. Each of these organizations requires its members, through its Code of Professional Conduct, to observe the Actuarial Standards of Practice when practicing in the United States.

A handwritten signature in dark ink, reading "Robert J. Moss". The signature is written in a cursive, flowing style.

Robert Moss, ACAS, MAAA  
Assistant Actuary  
Actuarial & Economic Services



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Disclosures**

##### **Purpose of the Report**

The purpose of this report is to provide the proposed advisory rates and loss costs, assigned risk rates, and rating values for workers compensation policies in Indiana, proposed to be effective January 1, 2020. The intended users of this report are:

- The Indiana Department of Insurance
- Affiliated carriers, for their reference in determining workers compensation rates

##### **Scope**

The prospective advisory rates are intended to cover the indemnity and medical benefits provided under the system, the expenses associated with providing these benefits (loss adjustment expenses) and any other costs associated with providing workers compensation insurance (such as commissions, taxes, etc.).

The filing also contains advisory loss costs. The prospective loss costs are intended to cover the indemnity and medical benefits provided under the system, as well as some of the expenses associated with providing these benefits (loss adjustment expenses). They do not, however, contemplate any other costs associated with providing workers compensation insurance (such as commissions, taxes, etc.).

Carriers offering workers compensation insurance in Indiana may desire to a) adopt the advisory rates which are based on NCCI's compilations of expense data, b) deviate from the advisory rates, or c) adopt the advisory loss costs to which they would apply their own expense provisions. The latter option can be accomplished through a loss cost multiplier that is applied to the approved advisory prospective loss costs in order to compute the final workers compensation rates that a carrier intends to charge. This multiplier is intended to cover the other costs associated with providing workers compensation insurance that are not already part of the advisory prospective loss costs.

Employers unable to secure coverage in the voluntary market can apply for such coverage in the assigned risk market. The proposed rates for the voluntary market are also applicable to the assigned risk policies, with a proposed effective date of January 1, 2020. Currently, assigned risk policies with premium greater than \$2,500 are assessed a 25% surcharge, with the surcharge being applied to the premium amount above \$2,500. This filing proposes to increase the assigned risk surcharge amount to 30% and increase the premium threshold to \$2,750.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Disclosures

##### Data Sources and Dates

The overall average loss cost level change is based on a review of Financial Call Data, which is an aggregation of workers compensation data annually reported to NCCI. In this filing, Financial Call Data submissions received after June 28, 2019 were not considered for inclusion in the analysis.

Advisory rate and loss cost level changes at the classification code level are based on Unit Statistical Data, which is the audited exposure, premium and loss information reported to NCCI on a policy level. In this filing, Unit Statistical Data submissions received after July 9, 2019 were not considered for inclusion in the analysis.

In some areas, NCCI's analysis also relies on other data sources, which are reviewed for reasonableness and are referenced in the filing where applicable.

This filing was prepared as of August 22, 2019. Therefore, events that occurred after this date that may have a material impact on workers compensation costs in this jurisdiction have not been considered in the analysis.

NCCI maintains several data reporting initiatives and programs to assist carriers to report data and to ensure that the data that is reported to NCCI is complete, accurate, and reported in a timely fashion. Occasionally, a carrier's data submission is not available for use in an NCCI filing either because the data was not reported prior to the filing, had quality issues, or NCCI determined that the data that was reported should not be included in the filing based on NCCI's actuarial judgment.

All carriers writing at least one-tenth of one percent of the Indiana workers compensation written premium volume and whose data is not included in the experience period are listed below:

- Policy Year 2016 – Guarantee Insurance Company (1.1% of state premium)

Other exclusions are made for the purposes of analysis, but do not have a material impact on the proposed changes in this filing.



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Disclosures**

##### **Risks and Uncertainty**

This filing includes assumptions and projections concerning the future. As with any prospective analysis, there exists estimation uncertainty in these assumptions and projections. Areas of this analysis subject to estimation uncertainty that could have a material impact on the final results include the following:

- Projection of future loss development
- Selection of loss ratio trends
- Potential impact of changes to laws and/or regulations

In addition, any future changes to workers compensation law or regulations that apply retroactively to policies or benefit claims on policies in the proposed effective period may have a significant impact on the adequacy of the advisory rates and loss costs proposed in this filing.





## Indiana

# Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

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## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Part 1 Filing Overview**

- Executive Summary
- Overview of Methodology
- Summary of Selections
- Selections Underlying the Proposed Changes
- Additional Proposed Changes



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Executive Summary

Based on its review of the most recently available data, NCCI has proposed an overall average workers compensation advisory loss cost level change of -6.9% and an advisory rate level change of -6.7% to become effective January 1, 2020. In addition, NCCI has proposed an overall average assigned risk rate level change of -6.7%, also to become effective January 1, 2020.

#### Advisory Rate Filing Components

Change in Experience and Development	- 4.6%
Change in Trend	- 2.5%
Change in Benefits	+ 0.4%
<u>Change in Loss-based Expenses</u>	<u>- 0.3%</u>
<b>Proposed Change in Overall Advisory Loss Cost Level</b>	<b>- 6.9%</b>
<u>Change in Production &amp; General Expenses and Taxes</u>	<u>+0.2%</u>
<b>Proposed Change in Overall Advisory Rate Level</b>	<b>- 6.7%</b>
<b>Proposed Change in Overall Assigned Risk Rate Level</b>	<b>- 6.7%</b>

#### Key observations:

- The filing is based on premium and loss experience for policy years 2016 and 2017. The financial data experience period evaluated as of December 31, 2018 shows continued improvement when compared with data evaluated as of December 31, 2017.
- Indiana's lost-time claim frequency decreased 0.9% in the latest complete policy year available (2017).
- After adjusting to a common wage level, the indemnity and medical average cost per case remain relatively stable.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Executive Summary

##### Proposed Changes in Advisory Rate Level by Industry Group:

<u>Industry Group</u>	<u>Average Change</u>	<u>Maximum Increase</u>	<u>Maximum Decrease</u>
Manufacturing	- 6.3%	+ 19%	- 31%
Contracting	- 8.8%	+ 16%	- 34%
Office and Clerical	- 6.3%	+ 19%	- 31%
Goods and Services	- 7.6%	+ 17%	- 33%
Miscellaneous	- 3.7%	+ 21%	- 29%

##### Additional Notable Change(s) Proposed in the Filing:

- Update to the United States Longshore and Harbor Workers' (USL&HW) Coverage Percentage Factor
- Proposed Change to the Defense and Cost Containment Expense Provision Calculation
- Swing Limit Bound Calculation Modification



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Overview of Methodology

##### Aggregate Ratemaking

NCCI's approach to determining the proposed overall average advisory rate level change utilizes widely accepted ratemaking methodologies. The approach employed in this filing includes the following steps:

- The reported historical premium totals are projected to an ultimate basis and adjusted to the current pure premium level
- The excess loss portion of individual large claims are removed from reported aggregate losses, based on an Indiana-specific large loss threshold
- The reported historical limited indemnity and medical loss totals are projected to an ultimate basis and adjusted to the current benefit level
- Ratios of losses to pure premium are projected to the cost levels expected in the loss cost effective period
- Ultimate, trended, limited losses are adjusted to an unlimited basis with an excess ratio
- Proposed benefit level and/or expense changes are applied to the projected cost ratios

The indicated average advisory rate level change is calculated for the years in the filing's experience period. If the final projected cost ratios are greater (less) than 1.000, then an increase (decrease) in the average advisory rate level is indicated.

##### Class Ratemaking

Once the proposed overall average advisory rate level change has been determined, NCCI separately determines rates per \$100 of payroll for each workers compensation job classification (class); the advisory rates and year-over-year changes vary by class. Three sets of pure premiums are combined as part of each class code's advisory rate calculation based on the volume of available data for that job classification. The three sets of pure premiums are:

- State-specific payroll and loss experience ("indicated")
- Currently-approved pure premium adjusted to the proposed level ("present on rate level")
- Countrywide experience adjusted to state conditions ("national")

Note: The methodology and assumptions used in this filing may not be applicable to or relevant for another purpose, including but not limited to NCCI filings in other jurisdictions.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Summary of Selections

The following is a summary of selections underlying the advisory rates and loss costs and assigned risk rates proposed to be effective January 1, 2020, along with the selections underlying the currently-approved rates and loss costs.

<b>Advisory Rates and Loss Costs</b>	<b>Currently Approved January 1, 2019</b>	<b>Proposed Effective January 1, 2020</b>
Experience Period	Policy Years 2015 and 2016	Policy Years 2016 and 2017
Premium Development	3-year average	3-year average
Basis of Loss Experience	Average of Paid and Paid+Case losses	Average of Paid and Paid+Case losses
Paid Loss Development	2-year average	2-year average
Paid+Case Loss Development	5-year average	5-year average
Tail Factors	10-year average	10-year average
Indemnity Annual Loss Ratio Trend Factor	0.960	0.960
Medical Annual Loss Ratio Trend Factor	0.985	0.975
Production and General Expense	23.5%	23.6%
Profit and Contingency Provision	0.0%	0.0%
Loss Adjustment Expense Provision	16.2%	16.1%
Base Threshold for Limiting Losses	\$8,580,309	\$7,682,406
Large Loss Excess Ratio	0.3%	0.8%*
Classification Swing Limits (applied by Industry Group)	+/-25%	+/-25%
<b>Assigned Risk Rates</b>	<b>Currently Approved January 1, 2019</b>	<b>Proposed Effective January 1, 2020</b>
Premium Surcharge	25% on premium excess of \$2,500	30% on premium excess of \$2,750

\* The proposed value reflects the updated excess loss pure premium factor parameters and methodology as detailed in the approved item filing R-1417



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Selections Underlying the Proposed Changes

##### Experience and Development

NCCI analyzed the emerging experience of Indiana workers compensation policies in recent years. The primary focus of our analysis was on premiums and losses from policy years 2016 and 2017 evaluated as of December 31, 2018. The most recently available full policy year is 2017 since the last policy had an effective date of December 31, 2017 and did not expire until December 31, 2018. During this year's analysis, after reviewing various possible experience periods, the use of the two most recently available full policy years of data was selected as most appropriate in terms of providing balance between stability and responsiveness.

Different aggregations of loss experience were analyzed in preparation of this filing. These were (i) paid losses (benefit amounts already paid by insurers on reported claims) and (ii) the sum of paid losses plus case reserves (paid losses and the amounts set aside to cover future payments on those claims). In this filing, NCCI utilized loss development factors based on each of these two loss aggregations. This is consistent with NCCI filings made in the past several years in Indiana. Loss development factors are needed since paid losses and case reserve estimates on a given claim change over time until the claim is finally closed. The loss development factors are based on how paid losses and case reserve estimates changed over time for claims from older years. In this filing, NCCI selected development factors appropriate for the experience base.

##### Trend

This filing relies primarily on the experience from policy years 2016 and 2017. However, the proposed advisory loss cost, advisory rate, and assigned risk rates are intended for use with policies with effective dates starting on January 1, 2020. It is necessary to use trend factors that forecast how much the future Indiana workers compensation experience will differ from the past. These trend factors measure anticipated changes in the amount of indemnity and medical benefits as compared with anticipated changes in the amount of workers' wages. For example, if benefit costs are expected to grow faster than wages, then a trend factor greater than zero is indicated. Conversely, if wages are expected to grow faster than benefit costs, then a trend factor less than zero is indicated.

While historical changes in claim frequency and average cost per case were also reviewed, NCCI applies loss ratio trend factors in the determination of the proposed overall average advisory rate level change.

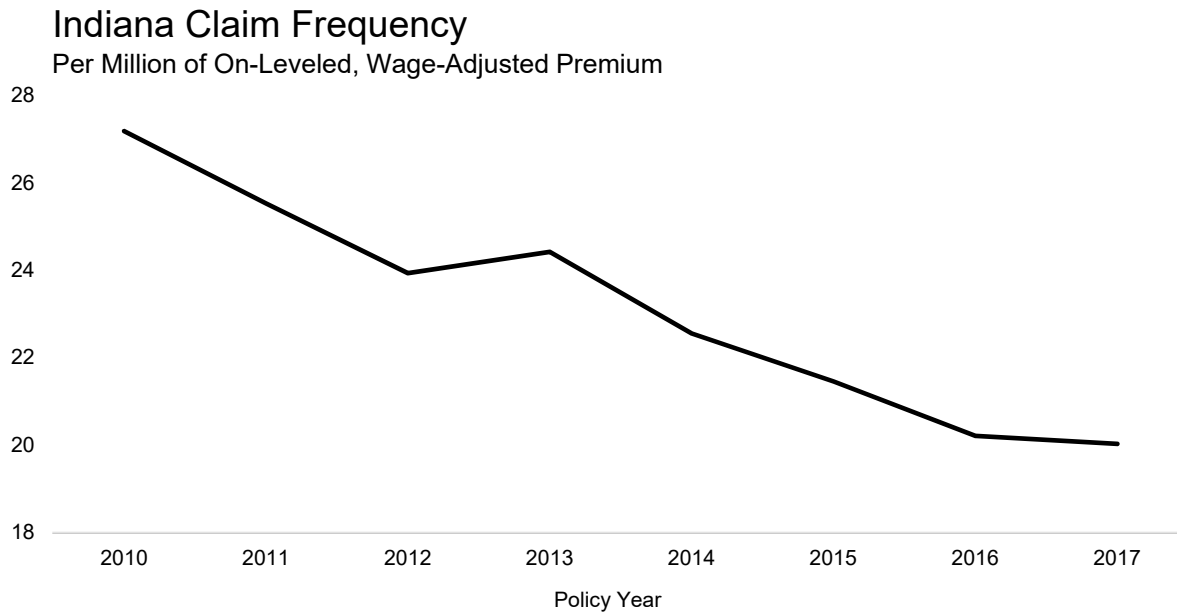


## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Selections Underlying the Proposed Changes

The following few charts show a measure of the number of workplace injuries (claim frequency) and the average cost of each of these injuries (claim severity).



Indiana's lost-time claim frequency has generally declined since 2010, as shown immediately above. The data in this chart reflects premiums at today's advisory rate and wage levels.

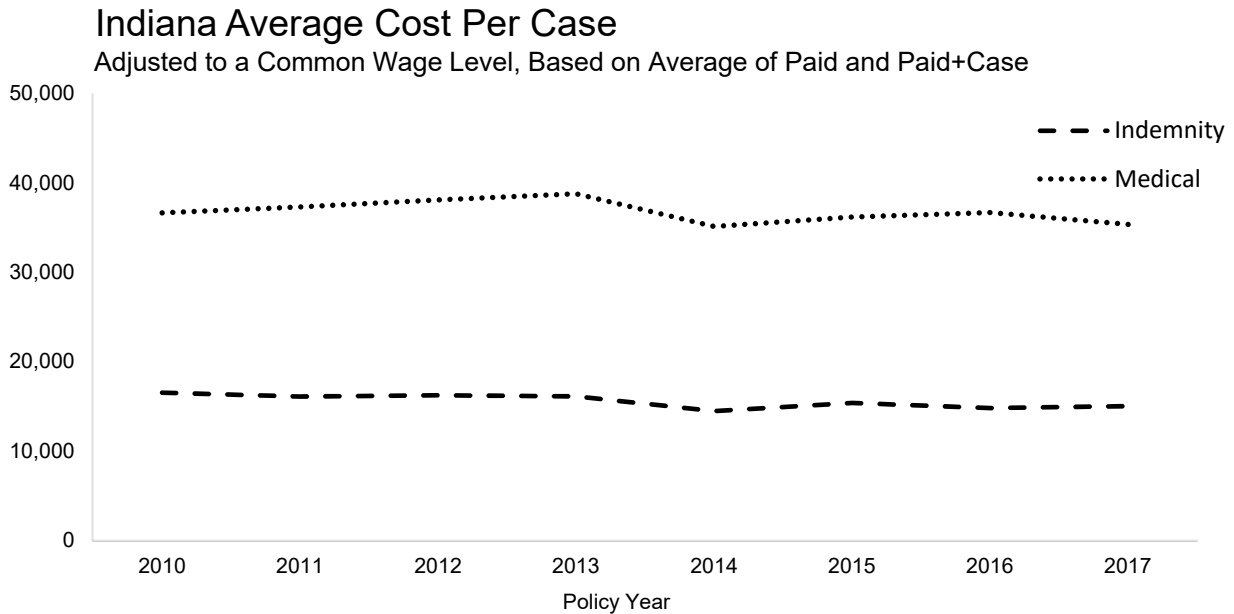




## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Selections Underlying the Proposed Changes



As this chart illustrates, Indiana's average indemnity cost per case in excess of wage growth has remained fairly consistent over time, while a long-term upward trend in the medical average cost per case was interrupted in PY 2014 due to the medical fee schedule implementation as part of HEA 1320.



## Indiana

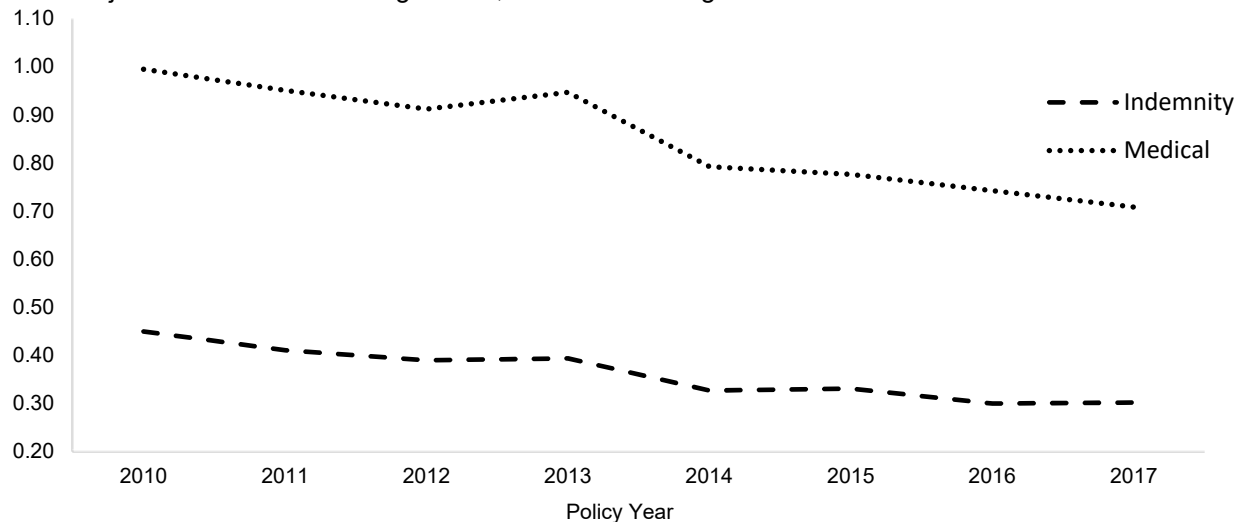
### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Selections Underlying the Proposed Changes

Loss ratios result after combining observed changes in Indiana's average claim frequency with corresponding changes in Indiana's average cost per case.

#### Indiana Loss Ratio History

Adjusted to a Common Wage Level, Based on Average of Paid and Paid+Case



Based on our analysis this year, we are proposing to maintain the current annual indemnity loss ratio trend of -4.0% and decrease the annual medical loss ratio trend from -1.5% to -2.5%.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Selections Underlying the Proposed Changes

##### Benefit Changes

**Indemnity Benefit Changes:** If an employee's death results from a compensable workplace accident or occupational disease, the employer is liable for burial benefits up to a maximum of \$7,500 in addition to other indemnity and medical benefits required by Indiana workers compensation statutes. Enacted HB 1182, effective July 1, 2019, will increase the maximum burial benefit from \$7,500 to \$10,000. The impact of this indemnity benefit change is negligible. Additional details are supplied in Appendix C-II.

**Medical Fee Schedule Changes:** NCCI has included the impact of the two most recent Medical Fee Schedule updates effective October 1, 2018 and January 1, 2019. The combined change is estimated to increase overall workers compensation system costs by 0.3%. Please see Appendix C-I for additional details.

##### Expense-Related Provisions

This filing proposes changes to several expense-related provisions as described below. Please see Exhibit II for additional detail.

**Production and General Expense:** The proposed advisory rates include a provision for production and general expenses. The latest data from the Insurance Expense Exhibit (which is reported annually by insurers to state insurance departments) is used to derive the Indiana expense provision.

The current provision in the advisory rates for production expense is 18.5% of premium. This filing proposes to maintain the current provision.

The current provision in the advisory rates for general expenses is 5.0% of premium. This filing proposes an increase in this provision to 5.1%.

The overall advisory rate change due to the proposed production and general expense provisions is an increase of 0.1%.

**Premium Taxes and Assessments:** This filing proposes an increase in the WC Guaranty Association provision from 0.2% to 0.3%, which results in an increase to the currently approved provision for taxes and assessments from 1.8% to 1.9%.

**Profit and Contingency Provision:** By law, Indiana rates must be determined such that workers compensation insurers in Indiana can be expected to earn a reasonable rate of



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Selections Underlying the Proposed Changes

return. Analysis and determination of a profit and contingency (P&C) provision is necessary to ensure this premise is maintained. As a result of this analysis, NCCI is proposing to maintain the current P&C provision of 0.0%.

**Loss-Based Expenses:** The proposed advisory rates and loss costs include a provision for loss adjustment expenses (LAE). These are expenses associated with the handling of workers compensation claims. LAE is included in the advisory rates and loss costs by using a ratio of loss adjustment expense dollars to loss dollars (called the LAE provision). In this filing, NCCI is proposing to decrease the current LAE provision from 16.2% to 16.1% of losses—resulting in a rate level impact of -0.1%.

**Loss-Based Assessment:** INSafe is not conducting an assessment in 2019. In this filing, NCCI is proposing to decrease the current INSafe provision from 0.2% of losses to 0%—resulting in a rate level impact of -0.2%.

#### Assigned Risk Surcharge:

The current assigned risk surcharge of 25% is applied to the premium excess of \$2,500 (i.e., it does not apply to risks in the assigned risk market with premium less than or equal to \$2,500). After a review of the assigned risk loss experience relative to statewide (see Appendix D), which indicates that the premium from assigned risk programs is not generating sufficient premium to offset the relatively poor loss experience, an increase to the surcharge from 25% to 30% is being proposed. Additionally, a change to the premium threshold to which the surcharge would become applicable, from \$2,500 to \$2,750, is also being proposed. The overall premium impact of this change will depend on the distribution of risks in the assigned risk market, as well as the overall premium for such risks.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Additional Proposed Changes

##### Update to the USL&HW Coverage Percentage Factor

This filing proposes a revision to the United States Longshore and Harbor Workers' (USL&HW) Coverage Percentage factor found on the Miscellaneous Values page in this filing.

##### USL&HW Factor – Benefits Only

<u>Current Approved</u>	<u>Proposed</u>
1.51	1.75

##### Background

The USL&HW Act is a federal law that extends federal benefits to employees such as harbor workers and others for disability or death resulting from an injury occurring upon the navigable waters of the United States. Separate class codes ("F-classes") were created to account for those occupations that tend to have considerable USL&HW Act exposure. For all industrial classes that have USL&HW Act exposure but no relevant F-class code, the potentially higher federal benefits payable needs to be contemplated when calculating an insured's premium. For USL&HW Act exposure that does not correspond to an F-class code, the USL&HW factor is applied to the industrial class loss cost/rate for the portion of payroll that the USL&HW Act exposure represents.

NCCI's prior full study of the USL&HW factors was completed in 2003. Since that time, the revised factor has been updated annually with each NCCI loss cost/rate filing to account for how federal benefits have changed relative to Indiana benefits, as calculated and displayed in those filings.

##### Methodology

NCCI recently completed a full study of the USL&HW factors using Unit Statistical Data to determine the indicated USL&HW factor. The average cost of claims subject to Indiana's workers compensation (WC) Act was compared to the average cost of claims subject to the USL&HW Act and a ratio, or "relativity," was calculated. Due to the limited number of claims subject to the USL&HW Act within a given state, the average cost for these claims was calculated on a countrywide basis to increase the predictive accuracy. Two adjustments were independently made to the federal severity calculation to reflect additional attributes of the state under review: an injury type (IT) adjustment and a hazard group (HG) adjustment. Prior to calculating the indicated relativity, these adjustments modified the countrywide federal claim cost and the state's industrial claim cost to have matching IT or matching HG distributions. These adjustments were done two ways: by weighting the federal severity to match the state severity IT or HG distribution, and vice versa. These calculations were done separately for



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#### Additional Proposed Changes

indemnity and medical severities before being combined. The resulting values from the four adjustment combinations were considered in the analysis. Note for medical, the indicated relativity was credibility weighted with the medical relativity assumption of unity underlying the previous (i.e., 2003) review prior to determining the combined indemnity and medical relativity.

Based on this review, each jurisdiction was placed into one of four USL&HW factor groups. These placements were validated by analyzing each jurisdiction's benefit structure. The USL&HW factor found on the Miscellaneous Values page is the USL&HW factor assigned to Indiana, adjusted for the difference between state and federal expenses, if applicable.

The USL&HW factor will not be automatically adjusted annually for filed benefit changes as has been current practice. Instead, unless a significant change to the state's benefit system occurs, NCCI will periodically review the current approved USL&HW factor to determine if an update to the USL&HW factor is warranted.

#### Impact

The update to the USL&HW factor is expected to have a negligible impact on the proposed overall average loss cost/rate level change in this filing.

Note that in NCCI Unit Statistical Data for the latest 5 policy years, the amount of USL&HW payroll reported outside of F-Classes has been approximately \$7,685,000 on average per year in Indiana.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Additional Proposed Changes

##### Proposed Change to the Defense and Cost Containment Expense Provision Calculation

###### Background

The Loss Adjustment Expense (LAE) provision in the loss costs is comprised of Defense and Cost Containment Expense (DCCE) and Adjusting and Other Expense (AOE) provisions.

Previously in Indiana, the DCCE portion of the LAE provision has been calculated as an average of:

- The countrywide-selected DCCE provision calculated from the NCCI Call for Loss Adjustment Expenses (Financial Call #19) multiplied by the state-specific relativity derived using NAIC Annual Statement payment data.
- The Indiana-specific DCCE ratios developed using multiplicative and additive methods on both a policy year and accident year basis (Financial Call #3 and #5).

###### Proposed Procedure

This filing proposes to calculate the DCCE provision more directly by only utilizing Indiana-specific paid DCCE and losses, reported on the NCCI Call for Policy Year Data (Financial Call #3). Under the proposed methodology, the ratios of reported paid DCCE to paid losses by policy year are developed to a 19th report using DCCE ratio development factors. A 19th-to-ultimate tail factor is applied to reflect expected development beyond the 19th report. The proposed DCCE provision is selected based on the ultimate projected DCCE ratios by policy year.

Utilizing policy year data for the DCCE calculation is consistent with the basis for the losses and premium underlying the filing's loss cost/rate level change (Exhibit I). By using policy year data, the proposed methodology minimizes the potential impact that claim activity occurring in older time periods (e.g., more than 20 years ago) may have on the prospective DCCE provision. When compared with the previous DCCE approach, the use of state-specific policy year data may allow the proposed methodology to be more responsive to state-specific changes.

The determination of the AOE provision is unaffected by this change to the DCCE methodology.



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Additional Proposed Changes**

##### **Swing Limit Bound Calculation Modification**

As part of NCCI's class ratemaking procedure, proposed loss costs/advisory rates by classification are subject to upper and lower bounds. As detailed in Appendix B-II, the bounds are determined as the product of the swing limits by industry group and the classification's present loss cost/advisory rate.

NCCI recently evaluated the bound calculations to determine if they are performing optimally, particularly for classifications with significantly low loss cost/advisory rate. In these cases, the current multiplicative bound calculation can result in an upper and lower bound equal to the current loss cost/advisory rate for a classification. For example, a classification with a loss cost or rate of \$0.03 in a state with 15% swing limits and an indication of -10% would have upper and lower bounds both equal to \$0.03. This restricts a classification's proposed loss cost/advisory rate to its present loss cost/advisory rate, eliminating any possible responsiveness to change indicated by the underlying data.

To enhance responsiveness to the data in these scenarios, NCCI is proposing a modification to the calculation of loss cost/advisory rate bounds by classification when both the upper and lower bounds are equal to the current loss cost/advisory rate. In these cases, NCCI will review the change indicated by the classification and the corresponding industry group. If the direction of these two indications are aligned, NCCI will adjust the upper or lower bound so that the proposed loss cost/advisory rate may change by one cent from the present loss cost/advisory rate in the direction of the change indicated for the classification.

This updated swing limit bound calculation can only impact classifications with loss cost/advisory rate of three cents or less given the current swing limit of 25%. In future instances where the proposed calculation applies, the classification will exceed the traditional swing of 25% by less than one cent.

In this filing, no adjustments have been made as a result of the proposed methodology. In future filings, if a class code is adjusted per this methodology change, the affected class codes would be listed in Appendix B-II.





## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Part 2 Proposed Values**

- Proposed Advisory Rates, Loss Costs and Rating Values
- Proposed Assigned Risk Rates and Rating Values
- Proposed Values for Inclusion in the Experience Rating Plan Manual
- Proposed Values for Inclusion in the Retrospective Rating Plan Manual



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Proposed Advisory Rates, Loss Costs, and Rating Values**

The following pages include proposed advisory rates, loss costs, and rating values:

- Advisory rates, loss costs, minimum premiums, expected loss rates, and d-ratios by class code, along with associated footnotes
- Advisory miscellaneous values, such as:
  - Premium discount percentages
  - Premium Reduction Percentages by Deductible Amount
  - Maximum and minimum weekly payroll applicable for select class codes
  - Premium determination for Partners and Sole Proprietors
  - Terrorism advisory rate and loss cost
  - United States Longshore and Harbor Workers' Compensation Coverage Percentage

**ADVISORY LOSS COSTS AND ADVISORY RATES****INDIANA**

Advisory loss costs exclude all expense provisions except loss adjustment expense and loss-based assessments.

Effective January 1, 2020

CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO
0005	2.04	1.52	803	1.19	0.43	2014	2.52	1.88	954	1.35	0.37
0008	2.09	1.56	818	1.16	0.42	2016	2.02	1.50	796	1.20	0.45
0016	3.58	2.67	1288	1.90	0.37	2021	1.72	1.28	702	0.95	0.42
0034	2.40	1.79	916	1.39	0.43	2039	1.26	0.94	557	0.76	0.45
0035	1.66	1.24	683	0.98	0.45	2041	1.73	1.29	705	1.03	0.45
0036	2.67	1.99	1001	1.56	0.43	2065	0.97	0.72	466	0.57	0.43
0037	2.51	1.87	951	1.40	0.42	2070	2.72	2.03	1017	1.59	0.43
0042	3.00	2.24	1105	1.67	0.42	2081	1.58	1.18	658	0.92	0.43
0050	3.70	2.76	1326	2.14	0.43	2089	1.98	1.48	784	1.15	0.43
0059D	0.28	0.21	—	0.07	0.37	2095	2.02	1.50	796	1.17	0.43
0065D	0.06	0.04	—	0.02	0.37	2105	1.82	1.36	733	1.08	0.45
0066D	0.06	0.04	—	0.02	0.37	2110	1.57	1.17	655	0.93	0.45
0067D	0.06	0.04	—	0.02	0.37	2111	1.25	0.93	554	0.74	0.45
0079	2.77	2.06	1033	1.50	0.37	2112	2.28	1.70	878	1.35	0.45
0083	3.51	2.61	1266	2.04	0.43	2114	1.73	1.29	705	1.03	0.45
0106	5.45	4.06	1500	2.72	0.33	2121	0.99	0.74	472	0.57	0.43
0113	2.49	1.86	944	1.44	0.43	2130	1.31	0.98	573	0.76	0.43
0170	2.17	1.62	844	1.26	0.43	2131	0.90	0.67	444	0.53	0.43
0251	2.02	1.50	796	1.18	0.43	2143	1.20	0.89	538	0.72	0.45
0400	—	—	—	0.76	0.42	2157	2.28	1.70	878	1.34	0.43
0401	7.47	5.57	A	3.72	0.33	2172	0.77	0.57	403	0.44	0.42
0766N	0.27	0.20	—	—	—	2174	1.31	0.98	573	0.78	0.45
0771N	0.25	0.19	—	—	—	2211	4.10	3.05	1452	2.20	0.37
0908P	131.00	98.00	291	76.35	0.43	2220	1.31	0.98	573	0.76	0.43
0913P	315.00	235.00	475	184.07	0.43	2286	1.09	0.81	503	0.66	0.45
1005*	3.21	2.39	1171	1.13	0.31	2288	2.26	1.68	872	1.34	0.45
1016X*	8.21	6.12	1500	2.69	0.31	2300	—	—	—	0.91	0.43
1164D	1.81	1.35	730	0.84	0.31	2302	0.90	0.67	444	0.52	0.43
1165D	1.67	1.24	686	0.83	0.33	2305	1.19	0.89	535	0.66	0.42
1320	1.76	1.31	714	0.88	0.33	2361	1.12	0.83	513	0.65	0.43
1322	4.43	3.30	1500	2.25	0.33	2362	1.02	0.76	481	0.59	0.43
1430	2.19	1.63	850	1.16	0.37	2380	1.50	1.12	633	0.88	0.43
1438	2.69	2.00	1007	1.35	0.33	2386	—	—	—	0.91	0.43
1452	1.38	1.03	595	0.75	0.37	2388	1.06	0.79	494	0.63	0.45
1463	7.20	5.36	1500	3.58	0.33	2402	1.46	1.09	620	0.78	0.37
1472	1.60	1.19	664	0.80	0.33	2413	1.53	1.14	642	0.89	0.43
1604X	2.45	1.83	932	1.33	0.37	2416	1.03	0.77	484	0.60	0.43
1624D	1.45	1.08	617	0.72	0.33	2417	0.68	0.51	374	0.40	0.43
1642	1.31	0.98	573	0.70	0.37	2501	1.57	1.17	655	0.91	0.43
1654	3.30	2.46	1200	1.77	0.37	2503	0.81	0.60	415	0.48	0.45
1655	—	—	—	0.70	0.37	2534	—	—	—	0.91	0.43
1699	1.44	1.07	614	0.77	0.37	2570	2.05	1.53	806	1.22	0.45
1701	1.94	1.45	771	1.03	0.37	2585	1.87	1.39	749	1.12	0.45
1710D	2.64	1.96	992	1.38	0.37	2586	1.41	1.05	604	0.82	0.43
1741	—	—	—	1.03	0.37	2587	1.37	1.02	592	0.82	0.45
1747	1.20	0.89	538	0.64	0.37	2589	1.20	0.89	538	0.70	0.43
1748	4.50	3.35	1500	2.37	0.37	2600	2.07	1.54	812	1.24	0.45
1803D	4.09	3.05	1448	1.82	0.33	2623	3.69	2.75	1322	2.06	0.42
1852	—	—	—	0.55	0.31	2651	0.96	0.72	462	0.57	0.45
1853	—	—	—	1.03	0.37	2660	1.41	1.05	604	0.84	0.45
1860	—	—	—	0.67	0.43	2670	1.29	0.96	566	0.80	0.48
1924	1.46	1.09	620	0.87	0.45	2683	1.46	1.09	620	0.86	0.45
1925	2.19	1.63	850	1.22	0.42	2688	1.30	0.97	570	0.78	0.45
2002	1.70	1.27	696	1.01	0.45	2701	9.13	6.80	1500	4.90	0.37
2003	2.51	1.87	951	1.46	0.43	2702	13.23	9.86	1500	6.28	0.31

\* Refer to the Footnotes Page for additional information on this class code.

**ADVISORY LOSS COSTS AND ADVISORY RATES****INDIANA**

Advisory loss costs exclude all expense provisions except loss adjustment expense and loss-based assessments.

Effective January 1, 2020

CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO
2709	6.03	4.49	1500	3.22	0.37	3224	1.78	1.33	721	1.07	0.45
2710	5.41	4.03	1500	2.70	0.33	3227	1.73	1.29	705	1.03	0.45
2714	2.80	2.09	1042	1.66	0.45	3240	1.94	1.45	771	1.16	0.45
2731	2.48	1.85	941	1.31	0.37	3241	1.44	1.07	614	0.84	0.43
2735	2.83	2.11	1051	1.68	0.45	3255	1.47	1.10	623	0.90	0.47
2759	4.09	3.05	1448	2.44	0.45	3257	1.50	1.12	633	0.87	0.43
2790	1.12	0.83	513	0.67	0.45	3270	1.46	1.09	620	0.85	0.43
2797	1.55	1.15	648	0.90	0.43	3300	3.95	2.94	1404	2.26	0.43
2799	3.13	2.33	1146	1.75	0.42	3303	1.66	1.24	683	0.98	0.45
2802	3.24	2.41	1181	1.81	0.42	3307	1.82	1.36	733	1.06	0.43
2835	1.34	1.00	582	0.82	0.48	3315	1.79	1.33	724	1.07	0.45
2836	1.55	1.15	648	0.95	0.47	3334	1.14	0.85	519	0.67	0.43
2841	2.37	1.77	907	1.41	0.45	3336	1.44	1.07	614	0.77	0.37
2881	1.67	1.24	686	1.03	0.47	3365	2.54	1.89	960	1.36	0.37
2883	1.49	1.11	629	0.87	0.43	3372	2.02	1.50	796	1.13	0.42
2913	—	—	—	0.87	0.43	3373	2.77	2.06	1033	1.63	0.43
2915	2.34	1.74	897	1.31	0.42	3383	0.79	0.59	409	0.47	0.45
2916	1.82	1.36	733	0.91	0.33	3385	0.43	0.32	295	0.25	0.45
2923	1.43	1.07	610	0.85	0.45	3400	2.29	1.71	881	1.27	0.42
2942	—	—	—	0.43	0.48	3507	1.63	1.21	673	0.95	0.43
2960	2.89	2.15	1070	1.68	0.43	3515	1.37	1.02	592	0.79	0.43
3004	0.79	0.59	409	0.42	0.37	3548	0.79	0.59	409	0.46	0.43
3018	1.64	1.22	677	0.88	0.37	3559	1.60	1.19	664	0.93	0.43
3022	2.04	1.52	803	1.21	0.45	3574	0.74	0.55	393	0.44	0.45
3027	1.55	1.15	648	0.82	0.37	3581	0.71	0.53	384	0.42	0.45
3028	1.61	1.20	667	0.94	0.43	3612	1.19	0.89	535	0.66	0.42
3030	3.49	2.60	1259	1.86	0.37	3620	1.88	1.40	752	1.00	0.37
3040	3.24	2.41	1181	1.72	0.37	3629	0.96	0.72	462	0.57	0.45
3041	2.52	1.88	954	1.46	0.43	3632	1.37	1.02	592	0.76	0.42
3042	2.11	1.57	825	1.18	0.42	3634	0.96	0.72	462	0.57	0.45
3064	2.16	1.61	840	1.26	0.43	3635	1.44	1.07	614	0.84	0.43
3069	—	—	—	0.99	0.43	3638	0.96	0.72	462	0.57	0.45
3076	1.72	1.28	702	0.99	0.43	3642	1.19	0.89	535	0.69	0.43
3081D	2.60	1.94	979	1.36	0.37	3643	1.19	0.89	535	0.69	0.43
3082D	2.63	1.95	988	1.36	0.37	3647	1.41	1.05	604	0.79	0.42
3085D	2.35	1.75	900	1.23	0.37	3648	0.94	0.70	456	0.56	0.45
3110	2.28	1.70	878	1.33	0.43	3681	0.58	0.43	343	0.34	0.45
3111	1.50	1.12	633	0.88	0.43	3685	0.52	0.39	324	0.31	0.45
3113	0.94	0.70	456	0.55	0.43	3719	0.47	0.35	308	0.22	0.31
3114	1.73	1.29	705	1.01	0.43	3724	2.13	1.59	831	1.07	0.33
3118	1.00	0.75	475	0.60	0.45	3726	1.63	1.21	673	0.77	0.31
3119	0.49	0.37	314	0.30	0.48	3803	1.49	1.11	629	0.87	0.43
3122	1.11	0.83	510	0.66	0.45	3807	1.25	0.93	554	0.74	0.45
3126	1.03	0.77	484	0.60	0.43	3808	2.40	1.79	916	1.34	0.42
3131	0.93	0.69	453	0.54	0.43	3821X	4.04	3.01	1433	2.26	0.42
3132	1.75	1.30	711	1.01	0.43	3822X	2.43	1.81	925	1.34	0.41
3145	1.49	1.11	629	0.86	0.43	3824X	1.96	1.46	777	1.09	0.42
3146	1.32	0.98	576	0.77	0.43	3826	0.43	0.32	295	0.25	0.43
3169	1.49	1.11	629	0.87	0.43	3827	1.29	0.96	566	0.72	0.42
3175	—	—	—	0.87	0.43	3830	0.74	0.55	393	0.42	0.42
3179	1.08	0.80	500	0.64	0.45	3851	1.50	1.12	633	0.90	0.45
3180	1.35	1.01	585	0.81	0.45	3865	1.02	0.76	481	0.62	0.47
3188	1.09	0.81	503	0.65	0.45	3881	3.24	2.41	1181	1.89	0.43
3220	1.11	0.83	510	0.64	0.43	4000	3.13	2.33	1146	1.58	0.33
3223	—	—	—	0.81	0.45	4021	2.31	1.72	888	1.23	0.37

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Effective January 1, 2020

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4024D	2.72	2.02	1017	1.44	0.37	4653	1.11	0.83	510	0.66	0.45
4034	3.24	2.41	1181	1.73	0.37	4665	3.34	2.49	1212	1.78	0.37
4036	1.52	1.13	639	0.81	0.37	4670	—	—	—	1.25	0.43
4038	1.25	0.93	554	0.77	0.48	4683	2.14	1.59	834	1.25	0.43
4053	—	—	—	0.93	0.43	4686	1.35	1.01	585	0.72	0.37
4061	—	—	—	0.93	0.43	4692	0.50	0.37	318	0.30	0.45
4062	1.60	1.19	664	0.93	0.43	4693	0.53	0.39	327	0.31	0.43
4101	1.37	1.02	592	0.77	0.42	4703	0.99	0.74	472	0.58	0.43
4109	0.24	0.18	236	0.15	0.45	4716	—	—	—	1.25	0.43
4110	0.46	0.34	305	0.27	0.43	4717	1.14	0.85	519	0.70	0.48
4111	1.32	0.98	576	0.78	0.45	4720	1.08	0.80	500	0.63	0.43
4113	—	—	—	0.78	0.45	4740	0.49	0.37	314	0.26	0.37
4114	1.44	1.07	614	0.84	0.43	4741	1.25	0.93	554	0.73	0.43
4130	1.76	1.31	714	1.03	0.43	4751	1.19	0.89	535	0.63	0.37
4131	3.34	2.49	1212	1.98	0.45	4766NX	1.98	1.48	869	0.94	0.31
4133	1.19	0.89	535	0.70	0.45	4771NX	1.44	1.07	692	0.68	0.31
4149	0.40	0.30	286	0.24	0.48	4777	1.75	1.30	711	0.82	0.31
4206	1.34	1.00	582	0.78	0.43	4825	0.44	0.33	299	0.24	0.37
4207	1.06	0.79	494	0.57	0.37	4828	1.32	0.98	576	0.73	0.42
4239	1.26	0.94	557	0.67	0.37	4829	0.76	0.57	399	0.38	0.33
4240	2.11	1.57	825	1.25	0.45	4902	1.82	1.36	733	1.09	0.45
4243	1.31	0.98	573	0.76	0.43	4923	0.62	0.46	355	0.36	0.43
4244	1.60	1.19	664	0.93	0.43	5020	2.72	2.03	1017	1.46	0.37
4250	1.00	0.75	475	0.58	0.43	5022	3.22	2.40	1174	1.62	0.33
4251	1.47	1.10	623	0.86	0.43	5037	5.72	4.26	1500	2.70	0.31
4263	1.91	1.42	762	1.11	0.43	5040	4.32	3.22	1500	2.04	0.31
4273	1.17	0.87	529	0.68	0.43	5057	2.75	2.05	1026	1.32	0.31
4279	1.15	0.86	522	0.67	0.43	5059	9.31	6.94	1500	4.37	0.31
4282	—	—	—	0.67	0.43	5069	—	—	—	4.37	0.31
4283	0.67	0.50	371	0.39	0.43	5102	2.78	2.07	1036	1.40	0.33
4299	1.12	0.83	513	0.67	0.45	5146	2.27	1.69	875	1.22	0.37
4304	3.05	2.27	1121	1.70	0.42	5160	1.22	0.91	544	0.62	0.33
4307	1.11	0.83	510	0.68	0.47	5183	1.40	1.04	601	0.75	0.37
4351	0.55	0.41	333	0.32	0.43	5188	1.64	1.22	677	0.88	0.37
4352	0.87	0.65	434	0.52	0.45	5190	1.48	1.10	626	0.79	0.37
4360	—	—	—	0.19	0.42	5191	0.76	0.57	399	0.44	0.43
4361	0.59	0.44	346	0.35	0.45	5192	1.73	1.29	705	1.01	0.43
4410	1.58	1.18	658	0.92	0.43	5213	2.77	2.06	1033	1.40	0.33
4420	1.58	1.18	658	0.79	0.33	5215	3.16	2.35	1155	1.77	0.42
4431	0.93	0.69	453	0.57	0.47	5221	2.24	1.67	866	1.20	0.37
4432	0.70	0.52	381	0.43	0.48	5222	3.73	2.78	1335	1.88	0.33
4439	—	—	—	0.59	0.43	5223	3.94	2.94	1401	2.10	0.37
4452	1.46	1.09	620	0.85	0.43	5348	1.92	1.43	765	1.03	0.37
4459	1.60	1.19	664	0.93	0.43	5402	2.17	1.62	844	1.30	0.45
4470	1.34	1.00	582	0.78	0.43	5403	3.06	2.28	1124	1.53	0.33
4484	1.72	1.28	702	0.99	0.43	5437	3.19	2.38	1165	1.72	0.37
4493	1.55	1.15	648	0.90	0.43	5443	1.67	1.24	686	0.98	0.43
4511	0.47	0.35	308	0.26	0.42	5445	2.89	2.15	1070	1.45	0.33
4557	1.15	0.86	522	0.69	0.45	5462	3.53	2.63	1272	1.89	0.37
4558	1.02	0.76	481	0.59	0.43	5472	3.44	2.56	1244	1.63	0.31
4568	1.17	0.87	529	0.63	0.37	5473	4.84	3.61	1500	2.28	0.31
4581	0.52	0.39	324	0.26	0.33	5474	3.09	2.30	1133	1.54	0.33
4583	2.13	1.59	831	1.07	0.33	5478	2.02	1.50	796	1.09	0.37
4611	0.35	0.26	270	0.21	0.45	5479	3.06	2.28	1124	1.71	0.42
4635	1.49	1.11	629	0.70	0.31	5480	3.01	2.24	1108	1.52	0.33

\* Refer to the Footnotes Page for additional information on this class code.

**ADVISORY LOSS COSTS AND ADVISORY RATES****INDIANA**

Advisory loss costs exclude all expense provisions except loss adjustment expense and loss-based assessments.

Effective January 1, 2020

CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO
5491	0.96	0.72	462	0.48	0.33	7024M	1.77	1.32	718	0.85	0.31
5506	3.74	2.79	1338	1.76	0.31	7038M	3.64	2.71	1307	1.69	0.31
5507	2.01	1.50	793	1.01	0.33	7046M	4.00	2.98	1420	1.91	0.31
5508	—	—	—	1.01	0.33	7047M	2.52	1.88	954	1.16	0.31
5535	2.71	2.02	1014	1.45	0.37	7050M	6.67	4.97	1500	2.94	0.31
5537	2.57	1.91	970	1.37	0.37	7090M	4.04	3.01	1433	1.87	0.31
5551	5.47	4.08	1500	2.59	0.31	7098M	4.44	3.31	1500	2.12	0.31
5606	0.68	0.51	374	0.34	0.33	7099M	7.33	5.46	1500	3.34	0.31
5610	2.80	2.09	1042	1.64	0.43	7133	1.57	1.17	655	0.78	0.33
5645	5.58	4.16	1500	2.79	0.33	7151M	1.91	1.42	762	0.95	0.33
5703	5.70	4.25	1500	3.04	0.37	7152M	3.49	2.60	1259	1.66	0.33
5705	8.20	6.11	1500	4.36	0.37	7153M	2.12	1.58	828	1.06	0.33
5951	0.21	0.16	226	0.13	0.45	7219	3.89	2.90	1385	1.98	0.33
6003	3.09	2.30	1133	1.67	0.37	7222	3.39	2.53	1228	1.83	0.37
6005	2.16	1.61	840	1.15	0.37	7225	3.27	2.44	1190	1.76	0.37
6017	—	—	—	1.40	0.33	7228	—	—	—	1.98	0.33
6018	1.19	0.89	535	0.65	0.37	7229	—	—	—	1.98	0.33
6045	1.92	1.43	765	1.04	0.37	7230	5.16	3.84	1500	2.91	0.42
6204	3.71	2.76	1329	1.86	0.33	7231	4.61	3.43	1500	2.62	0.42
6206	1.20	0.89	538	0.57	0.31	7232	3.83	2.85	1366	1.95	0.33
6213	0.70	0.52	381	0.35	0.33	7309F	10.67	7.95	1500	4.32	0.26
6214	0.90	0.67	444	0.42	0.31	7313F	4.14	3.08	1464	1.68	0.26
6216	2.60	1.94	979	1.23	0.31	7317F	10.43	7.77	1500	4.23	0.26
6217	2.08	1.55	815	1.05	0.33	7327F	27.74	20.67	1500	11.23	0.26
6229	2.28	1.70	878	1.14	0.33	7333M	1.26	0.94	557	0.61	0.31
6233	1.32	0.98	576	0.67	0.33	7335M	1.40	1.04	601	0.68	0.31
6235	3.15	2.35	1152	1.50	0.31	7337M	2.31	1.72	888	1.07	0.31
6236	3.28	2.44	1193	1.77	0.37	7350F	13.11	9.77	1500	5.49	0.28
6237	0.68	0.51	374	0.37	0.37	7360	2.16	1.61	840	1.15	0.37
6251D	2.80	2.08	1042	1.40	0.33	7370	3.66	2.73	1313	2.12	0.43
6252D	2.06	1.53	809	0.97	0.31	7380	2.74	2.04	1023	1.54	0.42
6260	—	—	—	1.40	0.33	7382	2.34	1.74	897	1.36	0.43
6306	2.40	1.79	916	1.21	0.33	7390	2.64	1.97	992	1.54	0.43
6319	1.75	1.30	711	0.88	0.33	7394M	1.67	1.24	686	0.81	0.31
6325	1.78	1.33	721	0.90	0.33	7395M	1.86	1.39	746	0.90	0.31
6400	2.98	2.22	1099	1.67	0.42	7398M	3.07	2.29	1127	1.42	0.31
6503	1.09	0.81	503	0.66	0.45	7402	0.11	0.08	195	0.06	0.43
6504	1.75	1.30	711	1.05	0.45	7403	2.41	1.80	919	1.29	0.37
6702M*	2.26	1.68	872	1.21	0.37	7405N	0.84	0.63	513	0.45	0.37
6703M*	4.14	3.08	1464	2.10	0.37	7420	3.88	2.89	1382	1.84	0.31
6704M*	2.51	1.87	951	1.34	0.37	7421	0.42	0.31	292	0.21	0.33
6801F	5.40	4.02	1500	2.32	0.32	7422	0.71	0.53	384	0.33	0.31
6811	3.82	2.85	1363	2.03	0.37	7425	1.15	0.86	522	0.55	0.31
6824F	9.82	7.32	1500	4.11	0.28	7431N	0.49	0.37	365	0.23	0.31
6826F	6.49	4.84	1500	2.79	0.32	7445N	0.28	0.21	—	—	—
6834	1.72	1.28	702	0.96	0.42	7453N	0.16	0.12	—	—	—
6836	2.25	1.68	869	1.19	0.37	7502	1.10	0.82	507	0.59	0.37
6843F	9.34	6.96	1500	3.79	0.26	7515	0.59	0.44	346	0.28	0.31
6845F	7.13	5.31	1500	2.89	0.26	7520	2.10	1.56	822	1.22	0.43
6854	3.03	2.26	1114	1.42	0.31	7538	2.39	1.78	913	1.13	0.31
6872F	10.78	8.03	1500	4.37	0.26	7539	0.88	0.66	437	0.44	0.33
6874F	19.66	14.65	1500	7.97	0.26	7540	1.60	1.19	664	0.75	0.31
6882	2.05	1.53	806	0.97	0.31	7580	1.79	1.33	724	0.95	0.37
6884	3.14	2.34	1149	1.53	0.31	7590	1.83	1.36	736	1.03	0.42
7016M	1.59	1.18	661	0.76	0.31	7600	2.41	1.80	919	1.30	0.37

\* Refer to the Footnotes Page for additional information on this class code.

**ADVISORY LOSS COSTS AND ADVISORY RATES****INDIANA**

Advisory loss costs exclude all expense provisions except loss adjustment expense and loss-based assessments.

Effective January 1, 2020

CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO
7605	1.55	1.15	648	0.83	0.37	8304	3.36	2.50	1218	1.78	0.37
7610	0.33	0.25	264	0.19	0.42	8350	2.84	2.12	1055	1.43	0.33
7698X	3.30	2.46	1200	1.49	0.31	8380	1.46	1.09	620	0.81	0.42
7699X	1.47	1.10	623	0.76	0.36	8381	1.27	0.95	560	0.71	0.42
7705	3.24	2.41	1181	1.81	0.42	8385	1.66	1.24	683	0.88	0.37
7710X	2.49	1.86	944	1.24	0.33	8392	1.71	1.27	699	0.99	0.43
7711X	2.49	1.86	944	1.24	0.33	8393X	1.17	0.87	529	0.69	0.43
7720	1.70	1.27	696	0.90	0.37	8500	4.28	3.19	1500	2.29	0.37
7725X	1.59	1.18	661	0.76	0.33	8601	0.23	0.17	232	0.13	0.42
7732PX	122.00	89.00	282	63.36	0.37	8602	0.83	0.62	421	0.47	0.42
7855	1.86	1.39	746	0.99	0.37	8603	0.05	0.04	176	0.03	0.43
8001	1.56	1.16	651	0.92	0.45	8606	1.34	1.00	582	0.67	0.33
8002	1.36	1.01	588	0.78	0.43	8709F	5.28	3.93	1500	2.14	0.26
8006	1.36	1.01	588	0.79	0.43	8719	1.53	1.14	642	0.72	0.31
8008	0.91	0.68	447	0.54	0.45	8720	0.79	0.59	409	0.42	0.37
8010	1.14	0.85	519	0.68	0.45	8721	0.20	0.15	223	0.10	0.37
8013	0.27	0.20	245	0.16	0.43	8723	0.11	0.08	195	0.06	0.43
8015	0.51	0.38	321	0.30	0.43	8725	1.64	1.22	677	0.88	0.37
8017	0.97	0.72	466	0.58	0.45	8726F	2.81	2.09	1045	1.21	0.32
8018	1.97	1.47	781	1.17	0.45	8734M	0.24	0.18	236	0.13	0.37
8021	1.86	1.39	746	1.07	0.43	8737M	0.22	0.16	229	0.12	0.37
8031	1.83	1.36	736	1.06	0.43	8738M	0.40	0.30	286	0.21	0.37
8032	1.37	1.02	592	0.81	0.45	8742	0.18	0.13	217	0.10	0.37
8033	2.00	1.49	790	1.15	0.43	8745	2.29	1.71	881	1.28	0.42
8037	1.11	0.83	510	0.66	0.45	8748	0.33	0.25	264	0.19	0.42
8039	1.23	0.92	547	0.73	0.45	8755	0.17	0.13	214	0.09	0.37
8044	1.70	1.27	696	0.95	0.42	8799	0.59	0.44	346	0.34	0.43
8045	0.60	0.45	349	0.36	0.45	8800	1.24	0.92	551	0.76	0.47
8046	1.46	1.09	620	0.85	0.43	8803	0.05	0.04	176	0.02	0.37
8047	0.61	0.45	352	0.37	0.45	8805M	0.16	0.12	210	0.09	0.43
8058	1.67	1.24	686	0.96	0.43	8810	0.12	0.09	198	0.07	0.43
8072	0.47	0.35	308	0.28	0.45	8814M	0.15	0.11	207	0.08	0.43
8102	1.29	0.96	566	0.76	0.45	8815M	0.27	0.20	245	0.15	0.43
8103	1.37	1.02	592	0.76	0.42	8820	0.11	0.08	195	0.06	0.42
8105	—	—	—	1.17	0.45	8824	1.43	1.07	610	0.85	0.45
8106	2.60	1.94	979	1.39	0.37	8825	—	—	—	0.79	0.43
8107	1.79	1.33	724	0.95	0.37	8826	1.35	1.01	585	0.79	0.43
8111	1.59	1.18	661	0.93	0.43	8829	—	—	—	0.85	0.45
8116	1.79	1.33	724	1.04	0.43	8831	0.91	0.68	447	0.53	0.43
8203	3.39	2.53	1228	1.98	0.43	8832	0.18	0.13	217	0.11	0.43
8204	3.31	2.47	1203	1.76	0.37	8833	0.56	0.42	336	0.33	0.43
8209	2.59	1.93	976	1.50	0.43	8835	1.51	1.12	636	0.88	0.43
8215	1.87	1.39	749	1.00	0.37	8842	2.29	1.71	881	1.32	0.43
8227	1.86	1.39	746	0.88	0.31	8855	0.12	0.09	198	0.07	0.43
8232	2.91	2.17	1077	1.55	0.37	8856	0.33	0.25	264	0.20	0.43
8233	1.64	1.22	677	0.89	0.37	8864	0.93	0.69	453	0.54	0.43
8235	2.67	1.99	1001	1.56	0.43	8868	0.29	0.22	251	0.17	0.45
8263	4.16	3.10	1470	2.30	0.42	8869	0.83	0.62	421	0.49	0.45
8264	2.83	2.11	1051	1.51	0.37	8871	0.06	0.04	179	0.04	0.45
8265	3.27	2.44	1190	1.63	0.33	8901	0.12	0.09	198	0.07	0.42
8279	4.90	3.65	1500	2.42	0.33	9012	0.73	0.54	390	0.41	0.42
8288	4.41	3.29	1500	2.33	0.37	9014X	1.71	1.27	699	1.00	0.43
8291	2.37	1.77	907	1.33	0.42	9015	2.10	1.56	822	1.22	0.43
8292	2.27	1.69	875	1.32	0.43	9016	1.84	1.37	740	1.06	0.43
8293	5.91	4.40	1500	3.19	0.37	9019	1.50	1.12	633	0.80	0.37

\* Refer to the Footnotes Page for additional information on this class code.

**ADVISORY LOSS COSTS AND ADVISORY RATES****INDIANA**

Advisory loss costs exclude all expense provisions except loss adjustment expense and loss-based assessments.

Effective January 1, 2020

CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	LOSS COST	MIN PREM	ELR	D RATIO
9033	1.59	1.18	661	0.92	0.43						
9040	1.91	1.42	762	1.14	0.45						
9044	0.90	0.67	444	0.53	0.45						
9052	1.24	0.92	551	0.74	0.45						
9058	1.20	0.89	538	0.74	0.47						
9060	1.03	0.77	484	0.61	0.45						
9061	0.91	0.68	447	0.56	0.47						
9062	0.91	0.68	447	0.56	0.47						
9063	0.69	0.51	377	0.40	0.44						
9077F	4.99	3.72	1500	2.21	0.39						
9082	0.93	0.69	453	0.57	0.47						
9083	0.83	0.62	421	0.51	0.47						
9084	0.96	0.72	462	0.55	0.43						
9088a	a	a	a	a	a						
9089	0.69	0.51	377	0.40	0.44						
9093	1.09	0.81	503	0.64	0.45						
9101	2.39	1.78	913	1.41	0.45						
9102	2.10	1.56	822	1.23	0.43						
9154	0.95	0.71	459	0.55	0.43						
9156	1.62	1.21	670	0.90	0.42						
9170	5.46	4.07	1500	2.56	0.31						
9178	4.28	3.19	1500	2.59	0.47						
9179	7.50	5.59	1500	4.46	0.45						
9180	4.18	3.11	1477	2.20	0.37						
9182	1.25	0.93	554	0.72	0.43						
9186	7.89	5.88	1500	3.89	0.33						
9220	2.98	2.22	1099	1.66	0.42						
9402	2.68	2.00	1004	1.44	0.37						
9403	3.91	2.91	1392	1.97	0.33						
9410	1.39	1.04	598	0.80	0.43						
9501	1.94	1.45	771	1.09	0.42						
9505	2.20	1.64	853	1.23	0.42						
9516	2.40	1.79	916	1.29	0.37						
9519	2.80	2.09	1042	1.50	0.37						
9521	1.75	1.30	711	0.93	0.37						
9522	1.58	1.18	658	0.91	0.43						
9534	1.92	1.43	765	0.97	0.33						
9554	4.56	3.40	1500	2.29	0.33						
9586	0.31	0.23	258	0.19	0.48						
9600	1.29	0.96	566	0.78	0.45						
9620	0.76	0.57	399	0.42	0.42						

\* Refer to the Footnotes Page for additional information on this class code.



Effective January 1, 2020

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**APPLICABLE TO ADVISORY RATES ONLY**  
**FOOTNOTES**


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- a Rate for each individual risk must be obtained from NCCI Customer Service or the Indiana Compensation Rating Bureau (ICRB).
- A Minimum Premium \$100 per ginning location for policy minimum premium computation.
- D Rate for classification already includes the specific disease loading shown in the table below. See **Basic Manual** Rule 3-A-7.

Disease			Disease			Disease		
Code No.	Loading	Symbol	Code No.	Loading	Symbol	Code No.	Loading	Symbol
0059D	0.28	S	1165D	0.03	S	3082D	0.06	S
0065D	0.06	S	1624D	0.02	S	3085D	0.04	S
0066D	0.06	S	1710D	0.06	S	4024D	0.03	S
0067D	0.06	S	1803D	0.44	S	6251D	0.03	S
1164D	0.04	S	3081D	0.05	S	6252D	0.02	S

S=Silica

- F Rate provides for coverage under the United States Longshore and Harbor Workers Compensation Act and its extensions. Rate includes a provision for the USL&HW Assessment.
- M Risks are subject to Admiralty Law or Federal Employers Liability Act (FELA). However, the published rate is for risks that voluntarily purchase standard workers compensation and employers liability coverage. A provision for the USL&HW Assessment is included for those classifications under Program II USL Act.
- N This code is part of a ratable / non-ratable group shown below. The statistical non-ratable code and corresponding rate are applied in addition to the basic classification when determining premium.

Class Code	Non-Ratable Element Code
4766	0766
4771	0771
7405	7445
7431	7453

- P Classification is computed on a per capita basis.
- X Refer to special classification phraseology in these pages which is applicable in this state.

**\* Class Codes with Specific Footnotes**

- 1005 Rate includes a non-ratable disease element of \$0.86. (For coverage written separately for federal benefits only, \$0.84. For coverage written separately for state benefits only, \$0.02.)
- 1016 Rate includes a non-ratable disease element of \$2.57. (For coverage written separately for federal benefits only, \$2.52. For coverage written separately for state benefits only, \$0.05.)
- 6702 Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way - no work on elevated railroads. Otherwise, assign appropriate construction or erection code rate and elr each x 1.215.
- 6703 Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way - no work on elevated railroads. Otherwise, assign appropriate construction or erection class rate x 2.228 and elr x 2.125.
- 6704 Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way - no work on elevated railroads. Otherwise, assign appropriate construction or erection class rate and elr each x 1.35.

Effective January 1, 2020

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**APPLICABLE TO ADVISORY LOSS COSTS ONLY**  
**FOOTNOTES**


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- a Advisory loss cost for each individual risk must be obtained from NCCI Customer Service or the Indiana Compensation Rating Bureau (ICRB).
- D Advisory loss cost for classification already includes the specific disease loading shown in the table below. See **Basic Manual** Rule 3-A-7.

Code No.	Disease Loading	Symbol	Code No.	Disease Loading	Symbol	Code No.	Disease Loading	Symbol
0059D	0.21	S	1165D	0.02	S	3082D	0.04	S
0065D	0.04	S	1624D	0.01	S	3085D	0.03	S
0066D	0.04	S	1710D	0.04	S	4024D	0.02	S
0067D	0.04	S	1803D	0.33	S	6251D	0.02	S
1164D	0.03	S	3081D	0.04	S	6252D	0.01	S

S=Silica

- F Advisory loss cost provides for coverage under the United States Longshore and Harbor Workers Compensation Act and its extensions. Loss cost contains a provision for the USL&HW Assessment.
- M Risks are subject to Admiralty Law or Federal Employers Liability Act (FELA). However, the published loss cost is for risks that voluntarily purchase standard workers compensation and employers liability coverage. A provision for the USL&HW Assessment is included for those classifications under Program II USL Act.
- N This code is part of a ratable / non-ratable group shown below. The statistical non-ratable code and corresponding advisory loss cost are applied in addition to the basic classification when determining premium.

Class Code	Non-Ratable Element Code
4766	0766
4771	0771
7405	7445
7431	7453

- P Classification is computed on a per capita basis.
- X Refer to special classification phraseology in these pages which is applicable in this state.

**\* Class Codes with Specific Footnotes**

- 1005 Advisory loss cost includes a non-ratable disease element of \$0.64. (For coverage written separately for federal benefits only, \$0.63. For coverage written separately for state benefits only, \$0.01.)
- 1016 Advisory loss cost includes a non-ratable disease element of \$1.92. (For coverage written separately for federal benefits only, \$1.88. For coverage written separately for state benefits only, \$0.04.)
- 6702 Loss cost and rating values only appropriate for laying or relaying of tracks or maintenance of way - no work on elevated railroads. Otherwise, assign appropriate construction or erection code loss cost and elr each x 1.215.
- 6703 Loss cost and rating values only appropriate for laying or relaying of tracks or maintenance of way - no work on elevated railroads. Otherwise, assign appropriate construction or erection class loss cost x 2.228 and elr x 2.125.
- 6704 Loss cost and rating values only appropriate for laying or relaying of tracks or maintenance of way - no work on elevated railroads. Otherwise, assign appropriate construction or erection class loss cost and elr each x 1.35.

Effective January 1, 2020

## MISCELLANEOUS VALUES - ADVISORY RATES

**Basis of premium** applicable in accordance with **Basic Manual** footnote instructions for Code 7370 -- "Taxicab Co.":

Employee operated vehicle.....	\$71,800
Leased or rented vehicle.....	\$47,800

**Catastrophe (other than Certified Acts of Terrorism) - (Advisory Rate) .....** 0.01

**Expense Constant** applicable in accordance with **Basic Manual** Rule 3-A-11..... \$160

**Maximum Weekly Payroll** applicable in accordance with **Basic Manual** Rule 2-E – "Executive Officers," "Partners, Sole Proprietors, and Members or Managers of Limited Liability Companies" as amended in Indiana Special Rules, and the **Basic Manual** footnote instructions for Code 9178 – "Athletic Sports or Park: Non-Contact Sports," and Code 9179 – "Athletic Sports or Park: Contact Sports"..... \$3,700

**Minimum Weekly Payroll** applicable in accordance with **Basic Manual** Rule 2-E – "Executive Officers" and "Partners, Sole Proprietors, and Members or Managers of Limited Liability Companies"..... \$800

**Premium Discount Percentages**-(See **Basic Manual** Rule 3-A-19.) Premium discounts are not mandatory in Indiana. The following premium discounts are applicable to Standard Premiums:

		Type A	Type B
First	\$10,000	-	-
Next	190,000	9.1%	5.1%
Next	1,550,000	11.3%	6.5%
Over	1,750,000	12.3%	7.5%

**Premium Reduction Percentages** - The following percentages are applicable by deductible amount and hazard group for total losses on a per claim basis:

Deductible Amount	With Coinsurance Premium Reduction Percentages HAZARD GROUP						
	A	B	C	D	E	F	G
\$0	8.1%	7.1%	6.6%	5.7%	5.1%	4.1%	3.7%
\$500	12.9%	10.6%	9.8%	8.1%	6.9%	5.3%	4.9%
\$1,000	16.0%	13.1%	12.0%	9.8%	8.3%	6.2%	5.8%
\$1,500	18.3%	14.9%	13.7%	11.2%	9.5%	7.0%	6.5%
\$2,000	20.1%	16.4%	15.0%	12.3%	10.4%	7.7%	7.2%
\$2,500	21.6%	17.7%	16.2%	13.3%	11.3%	8.3%	7.7%
\$3,000	22.8%	18.8%	17.2%	14.2%	12.0%	8.9%	8.2%
\$3,500	23.9%	19.8%	18.1%	14.9%	12.7%	9.5%	8.7%
\$4,000	24.9%	20.7%	18.9%	15.7%	13.3%	10.0%	9.1%
\$4,500	25.8%	21.5%	19.6%	16.3%	13.9%	10.4%	9.5%
\$5,000	26.7%	22.3%	20.3%	16.9%	14.5%	10.9%	9.9%

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## MISCELLANEOUS VALUES - ADVISORY RATES(cont.)

Deductible Amount	Without Coinsurance Premium Reduction Percentages HAZARD GROUP						
	A	B	C	D	E	F	G
\$500	6.0%	4.4%	4.0%	3.0%	2.3%	1.4%	1.5%
\$1,000	9.9%	7.5%	6.7%	5.1%	4.1%	2.6%	2.6%
\$1,500	12.7%	9.8%	8.8%	6.8%	5.5%	3.6%	3.6%
\$2,000	15.0%	11.7%	10.5%	8.2%	6.7%	4.5%	4.3%
\$2,500	16.8%	13.3%	12.0%	9.5%	7.8%	5.3%	5.0%
\$3,000	18.4%	14.7%	13.2%	10.5%	8.7%	6.0%	5.7%
\$3,500	19.8%	15.9%	14.4%	11.5%	9.6%	6.7%	6.2%
\$4,000	21.0%	17.0%	15.4%	12.4%	10.4%	7.3%	6.8%
\$4,500	22.1%	18.0%	16.3%	13.2%	11.1%	7.9%	7.3%
\$5,000	23.2%	19.0%	17.2%	14.0%	11.8%	8.5%	7.8%

**Terrorism - (Advisory Rate)**..... 0.01

**United States Longshore and Harbor Workers' Compensation Coverage Percentage**  
applicable only in connection with **Basic Manual** Rule 3-A-4..... 85%

(Multiply a Non-F classification rate by a factor of 1.85 to adjust for differences in benefits and loss-based expenses. This factor is the product of the adjustment for differences in benefits (1.75) and the adjustment for differences in loss-based expenses (1.059)).

**Experience Rating Eligibility**

A risk qualifies for experience rating on an intrastate basis when it meets the premium eligibility requirements for the state in which it operates. The eligibility amount varies by rating effective date. The **Experience Rating Plan Manual** should be referenced for the latest approved eligibility amounts by state and by effective date.

Effective January 1, 2020

**MISCELLANEOUS VALUES - ADVISORY LOSS COSTS**

**Advisory Loss Elimination Ratios** - The following reduction percentages are applicable for employers electing total deductibles on a per claim basis. They do not include a safety factor.

Deductible Amount	With Coinsurance Loss Elimination Ratios HAZARD GROUP						
	A	B	C	D	E	F	G
\$0	10.6%	9.2%	8.6%	7.5%	6.6%	5.4%	4.8%
\$500	16.9%	13.8%	12.8%	10.6%	9.0%	6.9%	6.4%
\$1,000	20.9%	17.0%	15.6%	12.9%	10.9%	8.1%	7.6%
\$1,500	23.9%	19.5%	17.8%	14.6%	12.4%	9.1%	8.5%
\$2,000	26.2%	21.4%	19.6%	16.1%	13.6%	10.1%	9.4%
\$2,500	28.1%	23.1%	21.1%	17.4%	14.7%	10.9%	10.1%
\$3,000	29.8%	24.6%	22.4%	18.5%	15.7%	11.6%	10.7%
\$3,500	31.2%	25.9%	23.6%	19.5%	16.6%	12.4%	11.3%
\$4,000	32.5%	27.0%	24.7%	20.4%	17.4%	13.0%	11.9%
\$4,500	33.7%	28.1%	25.6%	21.3%	18.2%	13.6%	12.4%
\$5,000	34.8%	29.1%	26.5%	22.1%	18.9%	14.2%	13.0%

Deductible Amount	Without Coinsurance Loss Elimination Ratios HAZARD GROUP						
	A	B	C	D	E	F	G
\$500	7.9%	5.7%	5.2%	3.9%	3.0%	1.9%	2.0%
\$1,000	12.9%	9.7%	8.8%	6.7%	5.3%	3.4%	3.5%
\$1,500	16.6%	12.8%	11.5%	8.9%	7.2%	4.7%	4.6%
\$2,000	19.5%	15.3%	13.8%	10.8%	8.8%	5.9%	5.7%
\$2,500	21.9%	17.3%	15.6%	12.4%	10.1%	6.9%	6.6%
\$3,000	24.0%	19.1%	17.3%	13.8%	11.4%	7.8%	7.4%
\$3,500	25.8%	20.8%	18.8%	15.0%	12.5%	8.7%	8.2%
\$4,000	27.4%	22.2%	20.1%	16.2%	13.5%	9.6%	8.9%
\$4,500	28.9%	23.5%	21.3%	17.3%	14.5%	10.3%	9.5%
\$5,000	30.3%	24.8%	22.4%	18.3%	15.4%	11.1%	10.2%

**Basis of premium** applicable in accordance with **Basic Manual** footnote instructions for Code 7370 --"Taxicab Co.":

Employee operated vehicle.....	\$71,800
Leased or rented vehicle.....	\$47,800

**Catastrophe (other than Certified Acts of Terrorism) - (Advisory Loss Cost).....** 0.01

**Maximum Weekly Payroll** applicable in accordance with **Basic Manual** Rule 2-E – "Executive Officers," "Partners, Sole Proprietors, and Members or Managers of Limited Liability Companies" as amended in Indiana Special Rules, and the **Basic Manual** footnote instructions for Code 9178 – "Athletic Sports or Park: Non-Contact Sports," and Code 9179 – "Athletic Sports or Park: Contact" \$3,700

**Minimum Weekly Payroll** applicable in accordance with **Basic Manual** Rule 2-E – "Executive Officers" and "Partners, Sole Proprietors, and Members or Managers of Limited Liability Companies"..... \$800

**Terrorism - (Advisory Loss Cost) .....** 0.005

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MISCELLANEOUS VALUES - ADVISORY LOSS COSTS (cont.)

United States Longshore and Harbor Workers' Compensation Coverage Percentage applicable  
only in connection with *Basic Manual* Rule 3-A-4..... 85%

(Multiply a Non-F classification loss cost by a factor of 1.85 to adjust for differences in benefits and loss-based expenses. This factor is the product of the adjustment for differences in benefits (1.75) and the adjustment for differences in loss-based expenses (1.059)).

Experience Rating Eligibility

A risk qualifies for experience rating on an intrastate basis when it meets the premium eligibility requirements for the state in which it operates. The eligibility amount varies by rating effective date. The *Experience Rating Plan Manual* should be referenced for the latest approved eligibility amounts by state and by effective date.



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Proposed Assigned Risk Rates and Rating Values**

The following pages include proposed assigned risk rates and rating values:

- Assigned risk rates, minimum premium, expected loss rates, and d-ratios by class code, along with associated footnotes
- Miscellaneous values, such as:
  - Maximum and minimum weekly payroll applicable for select class codes
  - Premium determination for Partners and Sole Proprietors
  - Terrorism rate
  - United States Longshore and Harbor Workers' Compensation Coverage Percentage

# WORKERS COMPENSATION AND EMPLOYERS LIABILITY

# INDIANA

Effective January 1, 2020

## APPLICABLE TO ASSIGNED RISK POLICIES ONLY

CLASS CODE	RATE	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	MIN PREM	ELR	D RATIO
0005	2.04	803	1.19	0.43	2014	2.52	954	1.35	0.37	2709	6.03	1500	3.22	0.37
0008	2.09	818	1.16	0.42	2016	2.02	796	1.20	0.45	2710	5.41	1500	2.70	0.33
0016	3.58	1288	1.90	0.37	2021	1.72	702	0.95	0.42	2714	2.80	1042	1.66	0.45
0034	2.40	916	1.39	0.43	2039	1.26	557	0.76	0.45	2731	2.48	941	1.31	0.37
0035	1.66	683	0.98	0.45	2041	1.73	705	1.03	0.45	2735	2.83	1051	1.68	0.45
0036	2.67	1001	1.56	0.43	2065	0.97	466	0.57	0.43	2759	4.09	1448	2.44	0.45
0037	2.51	951	1.40	0.42	2070	2.72	1017	1.59	0.43	2790	1.12	513	0.67	0.45
0042	3.00	1105	1.67	0.42	2081	1.58	658	0.92	0.43	2797	1.55	648	0.90	0.43
0050	3.70	1326	2.14	0.43	2089	1.98	784	1.15	0.43	2799	3.13	1146	1.75	0.42
0059D	0.28	—	0.07	0.37	2095	2.02	796	1.17	0.43	2802	3.24	1181	1.81	0.42
0065D	0.06	—	0.02	0.37	2105	1.82	733	1.08	0.45	2835	1.34	582	0.82	0.48
0066D	0.06	—	0.02	0.37	2110	1.57	655	0.93	0.45	2836	1.55	648	0.95	0.47
0067D	0.06	—	0.02	0.37	2111	1.25	554	0.74	0.45	2841	2.37	907	1.41	0.45
0079	2.77	1033	1.50	0.37	2112	2.28	878	1.35	0.45	2881	1.67	686	1.03	0.47
0083	3.51	1266	2.04	0.43	2114	1.73	705	1.03	0.45	2883	1.49	629	0.87	0.43
0106	5.45	1500	2.72	0.33	2121	0.99	472	0.57	0.43	2913	—	—	0.87	0.43
0113	2.49	944	1.44	0.43	2130	1.31	573	0.76	0.43	2915	2.34	897	1.31	0.42
0170	2.17	844	1.26	0.43	2131	0.90	444	0.53	0.43	2916	1.82	733	0.91	0.33
0251	2.02	796	1.18	0.43	2143	1.20	538	0.72	0.45	2923	1.43	610	0.85	0.45
0400	—	—	0.76	0.42	2157	2.28	878	1.34	0.43	2942	—	—	0.43	0.48
0401	7.47	A	3.72	0.33	2172	0.77	403	0.44	0.42	2960	2.89	1070	1.68	0.43
0766N	0.27	—	—	—	2174	1.31	573	0.78	0.45	3004	0.79	409	0.42	0.37
0771N	0.25	—	—	—	2211	4.10	1452	2.20	0.37	3018	1.64	677	0.88	0.37
0908P	131.00	291	76.35	0.43	2220	1.31	573	0.76	0.43	3022	2.04	803	1.21	0.45
0913P	315.00	475	184.07	0.43	2286	1.09	503	0.66	0.45	3027	1.55	648	0.82	0.37
1005*	3.21	1171	1.13	0.31	2288	2.26	872	1.34	0.45	3028	1.61	667	0.94	0.43
1016X*	8.21	1500	2.69	0.31	2300	—	—	0.91	0.43	3030	3.49	1259	1.86	0.37
1164D	1.81	730	0.84	0.31	2302	0.90	444	0.52	0.43	3040	3.24	1181	1.72	0.37
1165D	1.67	686	0.83	0.33	2305	1.19	535	0.66	0.42	3041	2.52	954	1.46	0.43
1320	1.76	714	0.88	0.33	2361	1.12	513	0.65	0.43	3042	2.11	825	1.18	0.42
1322	4.43	1500	2.25	0.33	2362	1.02	481	0.59	0.43	3064	2.16	840	1.26	0.43
1430	2.19	850	1.16	0.37	2380	1.50	633	0.88	0.43	3069	—	—	0.99	0.43
1438	2.69	1007	1.35	0.33	2386	—	—	0.91	0.43	3076	1.72	702	0.99	0.43
1452	1.38	595	0.75	0.37	2388	1.06	494	0.63	0.45	3081D	2.60	979	1.36	0.37
1463	7.20	1500	3.58	0.33	2402	1.46	620	0.78	0.37	3082D	2.63	988	1.36	0.37
1472	1.60	664	0.80	0.33	2413	1.53	642	0.89	0.43	3085D	2.35	900	1.23	0.37
1604X	2.45	932	1.33	0.37	2416	1.03	484	0.60	0.43	3110	2.28	878	1.33	0.43
1624D	1.45	617	0.72	0.33	2417	0.68	374	0.40	0.43	3111	1.50	633	0.88	0.43
1642	1.31	573	0.70	0.37	2501	1.57	655	0.91	0.43	3113	0.94	456	0.55	0.43
1654	3.30	1200	1.77	0.37	2503	0.81	415	0.48	0.45	3114	1.73	705	1.01	0.43
1655	—	—	0.70	0.37	2534	—	—	0.91	0.43	3118	1.00	475	0.60	0.45
1699	1.44	614	0.77	0.37	2570	2.05	806	1.22	0.45	3119	0.49	314	0.30	0.48
1701	1.94	771	1.03	0.37	2585	1.87	749	1.12	0.45	3122	1.11	510	0.66	0.45
1710D	2.64	992	1.38	0.37	2586	1.41	604	0.82	0.43	3126	1.03	484	0.60	0.43
1741	—	—	1.03	0.37	2587	1.37	592	0.82	0.45	3131	0.93	453	0.54	0.43
1747	1.20	538	0.64	0.37	2589	1.20	538	0.70	0.43	3132	1.75	711	1.01	0.43
1748	4.50	1500	2.37	0.37	2600	2.07	812	1.24	0.45	3145	1.49	629	0.86	0.43
1803D	4.09	1448	1.82	0.33	2623	3.69	1322	2.06	0.42	3146	1.32	576	0.77	0.43
1852	—	—	0.55	0.31	2651	0.96	462	0.57	0.45	3169	1.49	629	0.87	0.43
1853	—	—	1.03	0.37	2660	1.41	604	0.84	0.45	3175	—	—	0.87	0.43
1860	—	—	0.67	0.43	2670	1.29	566	0.80	0.48	3179	1.08	500	0.64	0.45
1924	1.46	620	0.87	0.45	2683	1.46	620	0.86	0.45	3180	1.35	585	0.81	0.45
1925	2.19	850	1.22	0.42	2688	1.30	570	0.78	0.45	3188	1.09	503	0.65	0.45
2002	1.70	696	1.01	0.45	2701	9.13	1500	4.90	0.37	3220	1.11	510	0.64	0.43
2003	2.51	951	1.46	0.43	2702	13.23	1500	6.28	0.31	3223	—	—	0.81	0.45

\* Refer to the Footnotes Page for additional information on this class code.



# WORKERS COMPENSATION AND EMPLOYERS LIABILITY

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Effective January 1, 2020

## APPLICABLE TO ASSIGNED RISK POLICIES ONLY

CLASS CODE	RATE	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	MIN PREM	ELR	D RATIO
3224	1.78	721	1.07	0.45	4024D	2.72	1017	1.44	0.37	4653	1.11	510	0.66	0.45
3227	1.73	705	1.03	0.45	4034	3.24	1181	1.73	0.37	4665	3.34	1212	1.78	0.37
3240	1.94	771	1.16	0.45	4036	1.52	639	0.81	0.37	4670	—	—	1.25	0.43
3241	1.44	614	0.84	0.43	4038	1.25	554	0.77	0.48	4683	2.14	834	1.25	0.43
3255	1.47	623	0.90	0.47	4053	—	—	0.93	0.43	4686	1.35	585	0.72	0.37
3257	1.50	633	0.87	0.43	4061	—	—	0.93	0.43	4692	0.50	318	0.30	0.45
3270	1.46	620	0.85	0.43	4062	1.60	664	0.93	0.43	4693	0.53	327	0.31	0.43
3300	3.95	1404	2.26	0.43	4101	1.37	592	0.77	0.42	4703	0.99	472	0.58	0.43
3303	1.66	683	0.98	0.45	4109	0.24	236	0.15	0.45	4716	—	—	1.25	0.43
3307	1.82	733	1.06	0.43	4110	0.46	305	0.27	0.43	4717	1.14	519	0.70	0.48
3315	1.79	724	1.07	0.45	4111	1.32	576	0.78	0.45	4720	1.08	500	0.63	0.43
3334	1.14	519	0.67	0.43	4113	—	—	0.78	0.45	4740	0.49	314	0.26	0.37
3336	1.44	614	0.77	0.37	4114	1.44	614	0.84	0.43	4741	1.25	554	0.73	0.43
3365	2.54	960	1.36	0.37	4130	1.76	714	1.03	0.43	4751	1.19	535	0.63	0.37
3372	2.02	796	1.13	0.42	4131	3.34	1212	1.98	0.45	4766NX	1.98	869	0.94	0.31
3373	2.77	1033	1.63	0.43	4133	1.19	535	0.70	0.45	4771NX	1.44	692	0.68	0.31
3383	0.79	409	0.47	0.45	4149	0.40	286	0.24	0.48	4777	1.75	711	0.82	0.31
3385	0.43	295	0.25	0.45	4206	1.34	582	0.78	0.43	4825	0.44	299	0.24	0.37
3400	2.29	881	1.27	0.42	4207	1.06	494	0.57	0.37	4828	1.32	576	0.73	0.42
3507	1.63	673	0.95	0.43	4239	1.26	557	0.67	0.37	4829	0.76	399	0.38	0.33
3515	1.37	592	0.79	0.43	4240	2.11	825	1.25	0.45	4902	1.82	733	1.09	0.45
3548	0.79	409	0.46	0.43	4243	1.31	573	0.76	0.43	4923	0.62	355	0.36	0.43
3559	1.60	664	0.93	0.43	4244	1.60	664	0.93	0.43	5020	2.72	1017	1.46	0.37
3574	0.74	393	0.44	0.45	4250	1.00	475	0.58	0.43	5022	3.22	1174	1.62	0.33
3581	0.71	384	0.42	0.45	4251	1.47	623	0.86	0.43	5037	5.72	1500	2.70	0.31
3612	1.19	535	0.66	0.42	4263	1.91	762	1.11	0.43	5040	4.32	1500	2.04	0.31
3620	1.88	752	1.00	0.37	4273	1.17	529	0.68	0.43	5057	2.75	1026	1.32	0.31
3629	0.96	462	0.57	0.45	4279	1.15	522	0.67	0.43	5059	9.31	1500	4.37	0.31
3632	1.37	592	0.76	0.42	4282	—	—	0.67	0.43	5069	—	—	4.37	0.31
3634	0.96	462	0.57	0.45	4283	0.67	371	0.39	0.43	5102	2.78	1036	1.40	0.33
3635	1.44	614	0.84	0.43	4299	1.12	513	0.67	0.45	5146	2.27	875	1.22	0.37
3638	0.96	462	0.57	0.45	4304	3.05	1121	1.70	0.42	5160	1.22	544	0.62	0.33
3642	1.19	535	0.69	0.43	4307	1.11	510	0.68	0.47	5183	1.40	601	0.75	0.37
3643	1.19	535	0.69	0.43	4351	0.55	333	0.32	0.43	5188	1.64	677	0.88	0.37
3647	1.41	604	0.79	0.42	4352	0.87	434	0.52	0.45	5190	1.48	626	0.79	0.37
3648	0.94	456	0.56	0.45	4360	—	—	0.19	0.42	5191	0.76	399	0.44	0.43
3681	0.58	343	0.34	0.45	4361	0.59	346	0.35	0.45	5192	1.73	705	1.01	0.43
3685	0.52	324	0.31	0.45	4410	1.58	658	0.92	0.43	5213	2.77	1033	1.40	0.33
3719	0.47	308	0.22	0.31	4420	1.58	658	0.79	0.33	5215	3.16	1155	1.77	0.42
3724	2.13	831	1.07	0.33	4431	0.93	453	0.57	0.47	5221	2.24	866	1.20	0.37
3726	1.63	673	0.77	0.31	4432	0.70	381	0.43	0.48	5222	3.73	1335	1.88	0.33
3803	1.49	629	0.87	0.43	4439	—	—	0.59	0.43	5223	3.94	1401	2.10	0.37
3807	1.25	554	0.74	0.45	4452	1.46	620	0.85	0.43	5348	1.92	765	1.03	0.37
3808	2.40	916	1.34	0.42	4459	1.60	664	0.93	0.43	5402	2.17	844	1.30	0.45
3821X	4.04	1433	2.26	0.42	4470	1.34	582	0.78	0.43	5403	3.06	1124	1.53	0.33
3822X	2.43	925	1.34	0.41	4484	1.72	702	0.99	0.43	5437	3.19	1165	1.72	0.37
3824X	1.96	777	1.09	0.42	4493	1.55	648	0.90	0.43	5443	1.67	686	0.98	0.43
3826	0.43	295	0.25	0.43	4511	0.47	308	0.26	0.42	5445	2.89	1070	1.45	0.33
3827	1.29	566	0.72	0.42	4557	1.15	522	0.69	0.45	5462	3.53	1272	1.89	0.37
3830	0.74	393	0.42	0.42	4558	1.02	481	0.59	0.43	5472	3.44	1244	1.63	0.31
3851	1.50	633	0.90	0.45	4568	1.17	529	0.63	0.37	5473	4.84	1500	2.28	0.31
3865	1.02	481	0.62	0.47	4581	0.52	324	0.26	0.33	5474	3.09	1133	1.54	0.33
3881	3.24	1181	1.89	0.43	4583	2.13	831	1.07	0.33	5478	2.02	796	1.09	0.37
4000	3.13	1146	1.58	0.33	4611	0.35	270	0.21	0.45	5479	3.06	1124	1.71	0.42
4021	2.31	888	1.23	0.37	4635	1.49	629	0.70	0.31	5480	3.01	1108	1.52	0.33

\* Refer to the Footnotes Page for additional information on this class code.

# WORKERS COMPENSATION AND EMPLOYERS LIABILITY

# INDIANA

Effective January 1, 2020

## APPLICABLE TO ASSIGNED RISK POLICIES ONLY

CLASS CODE	RATE	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	MIN PREM	ELR	D RATIO
5491	0.96	462	0.48	0.33	7024M	1.77	718	0.85	0.31	7605	1.55	648	0.83	0.37
5506	3.74	1338	1.76	0.31	7038M	3.64	1307	1.69	0.31	7610	0.33	264	0.19	0.42
5507	2.01	793	1.01	0.33	7046M	4.00	1420	1.91	0.31	7698X	3.30	1200	1.49	0.31
5508	—	—	1.01	0.33	7047M	2.52	954	1.16	0.31	7699X	1.47	623	0.76	0.36
5535	2.71	1014	1.45	0.37	7050M	6.67	1500	2.94	0.31	7705	3.24	1181	1.81	0.42
5537	2.57	970	1.37	0.37	7090M	4.04	1433	1.87	0.31	7710X	2.49	944	1.24	0.33
5551	5.47	1500	2.59	0.31	7098M	4.44	1500	2.12	0.31	7711X	2.49	944	1.24	0.33
5606	0.68	374	0.34	0.33	7099M	7.33	1500	3.34	0.31	7720	1.70	696	0.90	0.37
5610	2.80	1042	1.64	0.43	7133	1.57	655	0.78	0.33	7725X	1.59	661	0.76	0.33
5645	5.58	1500	2.79	0.33	7151M	1.91	762	0.95	0.33	7732PX	122.00	282	63.36	0.37
5703	5.70	1500	3.04	0.37	7152M	3.49	1259	1.66	0.33	7855	1.86	746	0.99	0.37
5705	8.20	1500	4.36	0.37	7153M	2.12	828	1.06	0.33	8001	1.56	651	0.92	0.45
5951	0.21	226	0.13	0.45	7219	3.89	1385	1.98	0.33	8002	1.36	588	0.78	0.43
6003	3.09	1133	1.67	0.37	7222	3.39	1228	1.83	0.37	8006	1.36	588	0.79	0.43
6005	2.16	840	1.15	0.37	7225	3.27	1190	1.76	0.37	8008	0.91	447	0.54	0.45
6017	—	—	1.40	0.33	7228	—	—	1.98	0.33	8010	1.14	519	0.68	0.45
6018	1.19	535	0.65	0.37	7229	—	—	1.98	0.33	8013	0.27	245	0.16	0.43
6045	1.92	765	1.04	0.37	7230	5.16	1500	2.91	0.42	8015	0.51	321	0.30	0.43
6204	3.71	1329	1.86	0.33	7231	4.61	1500	2.62	0.42	8017	0.97	466	0.58	0.45
6206	1.20	538	0.57	0.31	7232	3.83	1366	1.95	0.33	8018	1.97	781	1.17	0.45
6213	0.70	381	0.35	0.33	7309F	10.67	1500	4.32	0.26	8021	1.86	746	1.07	0.43
6214	0.90	444	0.42	0.31	7313F	4.14	1464	1.68	0.26	8031	1.83	736	1.06	0.43
6216	2.60	979	1.23	0.31	7317F	10.43	1500	4.23	0.26	8032	1.37	592	0.81	0.45
6217	2.08	815	1.05	0.33	7327F	27.74	1500	11.23	0.26	8033	2.00	790	1.15	0.43
6229	2.28	878	1.14	0.33	7333M	1.26	557	0.61	0.31	8037	1.11	510	0.66	0.45
6233	1.32	576	0.67	0.33	7335M	1.40	601	0.68	0.31	8039	1.23	547	0.73	0.45
6235	3.15	1152	1.50	0.31	7337M	2.31	888	1.07	0.31	8044	1.70	696	0.95	0.42
6236	3.28	1193	1.77	0.37	7350F	13.11	1500	5.49	0.28	8045	0.60	349	0.36	0.45
6237	0.68	374	0.37	0.37	7360	2.16	840	1.15	0.37	8046	1.46	620	0.85	0.43
6251D	2.80	1042	1.40	0.33	7370	3.66	1313	2.12	0.43	8047	0.61	352	0.37	0.45
6252D	2.06	809	0.97	0.31	7380	2.74	1023	1.54	0.42	8058	1.67	686	0.96	0.43
6260	—	—	1.40	0.33	7382	2.34	897	1.36	0.43	8072	0.47	308	0.28	0.45
6306	2.40	916	1.21	0.33	7390	2.64	992	1.54	0.43	8102	1.29	566	0.76	0.45
6319	1.75	711	0.88	0.33	7394M	1.67	686	0.81	0.31	8103	1.37	592	0.76	0.42
6325	1.78	721	0.90	0.33	7395M	1.86	746	0.90	0.31	8105	—	—	1.17	0.45
6400	2.98	1099	1.67	0.42	7398M	3.07	1127	1.42	0.31	8106	2.60	979	1.39	0.37
6503	1.09	503	0.66	0.45	7402	0.11	195	0.06	0.43	8107	1.79	724	0.95	0.37
6504	1.75	711	1.05	0.45	7403	2.41	919	1.29	0.37	8111	1.59	661	0.93	0.43
6702M*	2.26	872	1.21	0.37	7405N	0.84	513	0.45	0.37	8116	1.79	724	1.04	0.43
6703M*	4.14	1464	2.10	0.37	7420	3.88	1382	1.84	0.31	8203	3.39	1228	1.98	0.43
6704M*	2.51	951	1.34	0.37	7421	0.42	292	0.21	0.33	8204	3.31	1203	1.76	0.37
6801F	5.40	1500	2.32	0.32	7422	0.71	384	0.33	0.31	8209	2.59	976	1.50	0.43
6811	3.82	1363	2.03	0.37	7425	1.15	522	0.55	0.31	8215	1.87	749	1.00	0.37
6824F	9.82	1500	4.11	0.28	7431N	0.49	365	0.23	0.31	8227	1.86	746	0.88	0.31
6826F	6.49	1500	2.79	0.32	7445N	0.28	—	—	—	8232	2.91	1077	1.55	0.37
6834	1.72	702	0.96	0.42	7453N	0.16	—	—	—	8233	1.64	677	0.89	0.37
6836	2.25	869	1.19	0.37	7502	1.10	507	0.59	0.37	8235	2.67	1001	1.56	0.43
6843F	9.34	1500	3.79	0.26	7515	0.59	346	0.28	0.31	8263	4.16	1470	2.30	0.42
6845F	7.13	1500	2.89	0.26	7520	2.10	822	1.22	0.43	8264	2.83	1051	1.51	0.37
6854	3.03	1114	1.42	0.31	7538	2.39	913	1.13	0.31	8265	3.27	1190	1.63	0.33
6872F	10.78	1500	4.37	0.26	7539	0.88	437	0.44	0.33	8279	4.90	1500	2.42	0.33
6874F	19.66	1500	7.97	0.26	7540	1.60	664	0.75	0.31	8288	4.41	1500	2.33	0.37
6882	2.05	806	0.97	0.31	7580	1.79	724	0.95	0.37	8291	2.37	907	1.33	0.42
6884	3.14	1149	1.53	0.31	7590	1.83	736	1.03	0.42	8292	2.27	875	1.32	0.43
7016M	1.59	661	0.76	0.31	7600	2.41	919	1.30	0.37	8293	5.91	1500	3.19	0.37

\* Refer to the Footnotes Page for additional information on this class code.

# WORKERS COMPENSATION AND EMPLOYERS LIABILITY

INDIANA

Effective January 1, 2020

## APPLICABLE TO ASSIGNED RISK POLICIES ONLY

CLASS CODE	RATE	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	MIN PREM	ELR	D RATIO	CLASS CODE	RATE	MIN PREM	ELR	D RATIO
8304	3.36	1218	1.78	0.37	9033	1.59	661	0.92	0.43					
8350	2.84	1055	1.43	0.33	9040	1.91	762	1.14	0.45					
8380	1.46	620	0.81	0.42	9044	0.90	444	0.53	0.45					
8381	1.27	560	0.71	0.42	9052	1.24	551	0.74	0.45					
8385	1.66	683	0.88	0.37	9058	1.20	538	0.74	0.47					
8392	1.71	699	0.99	0.43	9060	1.03	484	0.61	0.45					
8393X	1.17	529	0.69	0.43	9061	0.91	447	0.56	0.47					
8500	4.28	1500	2.29	0.37	9062	0.91	447	0.56	0.47					
8601	0.23	232	0.13	0.42	9063	0.69	377	0.40	0.44					
8602	0.83	421	0.47	0.42	9077F	4.99	1500	2.21	0.39					
8603	0.05	176	0.03	0.43	9082	0.93	453	0.57	0.47					
8606	1.34	582	0.67	0.33	9083	0.83	421	0.51	0.47					
8709F	5.28	1500	2.14	0.26	9084	0.96	462	0.55	0.43					
8719	1.53	642	0.72	0.31	9088a	a	a	a	a					
8720	0.79	409	0.42	0.37	9089	0.69	377	0.40	0.44					
8721	0.20	223	0.10	0.37	9093	1.09	503	0.64	0.45					
8723	0.11	195	0.06	0.43	9101	2.39	913	1.41	0.45					
8725	1.64	677	0.88	0.37	9102	2.10	822	1.23	0.43					
8726F	2.81	1045	1.21	0.32	9154	0.95	459	0.55	0.43					
8734M	0.24	236	0.13	0.37	9156	1.62	670	0.90	0.42					
8737M	0.22	229	0.12	0.37	9170	5.46	1500	2.56	0.31					
8738M	0.40	286	0.21	0.37	9178	4.28	1500	2.59	0.47					
8742	0.18	217	0.10	0.37	9179	7.50	1500	4.46	0.45					
8745	2.29	881	1.28	0.42	9180	4.18	1477	2.20	0.37					
8748	0.33	264	0.19	0.42	9182	1.25	554	0.72	0.43					
8755	0.17	214	0.09	0.37	9186	7.89	1500	3.89	0.33					
8799	0.59	346	0.34	0.43	9220	2.98	1099	1.66	0.42					
8800	1.24	551	0.76	0.47	9402	2.68	1004	1.44	0.37					
8803	0.05	176	0.02	0.37	9403	3.91	1392	1.97	0.33					
8805M	0.16	210	0.09	0.43	9410	1.39	598	0.80	0.43					
8810	0.12	198	0.07	0.43	9501	1.94	771	1.09	0.42					
8814M	0.15	207	0.08	0.43	9505	2.20	853	1.23	0.42					
8815M	0.27	245	0.15	0.43	9516	2.40	916	1.29	0.37					
8820	0.11	195	0.06	0.42	9519	2.80	1042	1.50	0.37					
8824	1.43	610	0.85	0.45	9521	1.75	711	0.93	0.37					
8825	—	—	0.79	0.43	9522	1.58	658	0.91	0.43					
8826	1.35	585	0.79	0.43	9534	1.92	765	0.97	0.33					
8829	—	—	0.85	0.45	9554	4.56	1500	2.29	0.33					
8831	0.91	447	0.53	0.43	9586	0.31	258	0.19	0.48					
8832	0.18	217	0.11	0.43	9600	1.29	566	0.78	0.45					
8833	0.56	336	0.33	0.43	9620	0.76	399	0.42	0.42					
8835	1.51	636	0.88	0.43										
8842	2.29	881	1.32	0.43										
8855	0.12	198	0.07	0.43										
8856	0.33	264	0.20	0.43										
8864	0.93	453	0.54	0.43										
8868	0.29	251	0.17	0.45										
8869	0.83	421	0.49	0.45										
8871	0.06	179	0.04	0.45										
8901	0.12	198	0.07	0.42										
9012	0.73	390	0.41	0.42										
9014X	1.71	699	1.00	0.43										
9015	2.10	822	1.22	0.43										
9016	1.84	740	1.06	0.43										
9019	1.50	633	0.80	0.37										

\* Refer to the Footnotes Page for additional information on this class code.

Effective January 1, 2020  
**APPLICABLE TO ASSIGNED RISK POLICIES ONLY**

**FOOTNOTES**

- a Rate for each individual risk must be obtained from NCCI Customer Service or the Indiana Compensation Rating Bureau (ICRB).
- A Minimum Premium \$100 per ginning location for policy minimum premium computation.
- D Rate for classification already includes the specific disease loading shown in the table below. See **Basic Manual** Rule 3-A-7.

Code No.	Disease Loading	Symbol	Code No.	Disease Loading	Symbol	Code No.	Disease Loading	Symbol
0059D	0.28	S	1165D	0.03	S	3082D	0.06	S
0065D	0.06	S	1624D	0.02	S	3085D	0.04	S
0066D	0.06	S	1710D	0.06	S	4024D	0.03	S
0067D	0.06	S	1803D	0.44	S	6251D	0.03	S
1164D	0.04	S	3081D	0.05	S	6252D	0.02	S

S=Silica

- F Rate provides for coverage under the United States Longshore and Harbor Workers Compensation Act and its extensions. Rate includes a provision for the USL&HW Assessment.
- M Risks are subject to Admiralty Law or Federal Employers Liability Act (FELA). However, the published rate is for risks that voluntarily purchase standard workers compensation and employers liability coverage. A provision for the USL&HW Assessment is included for those classifications under Program II USL Act. The listed codes of 6702, 6703, 6704, 7151, 7152, 7153, 8734, 8737, 8738, 8805, 8814, and 8815 under the Federal Employers' Liability Act (FELA) for employees of interstate railroads are not applicable in the residual market.
- N This code is part of a ratable / non-ratable group shown below. The statistical non-ratable code and corresponding rate are applied in addition to the basic classification when determining premium.

Class Code	Non-Ratable Element Code
4766	0766
4771	0771
7405	7445
7431	7453

- P Classification is computed on a per capita basis.
- X Refer to special classification phraseology in these pages which is applicable in this state.

**\* Class Codes with Specific Footnotes**

- 1005 Rate includes a non-ratable disease element of \$0.86. (For coverage written separately for federal benefits only, \$0.84. For coverage written separately for state benefits only, \$0.02.)
- 1016 Rate includes a non-ratable disease element of \$2.57. (For coverage written separately for federal benefits only, \$2.52. For coverage written separately for state benefits only, \$0.05.)
- 6702 Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way - no work on elevated railroads. Otherwise, assign appropriate construction or erection code rate and elr each x 1.215.
- 6703 Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way - no work on elevated railroads. Otherwise, assign appropriate construction or erection class rate x 2.228 and elr x 2.125.
- 6704 Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way - no work on elevated railroads. Otherwise, assign appropriate construction or erection class rate and elr each x 1.35.

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## APPLICABLE TO ASSIGNED RISK POLICIES ONLY

## MISCELLANEOUS VALUES

**Basis of premium** applicable in accordance with **Basic Manual** footnote instructions for Code 7370 --

"Taxicab Co.":

Employee operated vehicle.....	\$71,800
Leased or rented vehicle.....	\$47,800

**Catastrophe (other than Certified Acts of Terrorism)** - (Assigned Risk)..... 0.01**Expense Constant** applicable in accordance with **Basic Manual** Rule 3-A-11..... \$160**Loss Sensitive Rating Plan (LSRP)** - The factors which are used in the calculation of the LSRP are as follows:

Basic Premium Factor	0.40	Loss Development Factors	
Minimum Premium Factor	0.75	1st Adjustment	0.05
Maximum Premium Factor	1.75	2nd Adjustment	0.03
Loss Conversion Factor	1.161	3rd Adjustment	0.01
Tax Multiplier	1.019	4th Adjustment	0.01

**Maximum Weekly Payroll** applicable in accordance with **Basic Manual** Rule 2-E -- "Executive Officers,""Partners, Sole Proprietors, and Members or Managers of Limited Liability Companies" as amended in Indiana Special Rules, and the **Basic Manual** footnote instructions for Code 9178 -- "Athletic Sports or Park: Non-Contact Sports," and Code 9179 -- "Athletic Sports or Park: Contact Sports".....

\$3,700

**Minimum Weekly Payroll** applicable in accordance with **Basic Manual** Rule 2-E -- "Executive Officers"

and "Partners, Sole Proprietors, and Members or Managers of Limited Liability Companies".....

\$800

**Premium Reduction Percentages** - The following percentages are applicable by deductible amount and hazard group for total losses on a per claim basis:

Deductible Amount	With Coinsurance Premium Reduction Percentages HAZARD GROUP						
	A	B	C	D	E	F	G
\$0	8.1%	7.1%	6.6%	5.7%	5.1%	4.1%	3.7%
\$500	12.9%	10.6%	9.8%	8.1%	6.9%	5.3%	4.9%
\$1,000	16.0%	13.1%	12.0%	9.8%	8.3%	6.2%	5.8%
\$1,500	18.3%	14.9%	13.7%	11.2%	9.5%	7.0%	6.5%
\$2,000	20.1%	16.4%	15.0%	12.3%	10.4%	7.7%	7.2%
\$2,500	21.6%	17.7%	16.2%	13.3%	11.3%	8.3%	7.7%
\$3,000	22.8%	18.8%	17.2%	14.2%	12.0%	8.9%	8.2%
\$3,500	23.9%	19.8%	18.1%	14.9%	12.7%	9.5%	8.7%
\$4,000	24.9%	20.7%	18.9%	15.7%	13.3%	10.0%	9.1%
\$4,500	25.8%	21.5%	19.6%	16.3%	13.9%	10.4%	9.5%
\$5,000	26.7%	22.3%	20.3%	16.9%	14.5%	10.9%	9.9%

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## APPLICABLE TO ASSIGNED RISK POLICIES ONLY

## MISCELLANEOUS VALUES (cont.)

Deductible Amount	Without Coinsurance Premium Reduction Percentages HAZARD GROUP						
	A	B	C	D	E	F	G
\$500	6.0%	4.4%	4.0%	3.0%	2.3%	1.4%	1.5%
\$1,000	9.9%	7.5%	6.7%	5.1%	4.1%	2.6%	2.6%
\$1,500	12.7%	9.8%	8.8%	6.8%	5.5%	3.6%	3.6%
\$2,000	15.0%	11.7%	10.5%	8.2%	6.7%	4.5%	4.3%
\$2,500	16.8%	13.3%	12.0%	9.5%	7.8%	5.3%	5.0%
\$3,000	18.4%	14.7%	13.2%	10.5%	8.7%	6.0%	5.7%
\$3,500	19.8%	15.9%	14.4%	11.5%	9.6%	6.7%	6.2%
\$4,000	21.0%	17.0%	15.4%	12.4%	10.4%	7.3%	6.8%
\$4,500	22.1%	18.0%	16.3%	13.2%	11.1%	7.9%	7.3%
\$5,000	23.2%	19.0%	17.2%	14.0%	11.8%	8.5%	7.8%

**Terrorism - (Assigned Risk)**..... 0.01

**United States Longshore and Harbor Workers' Compensation Coverage Percentage**  
applicable only in connection with **Basic Manual** Rule 3-A-4..... 85%

(Multiply a Non-F classification rate by a factor of 1.85 to adjust for differences in benefits and loss-based expenses. This factor is the product of the adjustment for differences in benefits (1.75) and the adjustment for differences in loss-based expenses (1.059)).

**Experience Rating Eligibility**

A risk qualifies for experience rating on an intrastate basis when it meets the premium eligibility requirements for the state in which it operates. The eligibility amount varies by rating effective date. The **Experience Rating Plan Manual** should be referenced for the latest approved eligibility amounts by state and by effective date.

A 30% residual market surcharge is applicable to the premium in excess of \$2,750 of the standard premium, subject to audit.



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Proposed Values for Inclusion in the Experience Rating Plan Manual**

The following pages include proposed values for the Experience Rating Plan Manual:

- Table of Weighting Values
- Table of Ballast Values
- Experience rating premium eligibility amounts

Effective January 1, 2020  
**TABLE OF WEIGHTING VALUES**  
**APPLICABLE TO ALL POLICIES**  
*Experience Rating Program - ERA*

Expected Losses			Weighting Values	Expected Losses			Weighting Values
0	--	1,643	0.04	926,999	--	978,131	0.44
1,644	--	6,645	0.05	978,132	--	1,032,224	0.45
6,646	--	11,754	0.06	1,032,225	--	1,089,544	0.46
11,755	--	16,972	0.07	1,089,545	--	1,150,387	0.47
16,973	--	22,306	0.08	1,150,388	--	1,215,089	0.48
22,307	--	37,308	0.09	1,215,090	--	1,284,031	0.49
37,309	--	55,535	0.10	1,284,032	--	1,357,644	0.50
55,536	--	71,747	0.11	1,357,645	--	1,436,419	0.51
71,748	--	87,533	0.12	1,436,420	--	1,520,921	0.52
87,534	--	103,321	0.13	1,520,922	--	1,611,797	0.53
103,322	--	119,303	0.14	1,611,798	--	1,709,797	0.54
119,304	--	135,588	0.15	1,709,798	--	1,815,795	0.55
135,589	--	152,249	0.16	1,815,796	--	1,930,812	0.56
152,250	--	169,341	0.17	1,930,813	--	2,056,049	0.57
169,342	--	186,912	0.18	2,056,050	--	2,192,934	0.58
186,913	--	205,001	0.19	2,192,935	--	2,343,170	0.59
205,002	--	223,649	0.20	2,343,171	--	2,508,813	0.60
223,650	--	242,893	0.21	2,508,814	--	2,692,360	0.61
242,894	--	262,773	0.22	2,692,361	--	2,896,882	0.62
262,774	--	283,327	0.23	2,896,883	--	3,126,191	0.63
283,328	--	304,598	0.24	3,126,192	--	3,385,086	0.64
304,599	--	326,628	0.25	3,385,087	--	3,679,688	0.65
326,629	--	349,462	0.26	3,679,689	--	4,017,932	0.66
349,463	--	373,151	0.27	4,017,933	--	4,410,293	0.67
373,152	--	397,744	0.28	4,410,294	--	4,870,886	0.68
397,745	--	423,299	0.29	4,870,887	--	5,419,209	0.69
423,300	--	449,874	0.30	5,419,210	--	6,082,965	0.70
449,875	--	477,535	0.31	6,082,966	--	6,902,895	0.71
477,536	--	506,351	0.32	6,902,896	--	7,941,469	0.72
506,352	--	536,398	0.33	7,941,470	--	9,299,601	0.73
536,399	--	567,758	0.34	9,299,602	--	11,151,594	0.74
567,759	--	600,519	0.35	11,151,595	--	13,826,689	0.75
600,520	--	634,780	0.36	13,826,690	--	18,030,403	0.76
634,781	--	670,647	0.37	18,030,404	--	25,597,080	0.77
670,648	--	708,237	0.38	25,597,081	--	43,252,645	0.78
708,238	--	747,677	0.39	43,252,646	--	131,530,424	0.79
747,678	--	789,109	0.40	131,530,425	AND OVER		0.80
789,110	--	832,689	0.41				
832,690	--	878,588	0.42				
878,589	--	926,998	0.43				

(a) G . . . . .	7.85
(b) State Per Claim Accident Limitation . . . . .	\$196,000
(c) State Multiple Claim Accident Limitation . . . . .	\$392,000
(d) USL&HW Per Claim Accident Limitation . . . . .	\$875,500
(e) USL&HW Multiple Claim Accident Limitation . . . . .	\$1,751,000
(f) Employers Liability Accident Limitation . . . . .	\$55,000
(g) Primary/Excess Loss Split Point . . . . .	\$17,500
(h) USL&HW Act -- Expected Loss Factor -- Non-F Classes . . . . .	1.75
<i>(Multiply a Non-F classification ELR by the USL&amp;HW Act - Expected Loss Factor of 1.75.)</i>	



*Effective January 1, 2020*  
**TABLE OF BALLAST VALUES**  
**APPLICABLE TO ALL POLICIES**  
*Experience Rating Plan - ERA*

Expected Losses				Ballast Values		Expected Losses				Ballast Values		Expected Losses				Ballast Values	
0	--	42,223	19,625	1,354,918	--	1,394,145	157,000	2,728,270	--	2,767,513	294,375						
42,224	--	72,671	23,550	1,394,146	--	1,433,374	160,925	2,767,514	--	2,806,758	298,300						
72,672	--	107,655	27,475	1,433,375	--	1,472,604	164,850	2,806,759	--	2,846,003	302,225						
107,656	--	144,561	31,400	1,472,605	--	1,511,835	168,775	2,846,004	--	2,885,248	306,150						
144,562	--	182,365	35,325	1,511,836	--	1,551,067	172,700	2,885,249	--	2,924,493	310,075						
182,366	--	220,643	39,250	1,551,068	--	1,590,300	176,625	2,924,494	--	2,963,738	314,000						
220,644	--	259,199	43,175	1,590,301	--	1,629,534	180,550	2,963,739	--	3,002,983	317,925						
259,200	--	297,929	47,100	1,629,535	--	1,668,769	184,475	3,002,984	--	3,042,228	321,850						
297,930	--	336,775	51,025	1,668,770	--	1,708,004	188,400	3,042,229	--	3,081,474	325,775						
336,776	--	375,703	54,950	1,708,005	--	1,747,240	192,325	3,081,475	--	3,120,719	329,700						
375,704	--	414,691	58,875	1,747,241	--	1,786,476	196,250	3,120,720	--	3,159,965	333,625						
414,692	--	453,723	62,800	1,786,477	--	1,825,713	200,175	3,159,966	--	3,199,211	337,550						
453,724	--	492,789	66,725	1,825,714	--	1,864,951	204,100	3,199,212	--	3,238,457	341,475						
492,790	--	531,881	70,650	1,864,952	--	1,904,189	208,025	3,238,458	--	3,277,703	345,400						
531,882	--	570,995	74,575	1,904,190	--	1,943,428	211,950	3,277,704	--	3,316,949	349,325						
570,996	--	610,126	78,500	1,943,429	--	1,982,667	215,875	3,316,950	--	3,356,195	353,250						
610,127	--	649,271	82,425	1,982,668	--	2,021,906	219,800	3,356,196	--	3,395,442	357,175						
649,272	--	688,429	86,350	2,021,907	--	2,061,146	223,725	3,395,443	--	3,434,688	361,100						
688,430	--	727,596	90,275	2,061,147	--	2,100,387	227,650	3,434,689	--	3,473,934	365,025						
727,597	--	766,771	94,200	2,100,388	--	2,139,627	231,575	3,473,935	--	3,513,181	368,950						
766,772	--	805,953	98,125	2,139,628	--	2,178,868	235,500	3,513,182	--	3,552,428	372,875						
805,954	--	845,142	102,050	2,178,869	--	2,218,109	239,425	3,552,429	--	3,591,674	376,800						
845,143	--	884,336	105,975	2,218,110	--	2,257,351	243,350	3,591,675	--	3,630,921	380,725						
884,337	--	923,535	109,900	2,257,352	--	2,296,593	247,275	3,630,922	--	3,670,168	384,650						
923,536	--	962,738	113,825	2,296,594	--	2,335,835	251,200	3,670,169	--	3,709,415	388,575						
962,739	--	1,001,945	117,750	2,335,836	--	2,375,077	255,125	3,709,416	--	3,748,375	392,500						
1,001,946	--	1,041,155	121,675	2,375,078	--	2,414,320	259,050										
1,041,156	--	1,080,368	125,600	2,414,321	--	2,453,563	262,975										
1,080,369	--	1,119,583	129,525	2,453,564	--	2,492,806	266,900										
1,119,584	--	1,158,801	133,450	2,492,807	--	2,532,049	270,825										
1,158,802	--	1,198,021	137,375	2,532,050	--	2,571,293	274,750										
1,198,022	--	1,237,242	141,300	2,571,294	--	2,610,537	278,675										
1,237,243	--	1,276,466	145,225	2,610,538	--	2,649,781	282,600										
1,276,467	--	1,315,691	149,150	2,649,782	--	2,689,025	286,525										
1,315,692	--	1,354,917	153,075	2,689,026	--	2,728,269	290,450										

For Expected Losses greater than \$3,748,375, the Ballast Value can be calculated using the following formula (rounded to the nearest 1):

$$\text{Ballast} = (0.10)(\text{Expected Losses}) + 2500(\text{Expected Losses})(7.85) / (\text{Expected Losses} + (700)(7.85))$$

$$G = 7.85$$

# NATIONAL COUNCIL ON COMPENSATION INSURANCE, INC.

## INDIANA—UPDATE TO EXPERIENCE RATING PREMIUM ELIGIBILITY AMOUNTS

### EXPERIENCE RATING PLAN MANUAL—2003 EDITION RULE 2—EXPERIENCE RATING ELEMENTS AND FORMULA A. PREMIUM ELIGIBILITY

#### 2. State Subject Premium Eligibility Amounts

A risk qualifies for experience rating when its subject premium, developed in its experience period, meets or exceeds the minimum eligibility amount shown in the State Table of Subject Premium Eligibility Amounts in Rule 2-A-2-c. *Refer to Rule 2-E-1 to determine a risk's experience period.*

- A risk qualifies for experience rating if its data within the most recent 24 months of the experience period develops a subject premium of at least the amount shown in Column A.
- A risk may not qualify according to Rule 2-A-2-a. If it has more than the amount of experience referenced in Rule 2-A-2-a, then to qualify for experience rating the risk must develop an average annual subject premium of at least the amount shown in Column B. *Refer to Rule 2-A-3 to determine average annual subject premium.*
- A risk's rating effective date determines the applicable Column A and Column B subject premium eligibility amounts required to qualify for experience rating. *Refer to Rule 2-B for rating effective date determination.*

State Table of Subject Premium Eligibility Amounts			
State	Rating Effective Date	Column A (\$)	Column B (\$)
IN	<u>7/1/20 and after</u>	<u>5,500</u>	<u>2,750</u>
	<u>7/1/19 - 6/30/20</u>	5,500	2,750
	<u>7/1/18 - 6/30/19</u>	5,500	2,750

NOTE: This exhibit revises the Indiana experience rating subject premium eligibility amounts shown in the State Table of Subject Premium Eligibility Amounts in NCCI's ***Experience Rating Plan Manual*** national Rule 2-A-2. The content shown in this table is not a complete replacement of the existing State Table of Subject Premium Eligibility Amounts. The premium eligibility amounts are applicable to all policies.



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Proposed Values for Inclusion in the Retrospective Rating Plan Manual**

The following pages include values for inclusion in the Retrospective Rating Plan Manual:

- Average Cost per Case
- Average Cost per Case including ALAE
- Excess loss factors
- Excess loss and allocated expense factors
- Excess loss pure premium factors
- Retrospective pure premium development factors

**RETROSPECTIVE RATING PLAN MANUAL**  
**STATE SPECIAL RATING**

**INDIANA**

APPLICABLE TO ADVISORY RATES

*Effective January 1, 2020*

**1. Average Cost per Case by Hazard Group**

A	B	C	D	E	F	G
5,166	7,429	8,123	11,195	14,655	24,530	22,174

**Average Cost per Case including ALAE by Hazard Group**

A	B	C	D	E	F	G
5,660	8,134	8,886	12,236	16,003	26,755	24,150

**2. Tax Multipliers**

- a. State (non-F Classes) 1.019
- b. Federal Classes, or non-F classes  
where rate is increased by the  
USL&HW Act Percentage 1.057

**3. Countrywide  
Expected Loss Ratio**  
0.615

**Countrywide Expected Loss and  
Allocated Expense Ratio**  
0.683

**4. Table of Expense Ratios**  
Type A: 2019-01  
Type B: 2019-01

**5.**

**Excess Loss Factors**  
(Applicable to New and Renewal Policies)

**Per Accident  
Limitation**

Limitation	A	B	C	D	E	F	G
\$10,000	0.386	0.425	0.444	0.475	0.498	0.532	0.543
\$15,000	0.343	0.385	0.405	0.438	0.464	0.501	0.516
\$20,000	0.311	0.353	0.374	0.408	0.437	0.475	0.492
\$25,000	0.284	0.326	0.348	0.383	0.413	0.453	0.472
\$30,000	0.261	0.304	0.325	0.361	0.391	0.432	0.453
\$35,000	0.242	0.284	0.306	0.341	0.373	0.414	0.436
\$40,000	0.226	0.267	0.288	0.324	0.356	0.398	0.421
\$50,000	0.199	0.239	0.259	0.294	0.326	0.368	0.393
\$75,000	0.154	0.189	0.208	0.241	0.272	0.313	0.340
\$100,000	0.126	0.157	0.175	0.205	0.235	0.273	0.301
\$125,000	0.106	0.135	0.151	0.179	0.207	0.243	0.271
\$150,000	0.091	0.117	0.133	0.159	0.186	0.220	0.247
\$175,000	0.080	0.104	0.118	0.143	0.169	0.201	0.228
\$200,000	0.071	0.093	0.107	0.130	0.155	0.185	0.212
\$225,000	0.064	0.085	0.097	0.119	0.143	0.172	0.198
\$250,000	0.058	0.077	0.089	0.110	0.133	0.161	0.187
\$275,000	0.053	0.071	0.083	0.102	0.124	0.151	0.176
\$300,000	0.049	0.066	0.077	0.095	0.116	0.142	0.167
\$325,000	0.045	0.061	0.072	0.089	0.110	0.134	0.159
\$350,000	0.042	0.057	0.067	0.084	0.104	0.127	0.152
\$375,000	0.039	0.054	0.063	0.080	0.099	0.121	0.145
\$400,000	0.037	0.050	0.060	0.075	0.094	0.116	0.139
\$425,000	0.035	0.048	0.057	0.072	0.090	0.111	0.134
\$450,000	0.033	0.045	0.054	0.068	0.086	0.106	0.129
\$475,000	0.031	0.043	0.052	0.065	0.082	0.102	0.124
\$500,000	0.029	0.041	0.049	0.063	0.079	0.098	0.120
\$600,000	0.025	0.035	0.042	0.054	0.069	0.085	0.106
\$700,000	0.021	0.030	0.037	0.047	0.061	0.076	0.096
\$800,000	0.019	0.026	0.033	0.042	0.055	0.069	0.087
\$900,000	0.017	0.024	0.030	0.038	0.050	0.063	0.081
\$1,000,000	0.015	0.022	0.027	0.035	0.046	0.058	0.075
\$2,000,000	0.008	0.012	0.015	0.020	0.027	0.035	0.047
\$3,000,000	0.006	0.008	0.011	0.015	0.020	0.025	0.036
\$4,000,000	0.004	0.006	0.009	0.012	0.016	0.020	0.029
\$5,000,000	0.003	0.005	0.007	0.009	0.013	0.017	0.024
\$6,000,000	0.003	0.004	0.006	0.008	0.011	0.014	0.021
\$7,000,000	0.002	0.003	0.005	0.007	0.009	0.012	0.018
\$8,000,000	0.002	0.003	0.004	0.006	0.008	0.011	0.016
\$9,000,000	0.002	0.003	0.003	0.005	0.007	0.009	0.014
\$10,000,000	0.001	0.002	0.003	0.004	0.006	0.008	0.012

**RETROSPECTIVE RATING PLAN MANUAL**  
**STATE SPECIAL RATING**

APPLICABLE TO ADVISORY RATES

**INDIANA**

**Effective January 1, 2020**

**Excess Loss and  
Allocated Expense Factors**  
(Applicable to New and Renewal Policies)

Per Accident Limitation	Hazard Groups						
	A	B	C	D	E	F	G
\$10,000	0.430	0.472	0.491	0.524	0.549	0.584	0.595
\$15,000	0.384	0.429	0.450	0.486	0.513	0.552	0.567
\$20,000	0.349	0.394	0.417	0.454	0.484	0.525	0.542
\$25,000	0.320	0.366	0.389	0.427	0.458	0.501	0.521
\$30,000	0.296	0.342	0.364	0.403	0.436	0.480	0.501
\$35,000	0.275	0.320	0.343	0.382	0.416	0.460	0.483
\$40,000	0.257	0.302	0.325	0.363	0.397	0.442	0.467
\$50,000	0.228	0.271	0.293	0.331	0.366	0.411	0.437
\$75,000	0.178	0.216	0.237	0.272	0.306	0.351	0.379
\$100,000	0.146	0.181	0.200	0.233	0.265	0.307	0.337
\$125,000	0.124	0.156	0.173	0.204	0.235	0.274	0.304
\$150,000	0.107	0.136	0.153	0.181	0.211	0.249	0.278
\$175,000	0.095	0.121	0.137	0.164	0.192	0.228	0.257
\$200,000	0.084	0.109	0.124	0.149	0.176	0.210	0.239
\$225,000	0.076	0.099	0.113	0.137	0.163	0.196	0.224
\$250,000	0.069	0.091	0.104	0.127	0.152	0.183	0.211
\$275,000	0.063	0.084	0.097	0.118	0.142	0.172	0.199
\$300,000	0.059	0.078	0.090	0.111	0.134	0.162	0.189
\$325,000	0.054	0.073	0.084	0.104	0.126	0.154	0.180
\$350,000	0.051	0.068	0.079	0.098	0.120	0.146	0.172
\$375,000	0.047	0.064	0.075	0.093	0.114	0.139	0.165
\$400,000	0.045	0.060	0.071	0.088	0.108	0.133	0.158
\$425,000	0.042	0.057	0.067	0.084	0.104	0.127	0.152
\$450,000	0.040	0.054	0.064	0.080	0.099	0.122	0.146
\$475,000	0.038	0.052	0.061	0.076	0.095	0.117	0.141
\$500,000	0.036	0.049	0.058	0.073	0.092	0.113	0.137
\$600,000	0.030	0.042	0.050	0.063	0.079	0.098	0.121
\$700,000	0.026	0.036	0.044	0.055	0.070	0.088	0.109
\$800,000	0.023	0.032	0.039	0.050	0.063	0.079	0.099
\$900,000	0.020	0.029	0.035	0.045	0.058	0.072	0.092
\$1,000,000	0.018	0.026	0.032	0.041	0.053	0.067	0.085
\$2,000,000	0.010	0.014	0.018	0.023	0.031	0.039	0.053
\$3,000,000	0.007	0.010	0.013	0.017	0.023	0.029	0.040
\$4,000,000	0.005	0.008	0.010	0.013	0.018	0.023	0.033
\$5,000,000	0.004	0.006	0.008	0.011	0.015	0.019	0.027
\$6,000,000	0.003	0.005	0.007	0.009	0.013	0.016	0.023
\$7,000,000	0.003	0.004	0.006	0.008	0.011	0.014	0.020
\$8,000,000	0.002	0.004	0.005	0.007	0.009	0.012	0.018
\$9,000,000	0.002	0.003	0.004	0.006	0.008	0.011	0.016
\$10,000,000	0.002	0.003	0.004	0.005	0.007	0.010	0.014

6.

**Retrospective Development Factors**

With Loss Limit			Without Loss Limit			4th & Subsequent Adjustment
1st Adj.	2nd Adj.	3rd Adj.	1st Adj.	2nd Adj.	3rd Adj.	
0.02	0.01	0.01	0.05	0.03	0.01	0.00

**RETROSPECTIVE RATING PLAN MANUAL**  
**STATE SPECIAL RATING**

APPLICABLE TO ADVISORY LOSS COSTS

**INDIANA**

**Effective January 1, 2020**

**1. Average Cost per Case by Hazard Group**

A	B	C	D	E	F	G
5,166	7,429	8,123	11,195	14,655	24,530	22,174

**Average Cost per Case including ALAE by Hazard Group**

A	B	C	D	E	F	G
5,660	8,134	8,886	12,236	16,003	26,755	24,150

**2.**

**Excess Loss Pure Premium Factors**  
(Applicable to New and Renewal Policies)

**Per Accident  
Limitation**

**Hazard Groups**

	A	B	C	D	E	F	G
\$10,000	0.516	0.569	0.594	0.636	0.667	0.712	0.727
\$15,000	0.460	0.515	0.542	0.587	0.621	0.671	0.690
\$20,000	0.416	0.472	0.500	0.547	0.584	0.636	0.659
\$25,000	0.380	0.437	0.465	0.513	0.552	0.606	0.631
\$30,000	0.350	0.406	0.435	0.483	0.524	0.579	0.606
\$35,000	0.324	0.380	0.409	0.457	0.499	0.554	0.584
\$40,000	0.302	0.357	0.386	0.434	0.476	0.532	0.563
\$50,000	0.267	0.319	0.347	0.394	0.437	0.493	0.526
\$75,000	0.206	0.253	0.279	0.322	0.364	0.418	0.455
\$100,000	0.168	0.211	0.234	0.274	0.314	0.365	0.402
\$125,000	0.142	0.180	0.202	0.239	0.277	0.325	0.363
\$150,000	0.122	0.157	0.178	0.212	0.249	0.294	0.331
\$175,000	0.107	0.139	0.158	0.191	0.226	0.269	0.305
\$200,000	0.095	0.125	0.143	0.174	0.207	0.248	0.284
\$225,000	0.085	0.113	0.130	0.159	0.191	0.230	0.266
\$250,000	0.077	0.103	0.120	0.147	0.178	0.215	0.250
\$275,000	0.071	0.095	0.111	0.136	0.166	0.202	0.236
\$300,000	0.065	0.088	0.103	0.127	0.156	0.190	0.224
\$325,000	0.060	0.082	0.096	0.120	0.147	0.180	0.213
\$350,000	0.056	0.076	0.090	0.113	0.139	0.171	0.203
\$375,000	0.052	0.072	0.085	0.106	0.132	0.162	0.194
\$400,000	0.049	0.068	0.080	0.101	0.126	0.155	0.186
\$425,000	0.046	0.064	0.076	0.096	0.120	0.148	0.179
\$450,000	0.044	0.061	0.072	0.092	0.115	0.142	0.173
\$475,000	0.041	0.058	0.069	0.088	0.110	0.136	0.166
\$500,000	0.039	0.055	0.066	0.084	0.106	0.131	0.161
\$600,000	0.033	0.046	0.056	0.072	0.092	0.114	0.142
\$700,000	0.028	0.040	0.049	0.063	0.081	0.102	0.128
\$800,000	0.025	0.035	0.044	0.057	0.073	0.092	0.117
\$900,000	0.022	0.032	0.040	0.051	0.067	0.084	0.108
\$1,000,000	0.020	0.029	0.036	0.047	0.062	0.077	0.101
\$2,000,000	0.011	0.016	0.021	0.027	0.037	0.046	0.063
\$3,000,000	0.007	0.011	0.015	0.020	0.027	0.034	0.048
\$4,000,000	0.006	0.009	0.011	0.015	0.021	0.027	0.039
\$5,000,000	0.004	0.007	0.009	0.013	0.018	0.023	0.033
\$6,000,000	0.004	0.006	0.008	0.011	0.015	0.019	0.028
\$7,000,000	0.003	0.005	0.006	0.009	0.013	0.016	0.024
\$8,000,000	0.002	0.004	0.005	0.008	0.011	0.014	0.021
\$9,000,000	0.002	0.003	0.005	0.007	0.009	0.013	0.019
\$10,000,000	0.002	0.003	0.004	0.006	0.008	0.011	0.017

**RETROSPECTIVE RATING PLAN MANUAL**  
**STATE SPECIAL RATING**

APPLICABLE TO ADVISORY LOSS COSTS

**INDIANA**

**Effective January 1, 2020**

**Excess Loss and Allocated  
Expense Pure Premium Factors**  
(Applicable to New and Renewal Policies)

Per Accident Limitation	Hazard Groups						
	A	B	C	D	E	F	G
\$10,000	0.575	0.632	0.657	0.702	0.734	0.782	0.797
\$15,000	0.514	0.574	0.602	0.650	0.687	0.739	0.759
\$20,000	0.467	0.528	0.558	0.608	0.647	0.703	0.726
\$25,000	0.428	0.490	0.520	0.571	0.613	0.671	0.697
\$30,000	0.396	0.457	0.488	0.540	0.583	0.642	0.671
\$35,000	0.368	0.429	0.460	0.511	0.556	0.616	0.647
\$40,000	0.344	0.404	0.435	0.486	0.532	0.592	0.625
\$50,000	0.305	0.363	0.392	0.443	0.490	0.550	0.585
\$75,000	0.238	0.290	0.317	0.365	0.410	0.469	0.508
\$100,000	0.196	0.242	0.268	0.311	0.355	0.411	0.451
\$125,000	0.166	0.208	0.232	0.273	0.314	0.367	0.407
\$150,000	0.144	0.183	0.205	0.243	0.283	0.333	0.372
\$175,000	0.127	0.163	0.183	0.219	0.257	0.305	0.344
\$200,000	0.113	0.146	0.166	0.200	0.236	0.282	0.320
\$225,000	0.102	0.133	0.152	0.184	0.219	0.262	0.300
\$250,000	0.093	0.122	0.140	0.170	0.204	0.245	0.282
\$275,000	0.085	0.112	0.129	0.158	0.191	0.230	0.267
\$300,000	0.078	0.104	0.121	0.148	0.179	0.217	0.253
\$325,000	0.073	0.097	0.113	0.139	0.169	0.206	0.241
\$350,000	0.068	0.091	0.106	0.131	0.160	0.195	0.230
\$375,000	0.064	0.086	0.100	0.124	0.152	0.186	0.220
\$400,000	0.060	0.081	0.095	0.118	0.145	0.178	0.212
\$425,000	0.056	0.076	0.090	0.112	0.139	0.170	0.203
\$450,000	0.053	0.072	0.086	0.107	0.133	0.163	0.196
\$475,000	0.051	0.069	0.082	0.102	0.127	0.157	0.189
\$500,000	0.048	0.066	0.078	0.098	0.122	0.151	0.183
\$600,000	0.040	0.056	0.067	0.084	0.106	0.132	0.162
\$700,000	0.035	0.048	0.058	0.074	0.094	0.117	0.146
\$800,000	0.031	0.043	0.052	0.066	0.085	0.106	0.133
\$900,000	0.027	0.038	0.047	0.060	0.077	0.097	0.123
\$1,000,000	0.025	0.035	0.043	0.055	0.071	0.089	0.114
\$2,000,000	0.013	0.019	0.024	0.031	0.042	0.053	0.071
\$3,000,000	0.009	0.013	0.017	0.023	0.031	0.039	0.054
\$4,000,000	0.007	0.010	0.013	0.018	0.024	0.031	0.044
\$5,000,000	0.005	0.008	0.011	0.014	0.020	0.026	0.037
\$6,000,000	0.004	0.007	0.009	0.012	0.017	0.022	0.031
\$7,000,000	0.004	0.006	0.008	0.010	0.014	0.019	0.027
\$8,000,000	0.003	0.005	0.006	0.009	0.013	0.016	0.024
\$9,000,000	0.003	0.004	0.006	0.008	0.011	0.014	0.021
\$10,000,000	0.002	0.004	0.005	0.007	0.010	0.013	0.019

3.

**Retrospective Pure Premium Development Factors**

With Loss Limit			Without Loss Limit			4th & Subsequent Adjustment
1st Adj.	2nd Adj.	3rd Adj.	1st Adj.	2nd Adj.	3rd Adj.	
0.03	0.01	0.01	0.07	0.03	0.02	0.00

# Table of Expense Ratios - Excluding Taxes and Including Profit and Contingencies

Type A: 2019-01

WC Premium Range				Expense	WC Premium Range				Expense	WC Premium Range				Expense
From		To		Ratio	From		To		Ratio	From		To		Ratio
0	-	10,055		0.348	21,928	-	22,469		0.300	393,334	-	424,799		0.252
10,056	-	10,167		0.347	22,470	-	23,037		0.299	424,800	-	461,739		0.251
10,168	-	10,282		0.346	23,038	-	23,636		0.298	461,740	-	505,714		0.250
10,283	-	10,399		0.345	23,637	-	24,266		0.297	505,715	-	558,947		0.249
10,400	-	10,520		0.344	24,267	-	24,931		0.296	558,948	-	624,705		0.248
10,521	-	10,643		0.343	24,932	-	25,633		0.295	624,706	-	707,999		0.247
10,644	-	10,769		0.342	25,634	-	26,376		0.294	708,000	-	816,923		0.246
10,770	-	10,898		0.341	26,377	-	27,164		0.293	816,924	-	965,454		0.245
10,899	-	11,030		0.340	27,165	-	27,999		0.292	965,455	-	1,179,999		0.244
11,031	-	11,165		0.339	28,000	-	28,888		0.291	1,180,000	-	1,517,142		0.243
11,166	-	11,304		0.339	28,889	-	29,836		0.290	1,517,143	-	1,824,799		0.242
11,305	-	11,446		0.338	29,837	-	30,847		0.289	1,824,800	-	1,983,478		0.241
11,447	-	11,592		0.337	30,848	-	31,929		0.288	1,983,479	-	2,172,380		0.240
11,593	-	11,741		0.336	31,930	-	33,090		0.287	2,172,381	-	2,401,052		0.239
11,742	-	11,895		0.335	33,091	-	34,339		0.286	2,401,053	-	2,683,529		0.238
11,896	-	12,052		0.334	34,340	-	35,686		0.286	2,683,530	-	3,041,333		0.237
12,053	-	12,214		0.333	35,687	-	37,142		0.285	3,041,334	-	3,509,230		0.236
12,215	-	12,380		0.332	37,143	-	38,723		0.284	3,509,231	-	4,147,272		0.235
12,381	-	12,551		0.331	38,724	-	40,444		0.283	4,147,273	-	5,068,888		0.234
12,552	-	12,727		0.330	40,445	-	42,325		0.282	5,068,889	-	6,517,142		0.233
12,728	-	12,907		0.329	42,326	-	44,390		0.281	6,517,143	-	9,123,999		0.233
12,908	-	13,093		0.328	44,391	-	46,666		0.280	9,124,000	-	15,206,666		0.232
13,094	-	13,284		0.327	46,667	-	49,189		0.279	15,206,667	-	45,619,999		0.231
13,285	-	13,481		0.326	49,190	-	51,999		0.278	45,620,000	-	And Above		0.230
13,482	-	13,684		0.325	52,000	-	55,151		0.277					
13,685	-	13,893		0.324	55,152	-	58,709		0.276					
13,894	-	14,108		0.323	58,710	-	62,758		0.275					
14,109	-	14,330		0.322	62,759	-	67,407		0.274					
14,331	-	14,559		0.321	67,408	-	72,799		0.273					
14,560	-	14,796		0.320	72,800	-	79,130		0.272					
14,797	-	15,041		0.319	79,131	-	86,666		0.271					
15,042	-	15,294		0.318	86,667	-	95,789		0.270					
15,295	-	15,555		0.317	95,790	-	107,058		0.269					
15,556	-	15,826		0.316	107,059	-	121,333		0.268					
15,827	-	16,106		0.315	121,334	-	139,999		0.267					
16,107	-	16,396		0.314	140,000	-	165,454		0.266					
16,397	-	16,697		0.313	165,455	-	200,377		0.265					
16,698	-	17,009		0.312	200,378	-	208,235		0.264					
17,010	-	17,333		0.312	208,236	-	216,734		0.263					
17,334	-	17,669		0.311	216,735	-	225,957		0.262					
17,670	-	18,019		0.310	225,958	-	235,999		0.261					
18,020	-	18,383		0.309	236,000	-	246,976		0.260					
18,384	-	18,762		0.308	246,977	-	259,024		0.260					
18,763	-	19,157		0.307	259,025	-	272,307		0.259					
19,158	-	19,569		0.306	272,308	-	287,027		0.258					
19,570	-	19,999		0.305	287,028	-	303,428		0.257					
20,000	-	20,449		0.304	303,429	-	321,818		0.256	First	-	10,000		0.0%
20,450	-	20,919		0.303	321,819	-	342,580		0.255	Next	-	190,000		9.1%
20,920	-	21,411		0.302	342,581	-	366,206		0.254	Next	-	1,550,000		11.3%
21,412	-	21,927		0.301	366,207	-	393,333		0.253	Over	-	1,750,000		12.3%
										Expected Loss Ratio:		0.615		
										Tax Multiplier:		1.038		



# Table of Expense Ratios - Excluding Taxes and Including Profit and Contingencies

Type B: 2019-01

WC Premium Range		Expense Ratio
From	To	
0	- 10,099	0.348
10,100	- 10,303	0.347
10,304	- 10,515	0.346
10,516	- 10,736	0.345
10,737	- 10,967	0.344
10,968	- 11,208	0.343
11,209	- 11,460	0.342
11,461	- 11,724	0.341
11,725	- 11,999	0.340
12,000	- 12,289	0.339
12,290	- 12,592	0.339
12,593	- 12,911	0.338
12,912	- 13,246	0.337
13,247	- 13,599	0.336
13,600	- 13,972	0.335
13,973	- 14,366	0.334
14,367	- 14,782	0.333
14,783	- 15,223	0.332
15,224	- 15,692	0.331
15,693	- 16,190	0.330
16,191	- 16,721	0.329
16,722	- 17,288	0.328
17,289	- 17,894	0.327
17,895	- 18,545	0.326
18,546	- 19,245	0.325

WC Premium Range		Expense Ratio
From	To	
19,246	- 19,999	0.324
20,000	- 20,816	0.323
20,817	- 21,702	0.322
21,703	- 22,666	0.321
22,667	- 23,720	0.320
23,721	- 24,878	0.319
24,879	- 26,153	0.318
26,154	- 27,567	0.317
27,568	- 29,142	0.316
29,143	- 30,909	0.315
30,910	- 32,903	0.314
32,904	- 35,172	0.313
35,173	- 37,777	0.312
37,778	- 40,799	0.312
40,800	- 44,347	0.311
44,348	- 48,571	0.310
48,572	- 53,684	0.309
53,685	- 59,999	0.308
60,000	- 67,999	0.307
68,000	- 78,461	0.306
78,462	- 92,727	0.305
92,728	- 113,333	0.304
113,334	- 145,714	0.303
145,715	- 200,606	0.302
200,607	- 213,548	0.301

WC Premium Range		Expense Ratio
From	To	
213,549	- 228,275	0.300
228,276	- 245,185	0.299
245,186	- 264,799	0.298
264,800	- 287,826	0.297
287,827	- 315,238	0.296
315,239	- 348,421	0.295
348,422	- 389,411	0.294
389,412	- 441,333	0.293
441,334	- 509,230	0.292
509,231	- 601,818	0.291
601,819	- 735,555	0.290
735,556	- 945,714	0.289
945,715	- 1,323,999	0.288
1,324,000	- 1,809,565	0.287
1,809,566	- 1,981,904	0.286
1,981,905	- 2,190,526	0.286
2,190,527	- 2,448,235	0.285
2,448,236	- 2,774,666	0.284
2,774,667	- 3,201,538	0.283
3,201,539	- 3,783,636	0.282
3,783,637	- 4,624,444	0.281
4,624,445	- 5,945,714	0.280
5,945,715	- 8,323,999	0.279
8,324,000	- 13,873,333	0.278
13,873,334	- 41,619,999	0.277
41,620,000	- And Above	0.276
First	- 10,000	0.0%
Next	- 190,000	5.1%
Next	- 1,550,000	6.5%
Over	- 1,750,000	7.5%
Expected Loss Ratio:		0.615
Tax Multiplier:		1.038

# Table of Expense Ratios - Excluding Allocated Loss Adjustment Expense and Taxes and Including Profit and Contingencies

Type A: 2019-01

WC Premium Range From To	Expense Ratio	WC Premium Range From To	Expense Ratio	WC Premium Range From To	Expense Ratio
0 - 10,055	0.280	21,928 - 22,469	0.232	393,334 - 424,799	0.184
10,056 - 10,167	0.279	22,470 - 23,037	0.231	424,800 - 461,739	0.183
10,168 - 10,282	0.279	23,038 - 23,636	0.230	461,740 - 505,714	0.182
10,283 - 10,399	0.278	23,637 - 24,266	0.229	505,715 - 558,947	0.181
10,400 - 10,520	0.277	24,267 - 24,931	0.228	558,948 - 624,705	0.180
10,521 - 10,643	0.276	24,932 - 25,633	0.227	624,706 - 707,999	0.179
10,644 - 10,769	0.275	25,634 - 26,376	0.227	708,000 - 816,923	0.178
10,770 - 10,898	0.274	26,377 - 27,164	0.226	816,924 - 965,454	0.177
10,899 - 11,030	0.273	27,165 - 27,999	0.225	965,455 - 1,179,999	0.176
11,031 - 11,165	0.272	28,000 - 28,888	0.224	1,180,000 - 1,517,142	0.175
11,166 - 11,304	0.271	28,889 - 29,836	0.223	1,517,143 - 1,824,799	0.174
11,305 - 11,446	0.270	29,837 - 30,847	0.222	1,824,800 - 1,983,478	0.174
11,447 - 11,592	0.269	30,848 - 31,929	0.221	1,983,479 - 2,172,380	0.173
11,593 - 11,741	0.268	31,930 - 33,090	0.220	2,172,381 - 2,401,052	0.172
11,742 - 11,895	0.267	33,091 - 34,339	0.219	2,401,053 - 2,683,529	0.171
11,896 - 12,052	0.266	34,340 - 35,686	0.218	2,683,530 - 3,041,333	0.170
12,053 - 12,214	0.265	35,687 - 37,142	0.217	3,041,334 - 3,509,230	0.169
12,215 - 12,380	0.264	37,143 - 38,723	0.216	3,509,231 - 4,147,272	0.168
12,381 - 12,551	0.263	38,724 - 40,444	0.215	4,147,273 - 5,068,888	0.167
12,552 - 12,727	0.262	40,445 - 42,325	0.214	5,068,889 - 6,517,142	0.166
12,728 - 12,907	0.261	42,326 - 44,390	0.213	6,517,143 - 9,123,999	0.165
12,908 - 13,093	0.260	44,391 - 46,666	0.212	9,124,000 - 15,206,666	0.164
13,094 - 13,284	0.259	46,667 - 49,189	0.211	15,206,667 - 45,619,999	0.163
13,285 - 13,481	0.258	49,190 - 51,999	0.210	45,620,000 - And Above	0.162
13,482 - 13,684	0.257	52,000 - 55,151	0.209		
13,685 - 13,893	0.256	55,152 - 58,709	0.208		
13,894 - 14,108	0.255	58,710 - 62,758	0.207		
14,109 - 14,330	0.254	62,759 - 67,407	0.206		
14,331 - 14,559	0.253	67,408 - 72,799	0.205		
14,560 - 14,796	0.253	72,800 - 79,130	0.204		
14,797 - 15,041	0.252	79,131 - 86,666	0.203		
15,042 - 15,294	0.251	86,667 - 95,789	0.202		
15,295 - 15,555	0.250	95,790 - 107,058	0.201		
15,556 - 15,826	0.249	107,059 - 121,333	0.200		
15,827 - 16,106	0.248	121,334 - 139,999	0.200		
16,107 - 16,396	0.247	140,000 - 165,454	0.199		
16,397 - 16,697	0.246	165,455 - 200,377	0.198		
16,698 - 17,009	0.245	200,378 - 208,235	0.197		
17,010 - 17,333	0.244	208,236 - 216,734	0.196		
17,334 - 17,669	0.243	216,735 - 225,957	0.195		
17,670 - 18,019	0.242	225,958 - 235,999	0.194		
18,020 - 18,383	0.241	236,000 - 246,976	0.193		
18,384 - 18,762	0.240	246,977 - 259,024	0.192		
18,763 - 19,157	0.239	259,025 - 272,307	0.191		
19,158 - 19,569	0.238	272,308 - 287,027	0.190		
19,570 - 19,999	0.237	287,028 - 303,428	0.189		
20,000 - 20,449	0.236	303,429 - 321,818	0.188		
20,450 - 20,919	0.235	321,819 - 342,580	0.187		
20,920 - 21,411	0.234	342,581 - 366,206	0.186		
21,412 - 21,927	0.233	366,207 - 393,333	0.185		
				First - 10,000	0.0%
				Next - 190,000	9.1%
				Next - 1,550,000	11.3%
				Over - 1,750,000	12.3%
				Expected Loss and ALAE Ratio:	0.683
				Tax Multiplier:	1.038

# Table of Expense Ratios - Excluding Allocated Loss Adjustment Expense and Taxes and Including Profit and Contingencies

Type B: 2019-01

WC Premium Range		Expense Ratio
From	To	
0	- 10,099	0.280
10,100	- 10,303	0.279
10,304	- 10,515	0.279
10,516	- 10,736	0.278
10,737	- 10,967	0.277
10,968	- 11,208	0.276
11,209	- 11,460	0.275
11,461	- 11,724	0.274
11,725	- 11,999	0.273
12,000	- 12,289	0.272
12,290	- 12,592	0.271
12,593	- 12,911	0.270
12,912	- 13,246	0.269
13,247	- 13,599	0.268
13,600	- 13,972	0.267
13,973	- 14,366	0.266
14,367	- 14,782	0.265
14,783	- 15,223	0.264
15,224	- 15,692	0.263
15,693	- 16,190	0.262
16,191	- 16,721	0.261
16,722	- 17,288	0.260
17,289	- 17,894	0.259
17,895	- 18,545	0.258
18,546	- 19,245	0.257

WC Premium Range		Expense Ratio
From	To	
19,246	- 19,999	0.256
20,000	- 20,816	0.255
20,817	- 21,702	0.254
21,703	- 22,666	0.253
22,667	- 23,720	0.253
23,721	- 24,878	0.252
24,879	- 26,153	0.251
26,154	- 27,567	0.250
27,568	- 29,142	0.249
29,143	- 30,909	0.248
30,910	- 32,903	0.247
32,904	- 35,172	0.246
35,173	- 37,777	0.245
37,778	- 40,799	0.244
40,800	- 44,347	0.243
44,348	- 48,571	0.242
48,572	- 53,684	0.241
53,685	- 59,999	0.240
60,000	- 67,999	0.239
68,000	- 78,461	0.238
78,462	- 92,727	0.237
92,728	- 113,333	0.236
113,334	- 145,714	0.235
145,715	- 200,606	0.234
200,607	- 213,548	0.233

WC Premium Range		Expense Ratio
From	To	
213,549	- 228,275	0.232
228,276	- 245,185	0.231
245,186	- 264,799	0.230
264,800	- 287,826	0.229
287,827	- 315,238	0.228
315,239	- 348,421	0.227
348,422	- 389,411	0.227
389,412	- 441,333	0.226
441,334	- 509,230	0.225
509,231	- 601,818	0.224
601,819	- 735,555	0.223
735,556	- 945,714	0.222
945,715	- 1,323,999	0.221
1,324,000	- 1,809,565	0.220
1,809,566	- 1,981,904	0.219
1,981,905	- 2,190,526	0.218
2,190,527	- 2,448,235	0.217
2,448,236	- 2,774,666	0.216
2,774,667	- 3,201,538	0.215
3,201,539	- 3,783,636	0.214
3,783,637	- 4,624,444	0.213
4,624,445	- 5,945,714	0.212
5,945,715	- 8,323,999	0.211
8,324,000	- 13,873,333	0.210
13,873,334	- 41,619,999	0.209
41,620,000	- And Above	0.208
First	10,000	0.0%
Next	190,000	5.1%
Next	1,550,000	6.5%
Over	1,750,000	7.5%
Expected Loss and ALAE Ratio:		0.683
Tax Multiplier:		1.038



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Part 3 Supporting Exhibits

- Exhibit I: Determination of the Indicated Rate Level Change
- Exhibit II: Workers Compensation Expense Program
- Appendix A: Factors Underlying the Proposed Rate Level Change
- Appendix B: Calculations Underlying the Rate Change by Classification
- Appendix C: Memoranda for Laws and Assessments
- Appendix D: Indicated Assigned Risk Premium Surcharge
- Appendix E: Factor to Convert Advisory Rates
- Appendix F: Derivation of Experience Rating Values



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Exhibit I – Determination of Indicated Rate Level Change

NCCI uses the following general methodology to determine the indicated change based on experience, trend, and benefits for each of the policy years in the experience period:

1. Standard earned premium at Designated Statistical Reporting (DSR) level is developed to ultimate and on-leveled to the current approved advisory rate level
2. Reported indemnity and medical losses are limited by a large loss threshold, developed to ultimate using limited development factors, and on-leveled to a common benefit level to yield adjusted limited losses
3. Limited indemnity and medical cost ratios excluding trend and benefits are calculated as adjusted losses (step 2) divided by premium available for benefit costs (step 1)
4. Trend factors are applied to the indemnity and medical cost ratios to reflect expected differences between the historical experience years and the effective period of the proposed filing
5. An excess provision is applied to adjust the limited cost ratios to an unlimited basis
6. A factor is applied to reflect the impact of proposed indemnity and medical benefit changes
7. The projected unlimited indemnity and medical cost ratios including benefit changes are added to yield the indicated change based on experience, trend, and benefits

The indicated change based on experience, trend, and benefits for this filing is calculated as the average of the indicated changes for each of the individual policy years in the experience period. Lastly, the impact of the change in expense-related provisions is applied to determine the indicated overall average advisory rate level change. The detailed calculations can be found on the following pages.



## INDIANA

### EXHIBIT I

#### Determination of Indicated Rate Level Change

##### Section A - Policy Year 2017 Experience

###### Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$770,742,249
(2) Premium On-level Factor (Appendix A-I)	0.506
(3) Pure Premium Available for Benefit Costs = (1) x (2)	\$389,995,578

###### Indemnity Benefit Cost:

(4) Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$117,279,353
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.000
(6) Adjusted Limited Indemnity Losses = (4) x (5)	\$117,279,353
(7) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.301
(8) Factor to Reflect Indemnity Trend (Appendix A-III)	0.885
(9) Projected Limited Indemnity Cost Ratio = (7) x (8)	0.266
(10) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.008
(11) Projected Indemnity Cost Ratio = (9) x (10)	0.268
(12) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.001
(13) Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.268

###### Medical Benefit Cost:

(14) Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$276,116,430
(15) Medical Loss On-level Factor (Appendix A-I)	1.000
(16) Adjusted Limited Medical Losses = (14) x (15)	\$276,116,430
(17) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.708
(18) Factor to Reflect Medical Trend (Appendix A-III)	0.927
(19) Projected Limited Medical Cost Ratio = (17) x (18)	0.656
(20) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.008
(21) Projected Medical Cost Ratio = (19) x (20)	0.661
(22) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.005
(23) Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.664

###### Total Benefit Cost:

(24) Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.932
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## INDIANA

### EXHIBIT I

#### Determination of Indicated Rate Level Change

##### Section B - Policy Year 2016 Experience

###### Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$803,951,559
(2) Premium On-level Factor (Appendix A-I)	0.460
(3) Pure Premium Available for Benefit Costs = (1) x (2)	\$369,817,717

###### Indemnity Benefit Cost:

(4) Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$109,958,500
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.007
(6) Adjusted Limited Indemnity Losses = (4) x (5)	\$110,728,210
(7) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.299
(8) Factor to Reflect Indemnity Trend (Appendix A-III)	0.849
(9) Projected Limited Indemnity Cost Ratio = (7) x (8)	0.254
(10) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.008
(11) Projected Indemnity Cost Ratio = (9) x (10)	0.256
(12) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.001
(13) Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.256

###### Medical Benefit Cost:

(14) Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$271,872,321
(15) Medical Loss On-level Factor (Appendix A-I)	1.009
(16) Adjusted Limited Medical Losses = (14) x (15)	\$274,319,172
(17) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.742
(18) Factor to Reflect Medical Trend (Appendix A-III)	0.904
(19) Projected Limited Medical Cost Ratio = (17) x (18)	0.671
(20) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.008
(21) Projected Medical Cost Ratio = (19) x (20)	0.676
(22) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.005
(23) Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.679

###### Total Benefit Cost:

(24) Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.935
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## INDIANA

### EXHIBIT I

#### Determination of Indicated Rate Level Change

##### Section C - Indicated Change Based on Experience, Trend, and Benefits

(1) Policy Year 2017 Indicated Change Based on Experience, Trend, and Benefits	0.932
(2) Policy Year 2016 Indicated Change Based on Experience, Trend, and Benefits	0.935
(3) Indicated Change Based on Experience, Trend, and Benefits = $[(1)+(2)] / 2$	0.934

##### Section D - Application of the Change in Production and General Expenses

(1) Indicated Rate Level Change	0.934
(2) Effect of the Change in Production and General Expenses (Exhibit II)	1.001
(3) Indicated Change Modified to Reflect the Change in Production and General Expenses = (1) x (2)	0.935

##### Section E - Application of the Change in Taxes

(1) Indicated Rate Level Change	0.935
(2) Effect of the Change in Taxes (Exhibit II)	1.001
(3) Indicated Change Modified to Reflect the Change in Taxes = (1) x (2)	0.936

##### Section F - Application of the Change in Loss-based Expenses

(1) Indicated Rate Level Change	0.936
(2) Effect of the Change in Loss-based Expenses (Exhibit II)	0.997
(3) Indicated Change Modified to Reflect the Change in Loss-based Expenses = (1) x (2)	0.933





## INDIANA

### EXHIBIT I

#### Determination of Indicated Rate Level Change

##### Section G - Distribution of Overall Rate Level Change to Industry Groups

Industry Group Differentials (Appendix A-IV):

Manufacturing	1.004
Contracting	0.978
Office & Clerical	1.004
Goods & Services	0.990
Miscellaneous	1.032

Applying these industry group differentials to the final overall rate level change produces the changes in rate level proposed for each group as shown:

Industry Group	(1) Final Overall Rate Level Change	(2) Industry Group Differential	(3) = (1) x (2) Final Rate Level Change by Industry Group	
Manufacturing	0.933	1.004	0.937	(-6.3%)
Contracting	0.933	0.978	0.912	(-8.8%)
Office & Clerical	0.933	1.004	0.937	(-6.3%)
Goods & Services	0.933	0.990	0.924	(-7.6%)
Miscellaneous	0.933	1.032	0.963	(-3.7%)
Overall	0.933	1.000	0.933	(-6.7%)



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Exhibit II – Workers Compensation Expense Program

The proposed advisory rates include several expense-related provisions as described below.

**Production and General Expenses:** Production costs include commissions, costs of preparing the policy, verifying the correct application of rates and rating plans, billing and collecting premium and the costs of maintaining company branch offices. General expenses are commonly classified into four categories: general administration, audit, boards and bureaus, and inspection expenses.

**Premium Taxes and Assessments:** The proposed advisory rates have a provision for taxes, licenses, and fees (excluding Federal Income Tax) of 1.9%. This includes 1.3% for the Premium Tax, a 0.3% miscellaneous tax provision, and a provision of 0.3% for the Insurance Guaranty Association assessment.

**Profit and Contingency Provision:** By law, Indiana workers compensation rates must be determined so that insurers can be expected to earn a reasonable rate of return. Analysis and determination of a profit and contingency provision is necessary to ensure this premise is maintained.

**Loss-based Expense Provisions:** The proposed advisory rates include a provision for loss adjustment expenses (LAE). LAE is included in the loss costs by using a ratio of loss adjustment expense dollars to loss dollars (called the LAE provision). These expenses are directly associated with the handling of workers compensation claims. The LAE provision is comprised of two components: Adjusting and Other Expenses (AOE) and Defense and Cost Containment Expenses (DCCE).

Given the nature of AOE, it cannot be allocated to a specific claim, and hence cannot be accurately attributed to specific states. Therefore, the state-specific AOE ratio reflects the latest selected countrywide provision. The countrywide provision was calculated using data obtained from the NCCI Call for Loss Adjustment Expense. The accident year developed AOE ratios displayed in Section G-(B) are calculated on a countrywide basis using private carrier-only data.

NCCI used the following general methodology to determine the proposed DCCE provision based on Indiana-specific paid DCCE and losses reported on the NCCI Call for Policy Year Data:

- Ratios of reported paid DCCE-to-paid losses by policy year are developed to a 19<sup>th</sup> report using DCCE ratio development factors.
- A 19<sup>th</sup>-to-ultimate tail factor is applied to reflect expected development beyond a



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Exhibit II – Workers Compensation Expense Program

19<sup>th</sup> report.

- The proposed DCCE provision is selected based on the ultimate projected DCCE ratios by policy year.

**Loss-based Assessment:** INSafe is not conducting an assessment in 2019.

**Expense Constant:** Insurer expenses as a proportion of premium vary by size of risk. As risk size increases, marginal expenses tend to diminish. An expense constant helps address these expense differences by size of risk. The expense constant together with the expense provision included in the manual rate provide the necessary funding for insurer expenses

The proposed expenses are reviewed each year and incorporates the most recently available data from the Insurance Expense Exhibit, which is reported annually by insurers to state insurance departments.



## INDIANA

### EXHIBIT II

#### Section A - Comparison of Proposed and Current Expense Provisions

Overhead expense provisions are itemized below. These figures are expressed as percentages of standard premium (excluding expense constant) and are indicative of the expenses of the first \$10,000 of policy premium. Taken together these allowances represent that portion of the standard premium dollar necessary to operate the benefit system. The complementary portion corresponds to the portion of the premium dollar available to finance benefits, loss adjustment expenses and loss-based assessments, if applicable. It is referred to as the "target cost ratio."

	Expense Provisions Underlying <u>Current Rates</u>	Expense Provisions Underlying <u>Proposed Rates</u>
(1) Expense Constant	\$160	\$160
(2) Production Expense	18.5%	18.5%
(3) General Expense	5.0%	5.1%
(4) Taxes, Licenses and Fees (other than Federal Income Tax)		
Premium Tax	1.3%	1.3%
Miscellaneous	0.3%	0.3%
Insurance Guaranty Association	0.2%	0.3%
<b>Total</b>	<b>1.8%</b>	<b>1.9%</b>
(5) Profit and Contingency Provision	0.0%	0.0%
(6) Total Overhead Provisions (2)+(3)+(4)+(5)	25.3%	25.5%
(7) Target Cost Ratio [100% - (6)]	74.7%	74.5%
(8) Loss Adjustment Expense	16.2%	16.1%
(9) Loss-based Assessment	0.2%	0.0%
(10) Permissible Loss Ratio (7) / [1+(8)+(9)]	64.2%	64.2%



# INDIANA

## EXHIBIT II

### Section B - Calculation of Change in Expense Provisions

	A	B	C	D
	Current <u>Expenses</u>	Col. A with Proposed Prod & Gen Exp	Col. B with Proposed Taxes	Col. C with Proposed Profit and Contingency
(1) Production Expense	18.5%	18.5%	18.5%	18.5%
(2) General Expense	5.0%	5.1%	5.1%	5.1%
(3) Taxes	1.8%	1.8%	1.9%	1.9%
(4) Profit and Contingency Provision	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
(5) Total Provisions (1)+(2)+(3)+(4)	25.3%	25.4%	25.5%	25.5%
(6) TCR (100%-(5))	74.7%	74.6%	74.5%	74.5%
(7) Loss Based Expenses	16.4%	16.1%	16.1%	16.1%
(8) Change in Production and General Expense (6A) / (6B)			1.001	+0.1%
(9) Change in Taxes and Assessments (6B) / (6C)			1.001	+0.1%
(10) Change in Profit and Contingency Provision (6C) / (6D)			1.000	0.0%
(11) Change in Loss Based Expenses [1.0 + (7B)]/[1.0 + (7A)]			0.997	-0.3%



## INDIANA

### EXHIBIT II

#### **Section C - Countrywide Expense Program**

NCCI annually reviews expense provisions underlying workers compensation rates.

This review procedure is based on countrywide expense data. Since a significant portion of workers compensation insurance is interstate business, it is not practical to allocate expenses (especially general, other acquisition, and adjusting and other loss adjustment expenses) to particular states.

The NCCI expense program is designed to ensure equity among employers through a percentage provision in manual rates, a schedule of premium discounts for risks with standard premium in excess of \$10,000, and the application of an expense constant.

The majority of expenses incurred in workers compensation vary directly by layer of premium and are accordingly termed variable expenses. An equitable apportionment of variable expense is achieved through the application of premium discounts. As the premium for a policy increases, some expenses incurred in handling the insurance coverage become proportionately less in terms of premium. A fair expense program must, therefore, provide that the larger premium policies be charged a lower percentage of premium for these expenses than the smaller policies.

Other expenses such as issuing, recording and auditing are common to all policies regardless of size. These common expenses are called fixed expenses and are addressed by incorporating an expense constant in the program.



## INDIANA

### EXHIBIT II

#### Section D - Derivation of General Expense Provisions

The data below (amounts in thousands) illustrates that the combination of a 5.1% general expense provision in the manual rates, a \$160 expense constant, and the premium discount schedule generates general expense premium dollars that are consistent with historical actual general expenses as reported in the Insurance Expense Exhibit. All figures below obtained from the Insurance Expense Exhibit (IEE) include data for stock and mutual companies.

	<u>2016</u>	<u>2017</u>	<u>2018</u>
(1) Direct Earned Premium (NAIC Insurance Expense Exhibit Data)	49,589,244	49,874,309	50,055,106
(1a) Effect of Premium Discounts	0.9284	0.9281	0.9279
(1b) Effect of Schedule Rating	0.9539	0.9500	0.9512
(1c) Effect of Carrier Deviations	1.0304	1.0231	1.0349
(1d) Effect of Deductibles	0.7345	0.7375	0.7393
(1e) Expense Constant Offset	0.9918	0.9917	0.9917
(2) Gross Adjusted Premium (STD Premium @ NCCI Level Excl. Expense Constant) $\{(1) / [(1a) \times (1b) \times (1c) \times (1d)]\} \times (1e)$	73,379,705	74,346,190	73,508,336
(3) Direct General Expenses Incurred (NAIC Insurance Expense Exhibit Data)	2,813,993	3,200,452	3,291,102
(3a) Proportion of Expense Constant Attributable to General Expenses	0.4063	0.4063	0.4063
(4) General Expenses Incurred (Excluding Expense Constant Revenue) $(3) - (2) \times [1 - (1e)] / (1e) \times (3a)$	2,567,495	2,947,637	3,041,136
(5) Ratio of General Expense to Premium (Excluding Expense Constant Revenue) $(4) / (2)$	3.50%	3.96%	4.14%
(6) General Expense Gradations (General Expenses in Average Premium Discount)	1.28%	1.28%	1.28%
(7) General Expense Provision $(5) + (6)$	4.78%	5.24%	5.42%
(8) Selected General Expense Provision ( Three-Year Average)			<b>5.1%</b>



# INDIANA

## EXHIBIT II

### Section E - Derivation of Production Expense Provisions

The data below (amounts in thousands) illustrates that the combination of a 18.5% production expense provision in the manual rates, a \$160 expense constant, and the premium discount schedule generates production expense premium dollars that are consistent with historical actual production expenses as reported for combined stock and mutual companies' voluntary business. All figures below obtained from the Insurance Expense Exhibit (IEE) include data for stock and mutual companies.

	<u>2016</u>	<u>2017</u>	<u>2018</u>
(1) Direct Written Premium (NAIC Insurance Expense Exhibit Data)	49,898,708	50,045,258	49,778,219
(1a) Effect of Premium Discounts	0.9284	0.9279	0.9279
(1b) Effect of Schedule Rating	0.9501	0.9499	0.9520
(1c) Effect of Carrier Deviations	1.0249	1.0220	1.0440
(1d) Effect of Deductibles	0.7352	0.7393	0.7393
(1e) Expense Constant Offset	0.9918	0.9916	0.9916
(2) Pool Written Premium (Summary of NCCI Managed Pools - Combined Stock and Mutual Company Data)	1,156,397	1,110,747	1,096,491
(3) Adjusted Direct Written Premium (STD Premium Excl. Pool Written Premium) [(1)-(2)] / (1a) x (1e)	52,070,901	52,293,848	52,023,711
(4) Gross Direct Written Premium (STD Premium @ NCCI Level Incl. Pool Written Premium) {(1) / [(1a) x (1b) x (1c) x (1d)]} x (1e)	74,459,817	74,515,872	72,396,329
(5) Direct Commission & Brokerage Incurred (NAIC Insurance Expense Exhibit Data)	4,434,236	4,591,083	4,460,371
(6) Pool Producer Fees (Summary of NCCI Managed Pools - Combined Stock and Mutual Company Data)	42,149	39,826	39,215
(7) Direct Other Acquisition Expenses Incurred (NAIC Insurance Expense Exhibit Data)	2,899,995	2,498,189	2,580,093
(7a) Proportion of Expense Constant Attributable to Production Expenses	0.5313	0.5313	0.5313
(8) Other Acquisition Expenses Incurred (Excluding Expense Constant Revenue) (7) - (4) x [1-(1e)]/(1e) x (7a)	2,572,917	2,162,813	2,254,257
(9) Ratio of Other Acq. Expenses to Premium (Excluding Expense Constant Revenue) (8)/(4)	3.46%	2.90%	3.11%
(10) Direct Commission & Brokerage Provision [(5)-(6)]/(3)	8.43%	8.70%	8.50%
(11) Production Expense Gradations (Production Expenses in Average Premium Discount)	6.78%	6.78%	6.78%
(12) Production Expense Provision (9)+(10)+(11)	18.67%	18.38%	18.39%
(13) Selected Production Expense Provision ( Three-Year Average)			<b>18.5%</b>





## INDIANA

### EXHIBIT II

#### Section F - Insurance Guaranty Association—Workers Compensation Account Assessment

##### Assessments Levied in Calendar Year 2018

<u>Base Year</u>	<u>Amount</u>	<u>Base</u>	<u>Rate</u>
2017	-	823,619,704	0.00%
2016	4,250,000	883,307,548	0.48%
2013	500,000	832,451,992	0.06%
CY 2018 Provision			0.54%

##### Assessments Levied in Calendar Year 2017

<u>Base Year</u>	<u>Amount</u>	<u>Base</u>	<u>Rate</u>
2016	-	873,665,614	0.00%
2015	525,000	905,664,149	0.06%
2013	1,250,000	843,823,715	0.15%
CY 2017 Provision			0.21%

##### Assessments Levied in Calendar Year 2016

<u>Base Year</u>	<u>Amount</u>	<u>Base</u>	<u>Rate</u>
2015	-	905,664,149	0.00%
CY 2016 Provision			0.00%
Selected Provision			0.30%



## INDIANA

### EXHIBIT II

#### Workers Compensation Loss-based Expense Provision

##### Section G - (A) Proposed Change in Indiana Loss Adjustment Expense Provision

NCCI proposes a 16.1% loss adjustment expense allowance as a percentage of incurred losses. This represents a 0.1% decrease from the currently approved loss adjustment expense provision.

Indiana Provisions	(1) Currently Approved	(2) Proposed
AOE	7.6%	<b>8.0%</b>
DCCE	8.6%	<b>8.1%</b>
Total LAE	16.2%	<b>16.1%</b>

Proposed Change in Indiana LAE Provision	0.999
$= [1.0 + (2)] / [1.0 + (1)] - 1$	<b>-0.1%</b>

##### Section G - (B) Selection of AOE Provision

The adjusting and other expense data by accident year shown below is based on countrywide data for private carriers. NCCI's countrywide selection for the AOE provision is 8.0%

Accident Year	Ultimate AOE Ratio
2014	6.9%
2015	7.2%
2016	7.7%
2017	8.1%
2018	7.9%
Countrywide Selected	8.0%
<b>Indiana Selected</b>	<b>8.0%</b>



## INDIANA

### EXHIBIT II

#### Workers Compensation Loss-based Expense Provision

##### Section G - (C) Selection of DCCE Provision

<u>Policy Year</u>	(1) Reported Ratio of Paid DCCE to <u>Paid Losses</u>	(2) Age to Ultimate Development <u>Factor</u>	(3) Ultimate DCCE <u>Ratio</u>
2013	7.9%	1.010	8.0%
2014	8.7%	1.023	8.9%
2015	7.8%	1.058	8.3%
2016	7.1%	1.134	8.1%
2017	6.5%	1.244	8.1%
<b>Indiana Selected</b>			<b>8.1%</b>

(2) Section G - (D)

(3) = (1) x (2)

##### Section G - (D) Summary of Paid DCCE to Paid Loss Ratio Development Factors

<u>Report</u>	(1) <u>To Next Report</u>	(2) <u>To Ultimate</u>
	<u>DCCE Ratio Development</u>	
1st	1.097	1.244
2nd	1.072	1.134
3rd	1.034	1.058
4th	1.013	1.023
5th	1.009	1.010
6th	1.001	1.001
7th	1.003	1.000
8th	1.001	0.997
9th	0.999	0.996
10th	0.995	0.997
11th	1.001	1.002
12th	1.001	1.001
13th	0.999	1.000
14th	1.000	1.001
15th	1.000	1.001
16th	1.002	1.001
17th	1.000	0.999
18th	0.999	0.999
19th		1.000*

(1) Section G - (E)

(2) = Cumulative upward product of column (1).

\*Selection



## INDIANA

### EXHIBIT II

#### Workers Compensation Loss-based Expense Provision

##### Section G - (E) Paid DCCE to Paid Loss Ratio Development Factors

<u>Valuation</u>	<u>1st/2nd</u>	<u>2nd/3rd</u>	<u>3rd/4th</u>	<u>4th/5th</u>	<u>5th/6th</u>	<u>6th/7th</u>
12/31/2017	1.111	1.077	1.036	1.022	1.010	1.001
12/31/2018	1.083	1.067	1.031	1.004	1.007	1.001
Average	1.097	1.072	1.034	1.013	1.009	1.001

<u>Valuation</u>	<u>7th/8th</u>	<u>8th/9th</u>	<u>9th/10th</u>	<u>10th/11th</u>	<u>11th/12th</u>	<u>12th/13th</u>
12/31/2017	1.005	0.999	0.998	0.990	1.001	1.001
12/31/2018	1.000	1.002	1.000	0.999	1.001	1.001
Average	1.003	1.001	0.999	0.995	1.001	1.001

<u>Valuation</u>	<u>13th/14th</u>	<u>14th/15th</u>	<u>15th/16th</u>	<u>16th/17th</u>	<u>17th/18th</u>	<u>18th/19th</u>
12/31/2017	0.999	1.001	1.000	1.003	0.999	0.998
12/31/2018	0.999	0.999	1.000	1.000	1.001	1.000
Average	0.999	1.000	1.000	1.002	1.000	0.999



NATIONAL COUNCIL ON COMPENSATION INSURANCE  
INTERNAL RATE OF RETURN ANALYSIS  
INDIANA - VOLUNTARY

Exhibit II-H

**Overview**

According to actuarial principles, insurance rates must be determined such that insurers can be expected to earn an appropriate rate of return. Analysis and determination of a profit and contingency (P&C) provision is necessary to ensure this objective is achieved. To determine the profit and contingency provision, NCCI first uses market-based financial methods to estimate the rate of return (also known as the cost of capital) required by investors of securities with a similar risk profile to workers compensation insurance. NCCI then performs an Internal Rate of Return (IRR) analysis to estimate the profit and contingency provision that needs to be included in the proposed rates for insurers to earn the cost of capital, after accounting for investment income.

The IRR model is based on the principle that the internal rate of return from an investment opportunity equals the investor's cost of capital if the sum of all cash flows from that investment, discounted at the cost of capital, equals zero. In the case of workers compensation insurance, cash flows to the capital providers are comprised of insurance cash flows, investment income, and commitment and release of capital in support of the insurance transaction.

- The insurance cash flows are estimated based on premiums earned less payments for losses and expenses, as included in this rate filing, after recognizing the impact of federal income taxes.
- Investment income on reserves and surplus depends on an after-tax return on investment (RoI), which is estimated using a combination of current financial market data and forecasts.
- The cost of capital used is a weighted average cost of capital (WACC), which takes into account both debt and equity components of a representative insurer's capital structure.

**IRR Model Inputs and Results**

The model estimates the P&C provision necessary in order for the proposed rates to cover the cost of capital. The P&C provision is estimated using two different assumptions regarding the return on investment and cost of capital:

- The "Static" estimate of the P&C provision assumes that the return on investment and the WACC do not change over time, but remain static at their indicated market values at the time the model was run.
- The "Dynamic" estimate assumes that the return on investment and WACC vary over time. The investment portfolio is assumed to be reinvested at future forecasted yields as securities mature, and WACC varies to reflect future expected costs of equity and debt. The starting point for the Dynamic estimates is January 1, 2020.

The following table summarizes the inputs and results of the model under these two scenarios.

**TABLE 1: IRR MODEL INPUTS AND RESULTS**

<b><u>Inputs:</u></b>			
(1)	Expenses and Taxes as a Percentage of Net Premium at NCCI Level . . . . .	19.60%	
(2)	Reserve-to-Surplus Ratio . . . . .	1.82	
(3)	Cash Flow Patterns . . . . .	See Table 2	
		<b><u>Static</u></b>	<b><u>Dynamic*</u></b>
(4)	Return on Investments . . . . .	3.26%	3.66% - 4.58%
(5)	Weighted Average Cost of Capital . . . . .	7.83%	8.37% - 9.46%
<b><u>Results</u></b>			
		<b><u>Static</u></b>	<b><u>Dynamic</u></b>
(6)	<b>Indicated Profit and Contingency Provision . . . . .</b>	<b>0.30%</b>	<b>-0.07%</b>
(7)	Loss and Loss Adjustment Expense Provision [100% - (6) - (1)] . . . . .	80.10%	80.47%

**Table Notes:**

It is assumed that no policyholders dividends are paid and that there are no rate departures (deviations or schedule rating).

(1) Expense provisions and taxes derived from the filing.

(2) Calculated from Best's 2018 Aggregates & Averages, for Commercial Casualty Composite, as the weighted average of Loss, LAE, and Unearned Premium Reserves to Policyholder Surplus, for years 2013 - 2017.

\* See Table 3 for details by time period.



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Exhibit II-H

**TABLE 2: CASH FLOW PATTERNS (CUMULATIVE)**

Time	(1) Policy-Year Collected Premium	(2) Earned Premium	(3) Written Premium	(4) Expenses and Taxes	(5) Paid Losses and LAE
0.00	-	-	-	-	-
0.25	14.37%	3.89%	31.10%	14.15%	1.23%
0.50	31.13%	14.60%	54.60%	30.66%	4.62%
0.75	53.03%	31.14%	77.70%	52.22%	9.86%
1.00	76.48%	53.35%	100.00%	76.84%	16.90%
1.25	89.11%	74.46%		89.28%	28.78%
1.50	96.95%	88.75%		96.99%	40.65%
1.75	100.00%	97.21%		100.00%	52.53%
2.00		100.00%			64.40%
2.25					68.83%
2.50					73.25%
2.75					77.68%
3.00					82.10%
3.25					83.58%
3.50					85.05%
3.75					86.53%
4.00					88.00%
4.25					88.83%
4.50					89.65%
4.75					90.48%
5.00					91.30%
6.00					93.50%
7.00					94.90%
8.00					95.50%
9.00					96.00%
10.00					96.40%
11.00					96.70%
12.00					97.30%
13.00					97.60%
14.00					97.80%
15.00					98.10%
16.00					98.20%
17.00					98.30%
18.00					98.40%
19.00					98.40%
20.00					98.70%
21.00					99.00%
22.00					99.10%
23.00					99.20%
24.00					99.30%
25.00					99.30%
26.00					99.60%
27.00					99.60%
28.00					99.70%
29.00					99.80%
30.00					99.90%
31.00					100.00%
32.00					
33.00					
34.00					
35.00					

**TABLE 3: DYNAMIC ESTIMATE  
INPUTS**

Time	(1) Return on Investments	(2) Weighted Average Cost of Capital
0.00	-	-
0.25	3.66%	8.37%
0.50	3.66%	8.43%
0.75	3.65%	8.40%
1.00	3.65%	8.32%
1.25	3.67%	8.44%
1.50	3.69%	8.59%
1.75	3.74%	8.78%
2.00	3.77%	9.02%
2.25	3.81%	9.18%
2.50	3.82%	9.28%
2.75	4.00%	9.29%
3.00	4.00%	9.30%
3.25	4.00%	9.31%
3.50	4.00%	9.30%
3.75	4.00%	9.29%
4.00	4.00%	9.27%
4.25	4.00%	9.29%
4.50	4.00%	9.31%
4.75	4.00%	9.32%
5.00	4.01%	9.33%
6.00	4.03%	9.42%
7.00	4.06%	9.59%
8.00	4.26%	9.64%
9.00	4.45%	9.60%
10.00	4.43%	9.54%
11.00	4.40%	9.50%
12.00	4.39%	9.47%
13.00	4.39%	9.46%
14.00	4.39%	9.44%
15.00	4.40%	9.44%
16.00	4.48%	9.43%
17.00	4.48%	9.43%
18.00	4.48%	9.43%
19.00	4.49%	9.44%
20.00	4.49%	9.44%
21.00	4.58%	9.46%
22.00	4.58%	9.46%
23.00	4.58%	9.46%
24.00	4.58%	9.46%
25.00	4.58%	9.46%
26.00	4.58%	9.46%
27.00	4.58%	9.46%
28.00	4.58%	9.46%
29.00	4.58%	9.46%
30.00	4.58%	9.46%
31.00	4.58%	9.46%
32.00	4.58%	9.46%
33.00	4.58%	9.46%
34.00	4.58%	9.46%
35.00	4.58%	9.46%

**Table 2 Notes:**

Table 2 shows cumulative cash flows. For ease of reading no additional numbers are shown after a column reaches 100% cumulative cash flow.

- (1) Derived from estimates of premium distribution and payment terms by size of policy.
- (2) Based on written premium pattern assuming uniform writings within quarters and standard quarterly earning pattern.
- (3) Based on this jurisdiction's premium writings by quarter.
- (4) Expenses assumed paid as premium is collected; timing of taxes based on NCCI's Tax and Assessment Directory.
- (5) Derived from loss development data underlying this rate filing. Payouts for the first 31 years are based upon the ratio of paid losses to incurred losses from the most recent 31 policy years for which data is available. For the following years, loss payouts are assumed to trail off geometrically, with an adjustment so that the payout will be complete at 35 years.



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**Calculation Details**

The tables in the following pages show the detailed calculations of the IRR model.

**List of Tables**

Static Estimate

Table 4: Derivation of Insurance Cash Flows

Table 5: Derivation of Cash Flows to the Capital Providers

Dynamic Estimate

Table 6: Derivation of Insurance Cash Flows

Table 7: Derivation of Cash Flows to the Capital Providers

Appendices

Appendix A: Calculation of Weighted Average Cost of Capital and Return on Investments

Table A.1: Calculation of Weighted Average Cost of Capital

Table A.2: Calculation of Return on Investments

Appendix B: Federal Income Tax Incurred from Insurance Operations

Table B.1: Federal Income Tax Calculation (Static Estimate)

Table B.2: Federal Income Tax Calculation (Dynamic Estimate)

Appendix C: Reserve-to-Surplus Ratio

Note: Although values are displayed to 4 decimal places in the following tables, the calculations themselves are carried to the full precision of the computer.



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Exhibit II-H

**Calculation Details - Static Estimate**

**TABLE 4: DERIVATION OF INSURANCE CASH FLOW (STATIC ESTIMATE)**

Time	(1) Collected Premium Factor	(2) Expense and Taxes Factor	(3) Paid Losses and LAE Factor	(4) Federal Income Tax Factor	(5) Insurance Cash flow Factor
0.00	-	-	-	-	-
0.25	0.1437	0.0277	0.0099	0.0057	0.1004
0.50	0.3113	0.0601	0.0370	0.0115	0.2028
0.75	0.5303	0.1024	0.0790	0.0172	0.3318
1.00	0.7648	0.1506	0.1354	0.0229	0.4559
1.25	0.8911	0.1750	0.2305	0.0193	0.4664
1.50	0.9695	0.1901	0.3256	0.0157	0.4381
1.75	1.0000	0.1960	0.4207	0.0121	0.3712
2.00	1.0000	0.1960	0.5158	0.0084	0.2797
2.25	1.0000	0.1960	0.5513	0.0076	0.2451
2.50	1.0000	0.1960	0.5867	0.0067	0.2105
2.75	1.0000	0.1960	0.6222	0.0059	0.1759
3.00	1.0000	0.1960	0.6576	0.0051	0.1413
3.25	1.0000	0.1960	0.6694	0.0048	0.1298
3.50	1.0000	0.1960	0.6812	0.0045	0.1183
3.75	1.0000	0.1960	0.6931	0.0041	0.1068
4.00	1.0000	0.1960	0.7049	0.0038	0.0953
4.25	1.0000	0.1960	0.7115	0.0037	0.0888
4.50	1.0000	0.1960	0.7181	0.0035	0.0824
4.75	1.0000	0.1960	0.7247	0.0033	0.0760
5.00	1.0000	0.1960	0.7313	0.0031	0.0696
6.00	1.0000	0.1960	0.7489	0.0026	0.0525
7.00	1.0000	0.1960	0.7601	0.0022	0.0417
8.00	1.0000	0.1960	0.7649	0.0019	0.0371
9.00	1.0000	0.1960	0.7690	0.0017	0.0333
10.00	1.0000	0.1960	0.7722	0.0015	0.0303
11.00	1.0000	0.1960	0.7746	0.0014	0.0281
12.00	1.0000	0.1960	0.7794	0.0012	0.0234
13.00	1.0000	0.1960	0.7818	0.0011	0.0212
14.00	1.0000	0.1960	0.7834	0.0010	0.0196
15.00	1.0000	0.1960	0.7858	0.0009	0.0173
16.00	1.0000	0.1960	0.7866	0.0008	0.0166
17.00	1.0000	0.1960	0.7874	0.0008	0.0158
18.00	1.0000	0.1960	0.7882	0.0007	0.0151
19.00	1.0000	0.1960	0.7882	0.0007	0.0151
20.00	1.0000	0.1960	0.7906	0.0007	0.0128
21.00	1.0000	0.1960	0.7930	0.0007	0.0104
22.00	1.0000	0.1960	0.7938	0.0007	0.0096
23.00	1.0000	0.1960	0.7946	0.0007	0.0088
24.00	1.0000	0.1960	0.7954	0.0006	0.0080
25.00	1.0000	0.1960	0.7954	0.0006	0.0080
26.00	1.0000	0.1960	0.7978	0.0006	0.0056
27.00	1.0000	0.1960	0.7978	0.0006	0.0056
28.00	1.0000	0.1960	0.7986	0.0006	0.0048
29.00	1.0000	0.1960	0.7994	0.0006	0.0040
30.00	1.0000	0.1960	0.8002	0.0006	0.0032
31.00	1.0000	0.1960	0.8010	0.0006	0.0024
32.00	1.0000	0.1960	0.8010	0.0006	0.0024
33.00	1.0000	0.1960	0.8010	0.0006	0.0024
34.00	1.0000	0.1960	0.8010	0.0006	0.0024
35.00	1.0000	0.1960	0.8010	0.0006	0.0024

**Column Notes:**

- (1) is Collected Premium by time period, expressed as a factor, = Table 2 col (1)
- (2) is Expenses and Taxes by time period, expressed as a factor, = Table 1 row (1) x Table 2 col (4)
- (3) is Paid Losses and LAE by time period, expressed as a factor, = Table 1 row (7, Static) x Table 2 col (5)
- (4) per the Tax Cuts and Jobs Act of 2017, federal income taxes are computed as the tax rate (21%) times the adjusted underwriting income calculated per IRS rules. See Appendix B for details.
- (5) is the Total Insurance Cash Flow by time period, expressed as a factor, = (1) - [(2) + (3) + (4)]





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**Calculation Details - Static Estimate (continued)**

**TABLE 5: DERIVATION OF CASH FLOWS TO THE CAPITAL PROVIDERS (STATIC ESTIMATE)**

Time	(1) Unearned Premium, Unpaid Loss and Unpaid LAE Reserve Factor	(2) Factor for Surplus Allocated to Reserves	(3) Total Invested Funds Factor	(4) Income from Invested Funds Factor	(5) Capital Provider Equity Factor	(6) Capital Provider Cash Flow Factor	(7) Discounted Capital Provider Cash Flow Factor
0.00	-	-	-	-	-	-	-
0.25	0.2934	0.1612	0.2873	0.0012	(0.1858)	(0.1858)	(0.1840)
0.50	0.4799	0.2637	0.5089	0.0044	(0.3018)	(0.1160)	(0.1128)
0.75	0.6360	0.3495	0.7388	0.0094	(0.3976)	(0.0958)	(0.0914)
1.00	0.7585	0.4167	0.9400	0.0161	(0.4679)	(0.0703)	(0.0658)
1.25	0.6213	0.3414	0.8538	0.0233	(0.3641)	0.1038	0.0954
1.50	0.4978	0.2735	0.7407	0.0298	(0.2729)	0.0912	0.0822
1.75	0.3858	0.2120	0.5978	0.0351	(0.1914)	0.0815	0.0721
2.00	0.2852	0.1567	0.4418	0.0393	(0.1228)	0.0687	0.0596
2.25	0.2497	0.1372	0.3869	0.0427	(0.0991)	0.0237	0.0202
2.50	0.2143	0.1177	0.3320	0.0456	(0.0759)	0.0232	0.0194
2.75	0.1788	0.0983	0.2771	0.0480	(0.0531)	0.0228	0.0187
3.00	0.1434	0.0788	0.2222	0.0500	(0.0308)	0.0223	0.0180
3.25	0.1316	0.0723	0.2039	0.0517	(0.0223)	0.0085	0.0067
3.50	0.1197	0.0658	0.1855	0.0533	(0.0139)	0.0084	0.0065
3.75	0.1079	0.0593	0.1672	0.0547	(0.0057)	0.0082	0.0062
4.00	0.0961	0.0528	0.1489	0.0560	0.0023	0.0081	0.0060
4.25	0.0895	0.0492	0.1387	0.0571	0.0073	0.0050	0.0036
4.50	0.0829	0.0456	0.1285	0.0582	0.0122	0.0049	0.0035
4.75	0.0763	0.0419	0.1182	0.0592	0.0170	0.0048	0.0034
5.00	0.0697	0.0383	0.1080	0.0601	0.0217	0.0047	0.0033
6.00	0.0521	0.0286	0.0807	0.0632	0.0350	0.0133	0.0088
7.00	0.0409	0.0224	0.0633	0.0655	0.0439	0.0089	0.0055
8.00	0.0360	0.0198	0.0558	0.0675	0.0487	0.0048	0.0027
9.00	0.0320	0.0176	0.0496	0.0692	0.0529	0.0041	0.0022
10.00	0.0288	0.0158	0.0447	0.0707	0.0563	0.0035	0.0017
11.00	0.0264	0.0145	0.0410	0.0721	0.0592	0.0029	0.0013
12.00	0.0216	0.0119	0.0335	0.0733	0.0633	0.0040	0.0017
13.00	0.0192	0.0106	0.0298	0.0744	0.0657	0.0025	0.0010
14.00	0.0176	0.0097	0.0273	0.0753	0.0676	0.0019	0.0007
15.00	0.0152	0.0084	0.0236	0.0761	0.0699	0.0022	0.0008
16.00	0.0144	0.0079	0.0223	0.0769	0.0711	0.0012	0.0004
17.00	0.0136	0.0075	0.0211	0.0776	0.0723	0.0012	0.0003
18.00	0.0128	0.0070	0.0199	0.0782	0.0735	0.0012	0.0003
19.00	0.0128	0.0070	0.0199	0.0789	0.0742	0.0007	0.0002
20.00	0.0104	0.0057	0.0161	0.0795	0.0761	0.0019	0.0004
21.00	0.0080	0.0044	0.0124	0.0799	0.0779	0.0018	0.0004
22.00	0.0072	0.0040	0.0112	0.0803	0.0787	0.0008	0.0002
23.00	0.0064	0.0035	0.0099	0.0807	0.0795	0.0008	0.0001
24.00	0.0056	0.0031	0.0087	0.0810	0.0803	0.0007	0.0001
25.00	0.0056	0.0031	0.0087	0.0813	0.0805	0.0003	0.0000
26.00	0.0032	0.0018	0.0050	0.0815	0.0821	0.0016	0.0002
27.00	0.0032	0.0018	0.0050	0.0816	0.0823	0.0002	0.0000
28.00	0.0024	0.0013	0.0037	0.0818	0.0828	0.0006	0.0001
29.00	0.0016	0.0009	0.0025	0.0819	0.0834	0.0005	0.0001
30.00	0.0008	0.0004	0.0012	0.0819	0.0839	0.0005	0.0001
31.00	-	-	-	0.0820	0.0843	0.0005	0.0000
32.00	-	-	-	0.0820	0.0843	-	-
33.00	-	-	-	0.0820	0.0843	-	-
34.00	-	-	-	0.0820	0.0843	-	-
35.00	-	-	-	0.0820	0.0843	-	-

**Column Notes:**

- (1) is Unearned Premium Reserve (equal to Written Premium minus Earned Premium, per the cashflow pattern) plus Unpaid Loss and LAE Reserve (equal to Incurred minus Paid Losses and LAE) by time period, expressed as a factor,  
= [Table 2 col (3) - Table 2 col (2)] + Table 1 row (7, Static) x [Table 2 col (2) - Table 2 col (5)]
- (2) is the Surplus derived from Reserves per the Reserve-to-Surplus Ratio by time period, expressed as a factor, = (1) / Table 1 row (2)
- (3) is Reserves plus Surplus minus Agent Balances by time period, expressed as a factor, = (1) + (2) - Agent Balances. Agent Balances exist when Written Premium exceeds Collected Premium, = [Table 2 col (3) - Table 2 col (1)].
- (4) is derived by applying the Return on Investments [Table 1 row (4, Static)] to the average Invested Funds (4) from the previous and current time periods, plus previous Income from Invested Funds, by time period expressed as a factor.
- (5) is Insurance Cash Flow plus Income from Invested Funds minus Total Invested Funds by time period, expressed as a factor,  
= Table 4 col (5) + (4) - (3)
- (6) is the difference between Capital Provider Equity (5) at the current and previous time periods, expressed as a factor
- (7) is the Capital Provider Cash Flow (6) discounted by the Weighted Average Cost of Capital [Table 1 row (5, Static)], expressed as a factor



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**Calculation Details - Dynamic Estimate**

**TABLE 6: DERIVATION OF INSURANCE CASH FLOW (DYNAMIC ESTIMATE)**

Time	(1) Collected Premium Factor	(2) Expense and Taxes Factor	(3) Paid Losses and LAE Factor	(4) Federal Income Tax Factor	(5) Insurance Cash flow Factor
0.00	-	-	-	-	-
0.25	0.1437	0.0277	0.0099	0.0056	0.1004
0.50	0.3113	0.0601	0.0372	0.0113	0.2028
0.75	0.5303	0.1024	0.0794	0.0169	0.3317
1.00	0.7648	0.1506	0.1360	0.0225	0.4556
1.25	0.8911	0.1750	0.2315	0.0188	0.4658
1.50	0.9695	0.1901	0.3271	0.0151	0.4371
1.75	1.0000	0.1960	0.4227	0.0114	0.3699
2.00	1.0000	0.1960	0.5182	0.0077	0.2781
2.25	1.0000	0.1960	0.5538	0.0068	0.2433
2.50	1.0000	0.1960	0.5894	0.0060	0.2086
2.75	1.0000	0.1960	0.6250	0.0051	0.1738
3.00	1.0000	0.1960	0.6606	0.0043	0.1391
3.25	1.0000	0.1960	0.6725	0.0040	0.1275
3.50	1.0000	0.1960	0.6844	0.0037	0.1159
3.75	1.0000	0.1960	0.6963	0.0034	0.1044
4.00	1.0000	0.1960	0.7081	0.0031	0.0928
4.25	1.0000	0.1960	0.7148	0.0029	0.0863
4.50	1.0000	0.1960	0.7214	0.0027	0.0799
4.75	1.0000	0.1960	0.7280	0.0026	0.0734
5.00	1.0000	0.1960	0.7347	0.0024	0.0669
6.00	1.0000	0.1960	0.7524	0.0018	0.0498
7.00	1.0000	0.1960	0.7636	0.0014	0.0390
8.00	1.0000	0.1960	0.7685	0.0012	0.0344
9.00	1.0000	0.1960	0.7725	0.0010	0.0305
10.00	1.0000	0.1960	0.7757	0.0008	0.0275
11.00	1.0000	0.1960	0.7781	0.0006	0.0253
12.00	1.0000	0.1960	0.7830	0.0004	0.0206
13.00	1.0000	0.1960	0.7854	0.0003	0.0183
14.00	1.0000	0.1960	0.7870	0.0002	0.0168
15.00	1.0000	0.1960	0.7894	0.0001	0.0145
16.00	1.0000	0.1960	0.7902	0.0001	0.0137
17.00	1.0000	0.1960	0.7910	0.0000	0.0130
18.00	1.0000	0.1960	0.7918	(0.0000)	0.0122
19.00	1.0000	0.1960	0.7918	(0.0001)	0.0123
20.00	1.0000	0.1960	0.7942	(0.0001)	0.0099
21.00	1.0000	0.1960	0.7966	(0.0001)	0.0075
22.00	1.0000	0.1960	0.7974	(0.0001)	0.0067
23.00	1.0000	0.1960	0.7982	(0.0001)	0.0059
24.00	1.0000	0.1960	0.7991	(0.0001)	0.0051
25.00	1.0000	0.1960	0.7991	(0.0001)	0.0051
26.00	1.0000	0.1960	0.8015	(0.0001)	0.0027
27.00	1.0000	0.1960	0.8015	(0.0001)	0.0027
28.00	1.0000	0.1960	0.8023	(0.0001)	0.0019
29.00	1.0000	0.1960	0.8031	(0.0001)	0.0011
30.00	1.0000	0.1960	0.8039	(0.0001)	0.0003
31.00	1.0000	0.1960	0.8047	(0.0001)	(0.0005)
32.00	1.0000	0.1960	0.8047	(0.0001)	(0.0005)
33.00	1.0000	0.1960	0.8047	(0.0001)	(0.0005)
34.00	1.0000	0.1960	0.8047	(0.0001)	(0.0005)
35.00	1.0000	0.1960	0.8047	(0.0001)	(0.0005)

**Column Notes:**

- (1) is Collected Premium by time period, expressed as a factor, = Table 2 col (1)
- (2) is Expenses and Taxes by time period, expressed as a factor, = Table 1 row (1) x Table 2 col (4)
- (3) is Paid Losses and LAE by time period, expressed as a factor, = Table 1 row (7, Dynamic) x Table 2 col (5)
- (4) per the Tax Cuts and Jobs Act of 2017, federal income taxes are computed as the tax rate (21%) times the adjusted underwriting income calculated per IRS rules. See Appendix B for details.
- (5) is the Total Insurance Cash Flow by time period, expressed as a factor, = (1) - [(2) + (3) + (4)]



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**Calculation Details - Dynamic Estimate (continued)**

**TABLE 7: DERIVATION OF CASH FLOWS TO THE CAPITAL PROVIDERS (DYNAMIC ESTIMATE)**

Time	(1) Unearned Premium, Unpaid Loss and Unpaid LAE Reserve Factor	(2) Factor for Surplus Allocated to Reserves	(3) Total Invested Funds Factor	(4) Income from Invested Funds Factor	(5) Capital Provider Equity Factor	(6) Capital Provider Cash Flow Factor	(7) Cumulative Discount Factor	(8) Discounted Capital Provider Cash Flow Factor
0.00	-	-	-	-	-	-	-	-
0.25	0.2935	0.1613	0.2875	0.0013	(0.1857)	(0.1857)	0.9900	(0.1839)
0.50	0.4803	0.2639	0.5095	0.0049	(0.3018)	(0.1161)	0.9702	(0.1126)
0.75	0.6368	0.3499	0.7400	0.0105	(0.3978)	(0.0960)	0.9508	(0.0913)
1.00	0.7598	0.4175	0.9421	0.0181	(0.4683)	(0.0705)	0.9320	(0.0657)
1.25	0.6230	0.3423	0.8565	0.0262	(0.3645)	0.1039	0.9133	0.0949
1.50	0.4996	0.2745	0.7435	0.0335	(0.2729)	0.0916	0.8947	0.0820
1.75	0.3875	0.2129	0.6004	0.0397	(0.1907)	0.0821	0.8760	0.0719
2.00	0.2865	0.1574	0.4439	0.0445	(0.1212)	0.0695	0.8573	0.0596
2.25	0.2509	0.1378	0.3887	0.0484	(0.0969)	0.0243	0.8387	0.0204
2.50	0.2153	0.1183	0.3335	0.0518	(0.0731)	0.0238	0.8203	0.0195
2.75	0.1796	0.0987	0.2784	0.0549	(0.0497)	0.0234	0.8023	0.0188
3.00	0.1440	0.0791	0.2232	0.0573	(0.0268)	0.0229	0.7847	0.0180
3.25	0.1322	0.0726	0.2048	0.0594	(0.0179)	0.0089	0.7674	0.0069
3.50	0.1203	0.0661	0.1864	0.0614	(0.0091)	0.0088	0.7505	0.0066
3.75	0.1084	0.0596	0.1680	0.0631	(0.0005)	0.0086	0.7340	0.0063
4.00	0.0966	0.0531	0.1496	0.0647	0.0078	0.0084	0.7180	0.0060
4.25	0.0899	0.0494	0.1393	0.0661	0.0131	0.0052	0.7022	0.0037
4.50	0.0833	0.0458	0.1290	0.0674	0.0182	0.0051	0.6867	0.0035
4.75	0.0766	0.0421	0.1188	0.0686	0.0233	0.0050	0.6716	0.0034
5.00	0.0700	0.0385	0.1085	0.0698	0.0282	0.0049	0.6568	0.0032
6.00	0.0523	0.0287	0.0810	0.0736	0.0424	0.0141	0.6209	0.0088
7.00	0.0410	0.0225	0.0636	0.0765	0.0519	0.0095	0.5665	0.0054
8.00	0.0362	0.0199	0.0561	0.0791	0.0573	0.0054	0.5167	0.0028
9.00	0.0322	0.0177	0.0499	0.0814	0.0621	0.0048	0.4715	0.0022
10.00	0.0290	0.0159	0.0449	0.0835	0.0661	0.0041	0.4304	0.0017
11.00	0.0266	0.0146	0.0411	0.0854	0.0695	0.0034	0.3930	0.0013
12.00	0.0217	0.0119	0.0337	0.0871	0.0740	0.0045	0.3590	0.0016
13.00	0.0193	0.0106	0.0299	0.0885	0.0769	0.0028	0.3280	0.0009
14.00	0.0177	0.0097	0.0274	0.0897	0.0791	0.0022	0.2997	0.0007
15.00	0.0153	0.0084	0.0237	0.0908	0.0816	0.0025	0.2739	0.0007
16.00	0.0145	0.0080	0.0224	0.0919	0.0832	0.0015	0.2503	0.0004
17.00	0.0137	0.0075	0.0212	0.0929	0.0846	0.0015	0.2287	0.0003
18.00	0.0129	0.0071	0.0199	0.0938	0.0861	0.0014	0.2090	0.0003
19.00	0.0129	0.0071	0.0199	0.0947	0.0870	0.0009	0.1910	0.0002
20.00	0.0105	0.0057	0.0162	0.0955	0.0892	0.0022	0.1745	0.0004
21.00	0.0080	0.0044	0.0125	0.0961	0.0911	0.0020	0.1594	0.0003
22.00	0.0072	0.0040	0.0112	0.0967	0.0921	0.0010	0.1456	0.0001
23.00	0.0064	0.0035	0.0100	0.0972	0.0931	0.0009	0.1331	0.0001
24.00	0.0056	0.0031	0.0087	0.0976	0.0939	0.0009	0.1216	0.0001
25.00	0.0056	0.0031	0.0087	0.0980	0.0943	0.0004	0.1110	0.0000
26.00	0.0032	0.0018	0.0050	0.0983	0.0960	0.0016	0.1014	0.0002
27.00	0.0032	0.0018	0.0050	0.0985	0.0962	0.0002	0.0927	0.0000
28.00	0.0024	0.0013	0.0037	0.0987	0.0969	0.0006	0.0847	0.0001
29.00	0.0016	0.0009	0.0025	0.0989	0.0974	0.0006	0.0774	0.0000
30.00	0.0008	0.0004	0.0012	0.0990	0.0980	0.0005	0.0707	0.0000
31.00	-	-	-	0.0990	0.0985	0.0005	0.0646	0.0000
32.00	-	-	-	0.0990	0.0985	-	0.0590	-
33.00	-	-	-	0.0990	0.0985	-	0.0539	-
34.00	-	-	-	0.0990	0.0985	-	0.0492	-
35.00	-	-	-	0.0990	0.0985	-	0.0450	-

**Column Notes:**

- (1) is Unearned Premium Reserve (equal to Written Premium minus Earned Premium, per the cashflow pattern) plus Unpaid Loss and LAE Reserve (equal to Incurred minus Paid Losses and LAE) by time period, expressed as a factor,  
= [Table 2 col (3) - Table 2 col (2)] + Table 1 row (7, Dynamic) x [Table 2 col (2) - Table 2 col (5)]
- (2) is the Surplus derived from Reserves per the Reserve-to-Surplus Ratio by time period, expressed as a factor, = (1) / Table 1 row (2)
- (3) is Reserves plus Surplus minus Agent Balances by time period, expressed as a factor, = (1) + (2) - Agent Balances. Agent Balances exist when Written Premium exceeds Collected Premium, = [Table 2 col (3) - Table 2 col (1)].
- (4) is derived by applying the Return on Investments [Table 3 col (1)] to the average Invested Funds (4) from the previous and current time periods, plus previous Income from Invested Funds, by time period expressed as a factor.
- (5) is Insurance Cash Flow plus Income from Invested Funds minus Total Invested Funds by time period, expressed as a factor,  
= Table 6 col (5) + (4) - (3)
- (6) is the difference between Capital Provider Equity (5) at the current and previous time periods, expressed as a factor
- (7) is derived from the respective Weighted Average Cost of Capital [Table 3 col (2)] for each time period, expressed as a factor
- (8) is the Capital Provider Cash Flow (6) discounted by the Cumulative Discount Factor (7), expressed as a factor



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APPENDIX A: CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL AND RETURN ON INVESTMENTS

The calculation of the Weighted Average Cost of Capital (WACC) is shown in Table A.1, and the calculation of the Return on Investments (RoI) is shown in Table A.2. The calculation for the Static estimate is shown in each. Calculations of the WACC and RoI under the Dynamic estimate for time periods 1, 2, and 5 are also provided for illustrative purposes. Note that the IRR model under the Dynamic estimate includes estimates of the WACC and RoI on a quarterly basis for the first five years and annually thereafter.

TABLE A.1: CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL

	<b>Static</b>	<b>IRR Model Time (yrs)</b>		
		<b>1.00</b>	<b>2.00</b>	<b>5.00</b>
(1) 5 year US T-note Yield	2.46%	2.97%	3.70%	4.02%
(2) US Equity Market Risk Premium	7.49%			
(3) Beta for Property/Casualty (P/C) Insurers	0.85			
(4) Equity Cost of Capital for P/C Insurers	8.83%	9.34%	10.07%	10.38%
(5) Share of Equity Capital for P/C Insurers	83%			
(6) Debt Cost of Capital for P/C Insurers	2.95%	3.35%	3.92%	4.17%
(7) Weighted Average Cost of Capital (WACC)	7.83%	8.32%	9.02%	9.33%

Column Notes:

- (1) Forward estimates of the 5-year US T-note yield are from Moody's forecasts and apply only to the Dynamic estimate of the WACC. Time periods provided are illustrative; the full model includes estimates on a quarterly basis for the first five years and annually thereafter.
- (3) & (5) P/C beta and share of equity capital are estimated from historical data for a collection of insurers with publicly traded equity and debt.
- (4) = (1) + (2) x (3)
- (6) P/C debt cost of capital is the sum of the 5-year US T-note yield plus the historical corporate spread, net of income tax.
- (7) = (4) x (5) + (6) x [1 - (5)]



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APPENDIX A: CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL AND RETURN ON INVESTMENTS (CONTINUED)

TABLE A.2 CALCULATION OF RETURN ON INVESTMENTS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Security Description	Investment Portfolio	Yield Curve, Maturity and Spread	Roll-over Period	Income Tax Rate	Post-tax Return			
					IRR Model Time (yrs)			
					Static	1.00	2.00	5.00
Bonds, of which	73.7%							
Government Direct Obligations	6.5%							
< 1yr	2.0%	6 mo US T-bill	0.50 yrs	21.00%	1.98%	2.09%	2.36%	2.53%
1 – 5 yrs	2.5%	2.5 yr US T-note	2.50 yrs	21.00%	1.95%	2.30%	2.30%	2.91%
5 – 10 yrs	1.3%	7.5 yr US T-note	7.50 yrs	21.00%	2.03%	2.46%	2.46%	2.46%
10 – 20 yrs	0.2%	15 yr US T-note	15.00 yrs	21.00%	2.17%	2.60%	2.60%	2.60%
> 20 yrs	0.5%	20 yr US T-note	20.00 yrs	21.00%	2.25%	2.73%	2.73%	2.73%
Collateralized Securities	6.8%							
< 1yr	0.9%	6 mo US T-bill + 50 basis points	0.50 yrs	21.00%	2.37%	2.49%	2.75%	2.93%
1 – 5 yrs	2.5%	2.5 yr US T-note + 50 basis points	2.50 yrs	21.00%	2.35%	2.70%	2.70%	3.31%
5 – 10 yrs	1.8%	7.5 yr US T-note + 50 basis points	7.50 yrs	21.00%	2.42%	2.86%	2.86%	2.86%
10 – 20 yrs	1.2%	15 yr US T-note + 50 basis points	15.00 yrs	21.00%	2.57%	3.00%	3.00%	3.00%
> 20 yrs	0.4%	20 yr US T-note + 50 basis points	20.00 yrs	21.00%	2.65%	3.13%	3.13%	3.13%
Tax-exempt Bonds	25.5%							
< 1yr	1.7%	6 mo US T-bill + Tax-exempt spread	0.50 yrs	5.25%	2.53%	2.67%	2.98%	3.20%
1 – 5 yrs	6.4%	2.5 yr US T-note + Tax-exempt spread	2.50 yrs	5.25%	2.55%	2.97%	2.97%	3.71%
5 – 10 yrs	9.0%	7.5 yr US T-note + Tax-exempt spread	7.50 yrs	5.25%	2.66%	3.18%	3.18%	3.18%
10 – 20 yrs	6.4%	15 yr US T-note + Tax-exempt spread	15.00 yrs	5.25%	2.97%	3.48%	3.48%	3.48%
> 20 yrs	1.9%	20 yr US T-note + Tax-exempt spread	20.00 yrs	5.25%	3.22%	3.77%	3.77%	3.77%
Industrial and Hybrid Securities (unaffiliated)	34.0%							
< 1yr	3.9%	6 mo US T-bill + Corp spread	0.50 yrs	21.00%	2.52%	2.64%	2.90%	3.08%
1 – 5 yrs	13.4%	2.5 yr US T-note + Corp spread	2.50 yrs	21.00%	2.76%	3.11%	3.11%	3.72%
5 – 10 yrs	12.5%	7.5 yr US T-note + Corp spread	7.50 yrs	21.00%	3.12%	3.55%	3.55%	3.55%
10 – 20 yrs	1.9%	15 yr US T-note + Corp spread	15.00 yrs	21.00%	3.36%	3.78%	3.78%	3.78%
> 20 yrs	2.3%	20 yr US T-note + Corp spread	20.00 yrs	21.00%	3.46%	3.93%	3.93%	3.93%
Industrial and Hybrid Securities (affiliated)	0.9%							
< 1yr	0.3%	6 mo US T-bill + Corp spread	0.50 yrs	5.25%	3.03%	3.17%	3.48%	3.69%
1 – 5 yrs	0.6%	2.5 yr US T-note + Corp spread	2.50 yrs	5.25%	3.31%	3.73%	3.73%	4.47%
5 – 10 yrs	0.0%	7.5 yr US T-note + Corp spread	7.50 yrs	5.25%	3.74%	4.26%	4.26%	4.26%
10 – 20 yrs	0.0%	15 yr US T-note + Corp spread	15.00 yrs	5.25%	4.02%	4.54%	4.54%	4.54%
> 20 yrs	0.0%	20 yr US T-note + Corp spread	20.00 yrs	5.25%	4.15%	4.71%	4.71%	4.71%
Stocks, of which	12.2%							
Preferred Stock	0.4%	5 year US T-note + 374 basis points	0.25 yrs	13.13%	5.39%	5.84%	6.47%	6.74%
Common Stock	11.8%	5 year US T-note + 749 basis points	0.25 yrs	18.31%	8.13%	8.55%	9.14%	9.40%
Mortgage Loans	2.0%							
Real Estate	0.5%							
Cash & Short-Term Investment	4.0%	3 month US T-bill	0.25 yrs	21.00%	1.93%	2.07%	2.45%	2.46%
All Other Assets*	7.7%							
Post-Tax Return on Invested Funds, pre-Expense:					3.43%	3.82%	3.94%	4.18%
Investment Expense**:					-0.17%	-0.17%	-0.17%	-0.17%
Post-Tax Return on Invested Funds:					<b>3.26%</b>	<b>3.65%</b>	<b>3.77%</b>	<b>4.01%</b>

Table Notes:

- Government Direct Obligations include US Government Issuer Obligations and Non-US Government Issuer Obligations. Collateralized Securities include Mortgage Backed, Loan Backed, or Structured Securities. Tax-exempt Bonds include Issuer Obligations of US States, Territories, and Possessions, US Political Subdivisions of States, Territories, and Possessions, and US Special Revenue and Special Assessment Obligations. Industrial and Hybrid Securities (unaffiliated) include Industrial and Miscellaneous and Hybrid Securities. Industrial and Hybrid Securities (affiliated) include Parents, Subsidiaries, and Affiliates.
- Bond and total portfolio distributions are 3-year averages for 2015-2017, calculated from various annual editions of Best's Aggregates & Averages (Property-Casualty), Assets for Commercial Casualty Composite, p. 276, Column 3, Net Admitted Assets. For each year 2015-2017, the maturity distribution pertains to all bonds owned as of December 31 at book/adjusted carrying value for Commercial Casualty Composite, Schedule D, Part 1A, Section 2.
- Spread to US treasury yields are either constant or varying by maturity (tax-exempt or corporate) as applicable. The tax-exempt spread is a term structure of average historical spreads in forward rates at different maturities between US municipal bonds and US Treasuries. Data on historical yields to US municipal bonds are from Bloomberg. The corporate spread is a term structure of average historical spreads in forward rates at different maturities between US corporate bonds and US Treasuries. Historical data on yields to US corporate bonds are from the US Department of Treasury.
- Applies only to the Dynamic estimate of the return on invested funds. The roll-over period is the time interval at which the estimated yield is updated for the given security in the investment portfolio. For bonds, the roll-over period is the bond's term to maturity. Forward yields for common and preferred stocks are updated quarterly.
- It is assumed that investment returns, except dividends and tax exempt municipal bond income, are taxed at 21%. With respect to dividends, it is assumed that 50% of dividends received are tax exempt. It is further assumed that in accordance with the "pro-ration" provision, 25% of otherwise exempt municipal bond income and dividends are taxed at 21%. The portion of income attributable to capital appreciation is assumed to equal 65.8% while the income portion is 34.2%. The percentages were obtained from Morningstar's Analyst Research Center containing Table 6-7 previously published in Ibbotson SBBI Classic Yearbook, large company stocks, arithmetic mean.
- Static estimates of treasury yields are actual current yields.
- Apply only to the Dynamic estimate of the return on invested funds. Forward estimates of treasury yields at various maturities are from Moody's.

\* Yields to mortgage loans, real estate, and all other assets are not directly estimated, but are assumed to be equal to the weighted average portfolio yield net of these categories.

\*\* Investment expense calculated from Annual Statement data for the Commercial Casualty Composite by dividing Total Investment Expense by Cash and Invested Assets.

Total investment expense for 2017 from the Annual Statement, Exhibit of Net Investment Income.

Average of 2016 and 2017 cash and invested assets from Best's Aggregates and Averages (Property-Casualty), Assets for Commercial Casualty Composite, p.276, Line 12.



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Exhibit II-H

APPENDIX B: FEDERAL INCOME TAX INCURRED FROM INSURANCE OPERATIONS

Federal taxes on underwriting income, based on the Tax Cuts and Jobs Act of 2017, are calculated in the following tables on an annual basis. Columns (1) through (4) are the same under both the Static and Dynamic Estimates; the paid losses and LAE factors (col (5)) vary by Estimate. Note that investment taxes are accounted for in Appendix A. Annual tax is prorated when quarterly amounts are required.

TABLE B.1: FEDERAL INCOME TAX CALCULATION (STATIC ESTIMATE)

Time	(1) Written Premium Factor	(2) Unearned Premium Factor	(3) Expense and Taxes Factor	(4) Discount Factor	(5) Paid Losses and LAE Factor	(6) AY1 Paid Losses and LAE Factor	(7) AY2 Paid Losses and LAE Factor	(8) Discounted AY1 Unpaid Losses & LAE Factor	(9) Discounted AY2 Unpaid Losses & LAE Factor	(10) Federal Income Tax Factor
0.00	-	-	-	-	-	-	-	-	-	-
1.00	1.0000	0.4665	0.1506	0.8742	0.1354	0.1354	-	0.2318	-	0.0229
2.00	1.0000	-	0.1960	0.8584	0.5158	0.3192	0.1966	0.0698	0.1782	0.0084
3.00	1.0000	-	0.1960	0.8470	0.6576	0.3336	0.3240	0.0566	0.0657	0.0051
4.00	1.0000	-	0.1960	0.8313	0.7049	0.3618	0.3430	0.0321	0.0487	0.0038
5.00	1.0000	-	0.1960	0.8255	0.7313	0.3676	0.3638	0.0272	0.0305	0.0031
6.00	1.0000	-	0.1960	0.8199	0.7489	0.3779	0.3710	0.0185	0.0243	0.0026
7.00	1.0000	-	0.1960	0.8237	0.7601	0.3811	0.3790	0.0159	0.0176	0.0022
8.00	1.0000	-	0.1960	0.8325	0.7649	0.3831	0.3818	0.0145	0.0154	0.0019
9.00	1.0000	-	0.1960	0.8389	0.7690	0.3851	0.3838	0.0129	0.0139	0.0017
10.00	1.0000	-	0.1960	0.8586	0.7722	0.3865	0.3856	0.0120	0.0125	0.0015
11.00	1.0000	-	0.1960	0.8713	0.7746	0.3876	0.3869	0.0112	0.0117	0.0014
12.00	1.0000	-	0.1960	0.8843	0.7794	0.3907	0.3887	0.0087	0.0103	0.0012
13.00	1.0000	-	0.1960	0.8975	0.7818	0.3910	0.3908	0.0085	0.0086	0.0011
14.00	1.0000	-	0.1960	0.9110	0.7834	0.3920	0.3913	0.0077	0.0082	0.0010
15.00	1.0000	-	0.1960	0.9248	0.7858	0.3933	0.3925	0.0066	0.0073	0.0009
16.00	1.0000	-	0.1960	0.9388	0.7866	0.3933	0.3933	0.0068	0.0067	0.0008
17.00	1.0000	-	0.1960	0.9531	0.7874	0.3939	0.3935	0.0063	0.0066	0.0008
18.00	1.0000	-	0.1960	0.9675	0.7882	0.3942	0.3940	0.0061	0.0062	0.0007
19.00	1.0000	-	0.1960	0.9819	0.7882	0.3940	0.3941	0.0063	0.0062	0.0007
20.00	1.0000	-	0.1960	0.9846	0.7906	0.3959	0.3947	0.0045	0.0057	0.0007
21.00	1.0000	-	0.1960	0.9846	0.7930	0.3968	0.3962	0.0037	0.0042	0.0007
22.00	1.0000	-	0.1960	0.9846	0.7938	0.3969	0.3968	0.0035	0.0036	0.0007
23.00	1.0000	-	0.1960	0.9846	0.7946	0.3975	0.3971	0.0030	0.0033	0.0007
24.00	1.0000	-	0.1960	0.9846	0.7954	0.3978	0.3976	0.0026	0.0029	0.0006
25.00	1.0000	-	0.1960	0.9846	0.7954	0.3976	0.3977	0.0028	0.0027	0.0006
26.00	1.0000	-	0.1960	0.9846	0.7978	0.3995	0.3983	0.0010	0.0022	0.0006
27.00	1.0000	-	0.1960	0.9846	0.7978	0.3986	0.3992	0.0019	0.0013	0.0006
28.00	1.0000	-	0.1960	0.9846	0.7986	0.3997	0.3989	0.0008	0.0015	0.0006
29.00	1.0000	-	0.1960	0.9846	0.7994	0.3997	0.3997	0.0008	0.0008	0.0006
30.00	1.0000	-	0.1960	0.9846	0.8002	0.4003	0.3999	0.0002	0.0006	0.0006
31.00	1.0000	-	0.1960	0.9846	0.8010	0.4006	0.4004	(0.0001)	0.0001	0.0006
32.00	1.0000	-	0.1960	0.9846	0.8010	0.4004	0.4005	0.0001	(0.0001)	0.0006
33.00	1.0000	-	0.1960	0.9846	0.8010	0.4005	0.4005	(0.0000)	0.0000	0.0006
34.00	1.0000	-	0.1960	0.9846	0.8010	0.4005	0.4005	0.0000	(0.0000)	0.0006
35.00	1.0000	-	0.1960	0.9846	0.8010	0.4005	0.4005	-	-	0.0006

Column Notes:

- (1) is Written Premium by time period, expressed as a factor, = Table 2 col (3)
- (2) is Written Premium minus Earned Premium by time period, expressed as a factor, = Table 2 col (3) - Table 2 col (2)
- (3) is Expenses and Taxes by time period, expressed as a factor, = Table 1 row (1) x Table 2 col (4)
- (4) is from Internal Revenue Bulletin 2019-02, Rev. Proc 2019-06, dated January 7, 2019
- (5) is Paid Losses and LAE by time period, expressed as a factor, = Table 1 row (7, Static) x Table 2 col (5)
- (6) and (7) split the payments between the accident year coincident with the policy year ("AY1"), and the following accident year ("AY2"). Assuming that the payout pattern is linear between integer times, and that the average accident date for AY2 is two-thirds of a year later than the average accident date for AY1, columns (6) and (7) are determined by solving these two equations simultaneously:  

$$\text{Col (6)} + \text{Col (7)} = \text{Col (5)}$$

$$\text{Col (7)} = (2/3) * \text{Col (6, previous row)} + (1/3) * \text{Col (6)}$$
 with Col (6, Time 1) = Col (5, Time 1) and Col (6, Time 35) = Col (7, Time 35)
- (8) is the discounted difference between AY1 Losses and LAE that will ultimately be paid, and the amount already paid,  

$$= [\text{col (6, Time 35)} - (6)] \times (4)$$
- (9) is the discounted difference between AY2 Losses and LAE that will ultimately be paid, and the amount already paid,  

$$= [\text{col (7, Time 35)} - (7)] \times \text{col (4, previous row)}$$
- (10) Per IRS rules, federal income tax equals the tax rate (21%) times the adjusted underwriting income  

$$= 21\% * \{ (1) - 0.8 * (2) - [(3) + (5) + (8) + (9)] \}$$





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Exhibit II-H

APPENDIX B: FEDERAL INCOME TAX INCURRED FROM INSURANCE OPERATIONS (CONTINUED)

TABLE B.2: FEDERAL INCOME TAX CALCULATION (DYNAMIC ESTIMATE)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Time	Written Premium Factor	Unearned Premium Factor	Expense and Taxes Factor	Discount Factor	Paid Losses and LAE Factor	AY1 Paid Losses and LAE Factor	AY2 Paid Losses and LAE Factor	Discounted AY1 Unpaid Losses & LAE Factor	Discounted AY2 Unpaid Losses & LAE Factor	Federal Income Tax Factor
0.00	-	-	-	-	-	-	-	-	-	-
1.00	1.0000	0.4665	0.1506	0.8742	0.1360	0.1360	-	0.2328	-	0.0225
2.00	1.0000	-	0.1960	0.8584	0.5182	0.3207	0.1976	0.0701	0.1790	0.0077
3.00	1.0000	-	0.1960	0.8470	0.6606	0.3352	0.3255	0.0569	0.0660	0.0043
4.00	1.0000	-	0.1960	0.8313	0.7081	0.3635	0.3446	0.0323	0.0489	0.0031
5.00	1.0000	-	0.1960	0.8255	0.7347	0.3692	0.3654	0.0273	0.0307	0.0024
6.00	1.0000	-	0.1960	0.8199	0.7524	0.3797	0.3727	0.0186	0.0245	0.0018
7.00	1.0000	-	0.1960	0.8237	0.7636	0.3829	0.3807	0.0160	0.0177	0.0014
8.00	1.0000	-	0.1960	0.8325	0.7685	0.3849	0.3836	0.0145	0.0155	0.0012
9.00	1.0000	-	0.1960	0.8389	0.7725	0.3869	0.3856	0.0129	0.0140	0.0010
10.00	1.0000	-	0.1960	0.8586	0.7757	0.3883	0.3874	0.0120	0.0125	0.0008
11.00	1.0000	-	0.1960	0.8713	0.7781	0.3894	0.3887	0.0112	0.0117	0.0006
12.00	1.0000	-	0.1960	0.8843	0.7830	0.3925	0.3905	0.0087	0.0104	0.0004
13.00	1.0000	-	0.1960	0.8975	0.7854	0.3928	0.3926	0.0086	0.0086	0.0003
14.00	1.0000	-	0.1960	0.9110	0.7870	0.3938	0.3931	0.0077	0.0083	0.0002
15.00	1.0000	-	0.1960	0.9248	0.7894	0.3951	0.3943	0.0067	0.0074	0.0001
16.00	1.0000	-	0.1960	0.9388	0.7902	0.3951	0.3951	0.0068	0.0067	0.0001
17.00	1.0000	-	0.1960	0.9531	0.7910	0.3957	0.3953	0.0063	0.0066	0.0000
18.00	1.0000	-	0.1960	0.9675	0.7918	0.3960	0.3958	0.0061	0.0062	(0.0000)
19.00	1.0000	-	0.1960	0.9819	0.7918	0.3959	0.3960	0.0064	0.0062	(0.0001)
20.00	1.0000	-	0.1960	0.9846	0.7942	0.3977	0.3965	0.0045	0.0058	(0.0001)
21.00	1.0000	-	0.1960	0.9846	0.7966	0.3986	0.3980	0.0037	0.0042	(0.0001)
22.00	1.0000	-	0.1960	0.9846	0.7974	0.3988	0.3987	0.0035	0.0036	(0.0001)
23.00	1.0000	-	0.1960	0.9846	0.7982	0.3993	0.3990	0.0030	0.0033	(0.0001)
24.00	1.0000	-	0.1960	0.9846	0.7991	0.3996	0.3994	0.0027	0.0029	(0.0001)
25.00	1.0000	-	0.1960	0.9846	0.7991	0.3995	0.3996	0.0028	0.0027	(0.0001)
26.00	1.0000	-	0.1960	0.9846	0.8015	0.4014	0.4001	0.0010	0.0022	(0.0001)
27.00	1.0000	-	0.1960	0.9846	0.8015	0.4004	0.4010	0.0019	0.0013	(0.0001)
28.00	1.0000	-	0.1960	0.9846	0.8023	0.4015	0.4008	0.0008	0.0015	(0.0001)
29.00	1.0000	-	0.1960	0.9846	0.8031	0.4016	0.4015	0.0008	0.0008	(0.0001)
30.00	1.0000	-	0.1960	0.9846	0.8039	0.4021	0.4017	0.0002	0.0006	(0.0001)
31.00	1.0000	-	0.1960	0.9846	0.8047	0.4024	0.4022	(0.0001)	0.0001	(0.0001)
32.00	1.0000	-	0.1960	0.9846	0.8047	0.4023	0.4024	0.0001	(0.0001)	(0.0001)
33.00	1.0000	-	0.1960	0.9846	0.8047	0.4024	0.4023	(0.0000)	0.0000	(0.0001)
34.00	1.0000	-	0.1960	0.9846	0.8047	0.4023	0.4024	0.0000	(0.0000)	(0.0001)
35.00	1.0000	-	0.1960	0.9846	0.8047	0.4023	0.4023	-	-	(0.0001)

Column Notes:

- (1) is Written Premium by time period, expressed as a factor, = Table 2 col (3)  
 (2) is Written Premium minus Earned Premium by time period, expressed as a factor, = Table 2 col (3) - Table 2 col (2)  
 (3) is Expenses and Taxes by time period, expressed as a factor, = Table 1 row (1) x Table 2 col (4)  
 (4) is from Internal Revenue Bulletin 2019-02, Rev. Proc 2019-06, dated January 7, 2019  
 (5) is Paid Losses and LAE by time period, expressed as a factor, = Table 1 row (7, Dynamic) x Table 2 col (5)  
 (6) and (7) split the payments between the accident year coincident with the policy year ("AY1"), and the following accident year ("AY2"). Assuming that the payout pattern is linear between integer times, and that the average accident date for AY2 is two-thirds of a year later than the average accident date for AY1, columns (6) and (7) are determined by solving these two equations simultaneously:  
     Col (6) + Col (7) = Col (5)  
     Col (7) = (2/3) \* Col (6, previous row) + (1/3) \* Col (6)  
     with Col (6, Time 1) = Col (5, Time 1) and Col (6, Time 35) = Col (7, Time 35)  
 (8) is the discounted difference between AY1 Losses and LAE that will ultimately be paid, and the amount already paid,  
     = [col (6, Time 35) - (6)] x (4)  
 (9) is the discounted difference between AY2 Losses and LAE that will ultimately be paid, and the amount already paid,  
     = [col (7, Time 35) - (7)] x col (4, previous row)  
 (10) Per IRS rules, federal income tax equals the tax rate (21%) times the adjusted underwriting income  
     = 21% \* { (1) - 0.8 \* (2) - [(3) + (5) + (8) + (9)] }



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Exhibit II-H

APPENDIX C: RESERVE-TO-SURPLUS RATIO

in 000's

	(1)	(2)	(3)	(4)	(5)	(6)
Year End	Unpaid Losses	Unpaid Loss Adjustment Expense	Unearned Premium	Policyholder Surplus	Ratio excl. Unearned Premium $\{(1)+(2)\} / (4)$	Ratio incl. Unearned Premium $\{(1)+(2) + (3)\} / (4)$
2017	194,692,095	42,696,647	77,537,150	171,664,964	1.38	1.83
2016	186,424,236	41,741,053	72,716,997	169,831,305	1.34	1.77
2015	185,919,427	42,816,231	73,469,477	169,017,203	1.35	1.79
2014	214,239,981	48,564,685	83,674,315	192,947,461	1.36	1.80
2013	215,275,673	47,841,227	81,229,642	182,832,920	1.44	1.88
2013 - 2017	996,551,412	223,659,843	388,627,581	886,293,853	1.38	1.82

Selected Ratio including Unearned Premium: 1.82

Source: Columns (1) - (4) for the latest year are taken from Liabilities, Surplus and Other Funds on page 277 in Best's 2018 Aggregates & Averages, for Commercial Casualty Composite.





## INDIANA

### EXHIBIT II

#### Section I - Table of Premium Discounts

<u>Division of Standard Premium</u>		<u>Type A Discounts</u>	<u>Type B Discounts</u>
First	\$10,000	---	---
Next	\$190,000	9.1%	5.1%
Next	\$1,550,000	11.3%	6.5%
Over	\$1,750,000	12.3%	7.5%

Application of the appropriate discount schedule to the standard premium produces a dollar discount that is subtracted from the standard premium.



# INDIANA

## EXHIBIT II

### Section J - Table of Premium Discounts

Reproduced below are the graduated expense provisions by policy size.

#### Gradation of Standard Premium

Division of Premium		Expense Gradations		
		Production*	General	Discounts
First	\$10,000	18.5%	5.1%	---
Next	\$190,000	11.0%	4.1%	9.1%
Next	\$1,550,000	9.5%	3.5%	11.3%
Over	\$1,750,000	9.5%	2.6%	12.3%
Proposed Average:		11.7%	3.8%	
Proposed Average Expense Gradation: (Expense for 1st \$10,000 - Avg Expense)		6.8%	1.3%	

#### Average Premium Discount:

$$[Avg\ Exp\ Grad] / [1 - Taxes - P\&C] = [6.8\% + 1.3\%] / [1 - 1.9\% - .0\%] = 8.3\%$$

#### Composition of Standard Premium:

Benefit & Loss Adj. Cost	Production (18.5%)	General (5.1%)	Profit (.0%)	Taxes (1.9%)	} Premium -- After Discounts (91.7%)	} Standard Premium -- Excluding Expense Constant (100.0%)
74.5%	11.7%	3.8%	0.0%	1.7%		
	6.8%	1.3%	0.0%	0.2%		
					} -- Discount (8.3%)	
	0.5%	0.4%	0.0%	0.0%	} -- Premium from \$160 expense constant. (.8% = 1/0.992 - 1)^	

#### Notes

\* The production expense gradations shown are based on Type A gradations.

^ The 0.992 offset is for the \$160 expense constant.



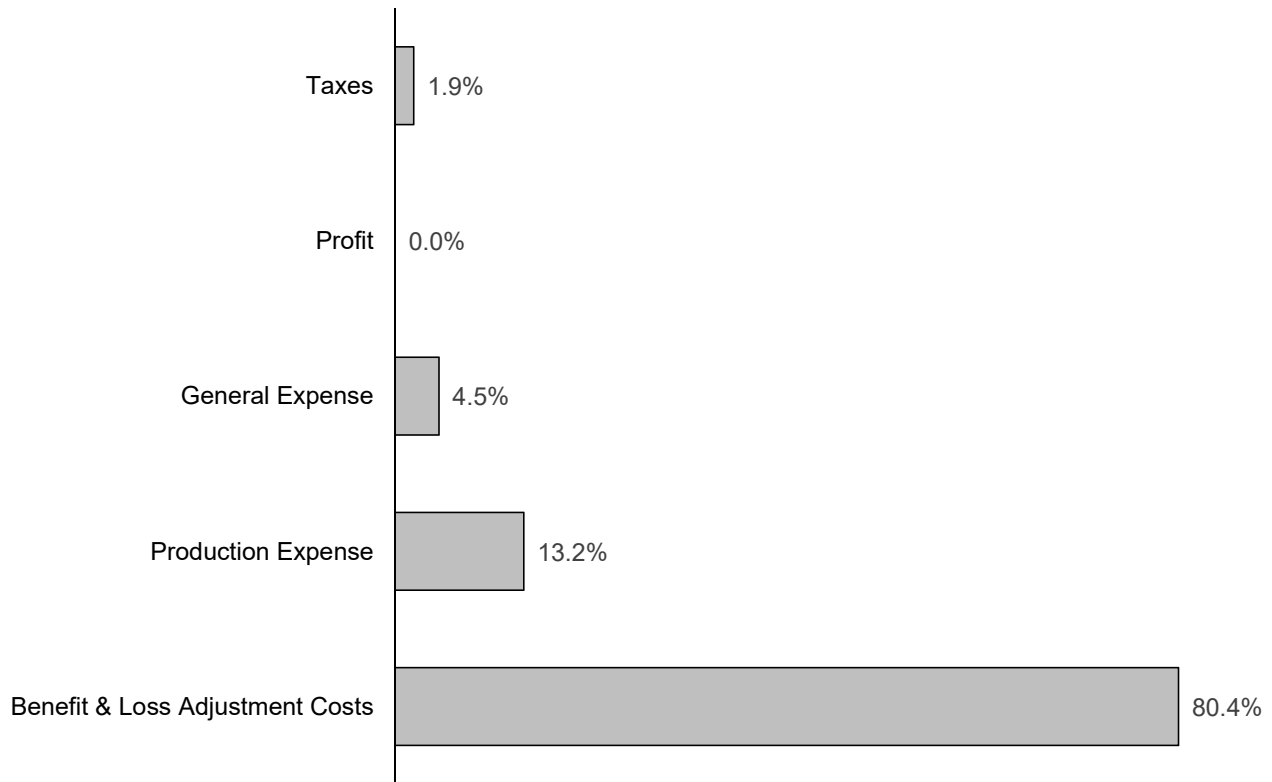
## INDIANA

### EXHIBIT II

#### Section K - Table of Premium Discounts

The exhibit below illustrates the allocation of the final premium dollar after the application of premium discounts and expense constants based on Indiana expense provisions.

#### Components of Premium



#### Notes

Benefit & Loss Adjustment Costs	80.4% = (74.5%) / 92.6%
Production Expense	13.2% = (11.7% + 0.5%) / 92.6%
General Expense	4.5% = (3.8% + 0.4%) / 92.6%
Profit	0.0% = (0.0% + 0.0%) / 92.6%
Taxes	<u>1.9%</u> = (1.7% + 0.0%) / 92.6%
<b>Total</b>	<b>100.0%</b>



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Appendix A – Factors Underlying the Proposed Rate Level Change

##### Appendix A-I Determination of Policy Year On-level Factors

NCCI uses premium and loss on-level factors to adjust historical policy year experience to current advisory rate and benefit levels, respectively.

Premium on-level factors are adjustment factors that reflect the cumulative impact of all premium level changes that have occurred during and after the individual year being on-leveled. To calculate a weighted average, NCCI utilizes a monthly premium distribution for Indiana based on an analysis of policies reported in the Unit Statistical Data. Additional adjustments applied as part of the premium on-level factor calculation include:

- Adjustment for Expense Constant Removal: This factor removes premium collected via the charged expense constant.
- Adjustment for Expense Removal: This factor is applied to remove expenses from the reported assigned risk and voluntary DSR level premium totals—serving to make the separate market premiums more comparable.
- Experience Rating Off-Balance Adjustment Factor: This factor reflects the relative difference between the average experience rating modification for the historical year being on-leveled and the average experience rating modification targeted in the filing.

Loss on-level factors are adjustment factors that reflect the cumulative impact of all benefit level changes that have occurred during and after the individual year of data being on-leveled.

Note: For NCCI ratemaking purposes, proposed benefit level changes that (i) do not impact the experience period of the filing and (ii) have not yet been approved are included in Exhibit I, rather than in the loss on-level calculation.



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## APPENDIX A-I

### Determination of Policy Year On-level Factors

#### Section A - Factor Adjusting 2017 Policy Year Assigned Risk Premium to Present Assigned Risk Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Rate Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Adj. For Expense Constant Removal @	Adj. For Expense Removal	Premium Adjustment Factor (5)x(6)x(7)
Date								
NR 01/01/17	Base	1.000	1.000	1.000	0.806	0.983	0.642	0.508
NR 01/01/18	0.872	0.872						
NR 01/01/19	0.924	0.806						
				1.000				

#### Section B - Factor Adjusting 2017 Policy Year Voluntary Premium to Present Voluntary Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Rate Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Adj. For Expense Constant Removal @	Adj. For Expense Removal	Premium Adjustment Factor (5)x(6)x(7)
Date								
NR 01/01/17	Base	1.000	1.000	1.000	0.806	0.983	0.642	0.508
NR 01/01/18	0.872	0.872						
NR 01/01/19	0.924	0.806						
				1.000				

#### Section C - Factor Adjusting 2017 Policy Year Assigned Risk Premium and Voluntary Premium to Present Statewide Level

(1) Assigned Risk Market Share PY 2017	0.066
(2) Voluntary Market Share PY 2017	0.934
(3) Assigned Risk Standard Premium Adjustment Factor (See Sec. A)	0.508
(4) Voluntary Standard Premium Adjustment Factor (See Sec. B)	0.508
(5) Premium Adjustment Factor = [(1)x(3)]/1.165+(2)x(4) #	0.503
(6) Experience Rating Off-balance Adjustment Factor*	1.005
(7) Final Premium Adjustment Factor = (5)x(6)	0.506

NR New and renewal business.

@ Eliminates premium derived from expense constants.

# Current premium index (assigned risk-to-voluntary) = 1.165

\* = 1.005 = 0.959 / 0.954 = (Targeted Off-balance) / (Off-balance for Policy Year 2017)



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## APPENDIX A-I

### Determination of Policy Year On-level Factors

#### Section D - Factor Adjusting 2017 Policy Year Indemnity Losses to Present Benefit Level

	(1)	(2)	(3)	(4)	(5)
Date	Benefit Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)
01/01/17	Base	1.000	0.355	0.355	1.000
10/01/17	1.000	1.000	0.232	0.232	
01/01/18	1.000	1.000	0.413	0.413	
01/01/19	1.000	1.000		1.000	

#### Section E - Factor Adjusting 2017 Policy Year Medical Losses to Present Benefit Level

	(1)	(2)	(3)	(4)	(5)
Date	Benefit Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)
01/01/17	Base	1.000	0.355	0.355	1.000
10/01/17	1.001	1.001	0.232	0.232	
01/01/18	1.009	1.010	0.413	0.417	
01/01/19	0.994	1.004		1.004	



# INDIANA

## APPENDIX A-I

### Determination of Policy Year On-level Factors

#### Section F - Factor Adjusting 2016 Policy Year Assigned Risk Premium to Present Assigned Risk Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Rate Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Adj. For Expense Constant Removal @	Adj. For Expense Removal	Premium Adjustment Factor (5)x(6)x(7)
NR 01/01/16	Base	1.000	1.000	1.000	0.731	0.984	0.642	0.462
NR 01/01/17	0.907	0.907						
NR 01/01/18	0.872	0.791						
NR 01/01/19	0.924	0.731						
				1.000				

#### Section G - Factor Adjusting 2016 Policy Year Voluntary Premium to Present Voluntary Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Rate Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Adj. For Expense Constant Removal @	Adj. For Expense Removal	Premium Adjustment Factor (5)x(6)x(7)
NR 01/01/16	Base	1.000	1.000	1.000	0.731	0.984	0.642	0.462
NR 01/01/17	0.907	0.907						
NR 01/01/18	0.872	0.791						
NR 01/01/19	0.924	0.731						
				1.000				

#### Section H - Factor Adjusting 2016 Policy Year Assigned Risk Premium and Voluntary Premium to Present Statewide Level

(1) Assigned Risk Market Share PY 2016	0.073
(2) Voluntary Market Share PY 2016	0.927
(3) Assigned Risk Standard Premium Adjustment Factor (See Sec. F)	0.462
(4) Voluntary Standard Premium Adjustment Factor (See Sec. G)	0.462
(5) Premium Adjustment Factor = [(1)x(3)]/1.165+(2)x(4) #	0.457
(6) Experience Rating Off-balance Adjustment Factor*	1.006
(7) Final Premium Adjustment Factor = (5)x(6)	0.460

NR New and renewal business.

@ Eliminates premium derived from expense constants.

# Current premium index (assigned risk-to-voluntary) = 1.165

\* = 1.006 = 0.959 / 0.953 = (Targeted Off-balance) / (Off-balance for Policy Year 2016)



# INDIANA

## APPENDIX A-I

### Determination of Policy Year On-level Factors

#### Section I - Factor Adjusting 2016 Policy Year Indemnity Losses to Present Benefit Level

	(1)	(2)	(3)	(4)	(5)
Date	Benefit Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)
01/01/16	Base	1.000	0.177	0.177	1.007
07/01/16	1.041	1.041	0.178	0.185	
10/01/16	1.000	1.041	0.232	0.242	
01/01/17	1.000	1.041	0.395	0.411	
10/01/17	1.000	1.041	0.018	0.019	
01/01/18	1.000	1.041			
01/01/19	1.000	1.041			
				1.034	

#### Section J - Factor Adjusting 2016 Policy Year Medical Losses to Present Benefit Level

	(1)	(2)	(3)	(4)	(5)
Date	Benefit Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)
01/01/16	Base	1.000	0.177	0.177	1.009
07/01/16	1.000	1.000	0.178	0.178	
10/01/16	1.002	1.002	0.232	0.232	
01/01/17	1.006	1.008	0.395	0.398	
10/01/17	1.001	1.009	0.018	0.018	
01/01/18	1.009	1.018			
01/01/19	0.994	1.012			
				1.003	





## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Appendix A – Factors Underlying the Proposed Rate Level Change

##### Appendix A-II Determination of Premium and Losses Developed to an Ultimate Report

Development factors are used to project premium and limited losses to an ultimate report. In general, the ultimate development factors are based on a chain-ladder approach that utilizes average link ratios for several maturities and the application of a tail factor.

##### Limited Large Loss Methodology

In order to limit volatility on the advisory rate indications due to the impact of extraordinary large losses, a limited large loss methodology is used in Indiana. A base threshold for the large loss limitation is determined by the volume of premium in the state as well as the number of years used in the experience period. The base threshold proposed in this filing is \$7,682,406, based on the volume of premium in policy years 2015 and 2016 underlying the currently approved filing that utilizes data valued as of 12/31/2017. The base threshold is detrended by policy year to reflect the inflationary impact on claim costs due to wage inflation. The wage index used as a basis for these calculations is the Indiana average weekly wages from the Quarterly Census of Employment and Wages (QCEW). Detrended thresholds are used in the experience period, trend period, and loss development period. Indemnity and medical losses are limited at the detrended large loss threshold corresponding to their Policy Year, as shown in Appendix A-II Section L.

Limited indemnity and medical losses used to calculate the ultimate losses are shown in Appendix A-II Section A.

After developing limited indemnity and medical losses to an ultimate report, a statewide excess ratio at the base threshold is used to adjust the limited losses to an unlimited basis. The proposed excess ratio in this filing is 0.8%, as shown in Appendix A-II Section K.

##### Development Factors

For premium development, link ratios are used from 1st report through 5th report. It is assumed that no further development occurs after the 5th report.

For indemnity and medical loss development, link ratios calculated from limited losses are used from 1<sup>st</sup> report through the 19<sup>th</sup> report.

For indemnity and medical loss development past the 19<sup>th</sup> report, a “tail” factor is used to reflect all future expected emergence. The calculation of indemnity and medical paid + case 19<sup>th</sup>-to-ultimate tail factors utilize all available experience for the years prior to the tail attachment point. Tail factors are calculated for the most recent ten available policy years, each relying on losses



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Appendix A – Factors Underlying the Proposed Rate Level Change**

in older policy years as well as a factor to adjust for the differences in the volume of losses between the policy years. Tail factors are calculated separately for indemnity and medical losses by comparing the changes in the volume of policy year losses that occur on policy years reported after a nineteenth report to the volume of policy year losses at the nineteenth report, along with the application of a growth adjustment factor.

Since unlimited losses are used for the tail factor, they are adjusted to a limited basis as shown in Appendix A-II Section H.



## INDIANA

### APPENDIX A-II

#### Determination of Premium and Losses Developed to an Ultimate Report

##### Section A - Premium and Loss Summary Valued as of 12/31/2018

###### Policy Year 2017

(1) Standard Earned Premium	\$766,907,710
(2) Factor to Develop Premium to Ultimate	1.005
(3) Standard Earned Premium Developed to Ultimate = (1)x(2)	\$770,742,249
(4) Limited Indemnity Paid Losses	\$50,919,390
(5) Limited Indemnity Paid Development Factor to Ultimate	2.314
(6) Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$117,827,468
(7) Limited Indemnity Paid+Case Losses	\$97,033,447
(8) Limited Indemnity Paid+Case Development Factor to Ultimate	1.203
(9) Limited Indemnity Paid+Case Losses Developed to Ultimate = (7)x(8)	\$116,731,237
(10) Policy Year 2017 Limited Indemnity Losses Developed to Ultimate = [(6)+(9)]/2	\$117,279,353
(11) Limited Medical Paid Losses	\$201,396,890
(12) Limited Medical Paid Development Factor to Ultimate	1.366
(13) Limited Medical Paid Losses Developed to Ultimate = (11)x(12)	\$275,108,152
(14) Limited Medical Paid+Case Losses	\$278,237,659
(15) Limited Medical Paid+Case Development Factor to Ultimate	0.996
(16) Limited Medical Paid+Case Losses Developed to Ultimate = (14)x(15)	\$277,124,708
(17) Policy Year 2017 Limited Medical Losses Developed to Ultimate = [(13)+(16)]/2	\$276,116,430

###### Policy Year 2016

(1) Standard Earned Premium	\$804,756,315
(2) Factor to Develop Premium to Ultimate	0.999
(3) Standard Earned Premium Developed to Ultimate = (1)x(2)	\$803,951,559
(4) Limited Indemnity Paid Losses	\$74,038,488
(5) Limited Indemnity Paid Development Factor to Ultimate	1.488
(6) Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$110,169,270
(7) Limited Indemnity Paid+Case Losses	\$101,243,292
(8) Limited Indemnity Paid+Case Development Factor to Ultimate	1.084
(9) Limited Indemnity Paid+Case Losses Developed to Ultimate = (7)x(8)	\$109,747,729
(10) Policy Year 2016 Limited Indemnity Losses Developed to Ultimate = [(6)+(9)]/2	\$109,958,500
(11) Limited Medical Paid Losses	\$238,579,943
(12) Limited Medical Paid Development Factor to Ultimate	1.125
(13) Limited Medical Paid Losses Developed to Ultimate = (11)x(12)	\$268,402,436
(14) Limited Medical Paid+Case Losses	\$277,283,187
(15) Limited Medical Paid+Case Development Factor to Ultimate	0.993
(16) Limited Medical Paid+Case Losses Developed to Ultimate = (14)x(15)	\$275,342,205
(17) Policy Year 2016 Limited Medical Losses Developed to Ultimate = [(13)+(16)]/2	\$271,872,321



## INDIANA

### APPENDIX A-II

#### Determination of Premium and Losses Developed to an Ultimate Report

##### Section B - Premium Development Factors

<u>Policy Year</u>	<u>1st/2nd</u>	<u>Policy Year</u>	<u>2nd/3rd</u>	<u>Policy Year</u>	<u>3rd/4th</u>	<u>Policy Year</u>	<u>4th/5th</u>
2014	1.012	2013	1.001	2012	1.000	2011	1.000
2015	1.002	2014	0.998	2013	1.000	2012	1.000
2016	1.005	2015	0.999	2014	1.000	2013	1.000
Average	1.006	Average	0.999	Average	1.000	Average	1.000

##### Summary of Premium Development Factors

<u>1st/5th</u>	<u>2nd/5th</u>	<u>3rd/5th</u>	<u>4th/5th</u>
1.005	0.999	1.000	1.000



# INDIANA

## APPENDIX A-II

### Determination of Premium and Losses Developed to an Ultimate Report

#### Section C - Limited Indemnity Paid Loss Development Factors

<u>Policy Year</u>	<u>1st/2nd</u>	<u>Policy Year</u>	<u>2nd/3rd</u>	<u>Policy Year</u>	<u>3rd/4th</u>	<u>Policy Year</u>	<u>4th/5th</u>
2015	1.575	2014	1.174	2013	1.122	2012	1.049
2016	1.534	2015	1.215	2014	1.078	2013	1.051
Average	1.555	Average	1.195	Average	1.100	Average	1.050
<u>Policy Year</u>	<u>5th/6th</u>	<u>Policy Year</u>	<u>6th/7th</u>	<u>Policy Year</u>	<u>7th/8th</u>	<u>Policy Year</u>	<u>8th/9th</u>
2011	1.026	2010	1.014	2009	1.010	2008	1.008
2012	1.024	2011	1.014	2010	1.010	2009	1.008
Average	1.025	Average	1.014	Average	1.010	Average	1.008
<u>Policy Year</u>	<u>9th/10th</u>	<u>Policy Year</u>	<u>10th/11th</u>	<u>Policy Year</u>	<u>11th/12th</u>	<u>Policy Year</u>	<u>12th/13th</u>
2007	1.005	2006	1.002	2005	1.003	2004	1.000
2008	1.002	2007	1.001	2006	1.003	2005	1.001
Average	1.004	Average	1.002	Average	1.003	Average	1.001
<u>Policy Year</u>	<u>13th/14th</u>	<u>Policy Year</u>	<u>14th/15th</u>	<u>Policy Year</u>	<u>15th/16th</u>	<u>Policy Year</u>	<u>16th/17th</u>
2003	1.003	2002	1.000	2001	0.999	2000	1.000
2004	1.000	2003	1.000	2002	1.002	2001	1.000
Average	1.002	Average	1.000	Average	1.001	Average	1.000
<u>Policy Year</u>	<u>17th/18th</u>	<u>Policy Year</u>	<u>18th/19th</u>				
1999	1.001	1998	1.000				
2000	1.000	1999	1.000				
Average	1.001	Average	1.000				



# INDIANA

## APPENDIX A-II

### Determination of Premium and Losses Developed to an Ultimate Report

#### Section D - Limited Medical Paid Loss Development Factors

<u>Policy Year</u>	<u>1st/2nd</u>	<u>Policy Year</u>	<u>2nd/3rd</u>	<u>Policy Year</u>	<u>3rd/4th</u>	<u>Policy Year</u>	<u>4th/5th</u>
2015	1.220	2014	1.039	2013	1.019	2012	1.008
2016	1.207	2015	1.040	2014	1.014	2013	1.018
Average	1.214	Average	1.040	Average	1.017	Average	1.013
<u>Policy Year</u>	<u>5th/6th</u>	<u>Policy Year</u>	<u>6th/7th</u>	<u>Policy Year</u>	<u>7th/8th</u>	<u>Policy Year</u>	<u>8th/9th</u>
2011	1.016	2010	1.003	2009	1.003	2008	1.003
2012	1.005	2011	1.005	2010	1.002	2009	1.001
Average	1.011	Average	1.004	Average	1.003	Average	1.002
<u>Policy Year</u>	<u>9th/10th</u>	<u>Policy Year</u>	<u>10th/11th</u>	<u>Policy Year</u>	<u>11th/12th</u>	<u>Policy Year</u>	<u>12th/13th</u>
2007	1.005	2006	1.002	2005	1.001	2004	1.002
2008	1.001	2007	1.002	2006	1.002	2005	1.003
Average	1.003	Average	1.002	Average	1.002	Average	1.003
<u>Policy Year</u>	<u>13th/14th</u>	<u>Policy Year</u>	<u>14th/15th</u>	<u>Policy Year</u>	<u>15th/16th</u>	<u>Policy Year</u>	<u>16th/17th</u>
2003	1.003	2002	1.000	2001	1.002	2000	1.001
2004	1.004	2003	1.002	2002	1.001	2001	1.001
Average	1.004	Average	1.001	Average	1.002	Average	1.001
<u>Policy Year</u>	<u>17th/18th</u>	<u>Policy Year</u>	<u>18th/19th</u>				
1999	1.000	1998	1.003				
2000	1.001	1999	1.000				
Average	1.001	Average	1.002				



# INDIANA

## APPENDIX A-II

### Determination of Premium and Losses Developed to an Ultimate Report

#### Section E - Limited Indemnity Paid + Case Loss Development Factors

Policy Year	<u>1st/2nd</u>	Policy Year	<u>2nd/3rd</u>	Policy Year	<u>3rd/4th</u>	Policy Year	<u>4th/5th</u>
2012	1.132	2011	1.038	2010	1.013	2009	1.001
2013	1.125	2012	1.072	2011	1.028	2010	1.008
2014	1.082	2013	1.055	2012	1.029	2011	1.001
2015	1.115	2014	1.019	2013	1.024	2012	1.000
2016	1.095	2015	1.063	2014	1.015	2013	1.000
Average	1.110	Average	1.049	Average	1.022	Average	1.002
Policy Year	<u>5th/6th</u>	Policy Year	<u>6th/7th</u>	Policy Year	<u>7th/8th</u>	Policy Year	<u>8th/9th</u>
2008	0.989	2007	1.007	2006	1.001	2005	1.000
2009	0.999	2008	0.999	2007	0.999	2006	0.999
2010	1.004	2009	1.004	2008	1.000	2007	1.002
2011	1.001	2010	1.003	2009	1.003	2008	1.002
2012	0.999	2011	1.003	2010	1.000	2009	1.001
Average	0.998	Average	1.003	Average	1.001	Average	1.001
Policy Year	<u>9th/10th</u>	Policy Year	<u>10th/11th</u>	Policy Year	<u>11th/12th</u>	Policy Year	<u>12th/13th</u>
2004	0.999	2003	1.002	2002	1.001	2001	0.998
2005	1.003	2004	1.000	2003	1.000	2002	1.000
2006	1.000	2005	1.002	2004	1.001	2003	1.000
2007	1.000	2006	1.000	2005	1.000	2004	1.000
2008	1.005	2007	0.999	2006	1.000	2005	1.000
Average	1.001	Average	1.001	Average	1.000	Average	1.000
Policy Year	<u>13th/14th</u>	Policy Year	<u>14th/15th</u>	Policy Year	<u>15th/16th</u>	Policy Year	<u>16th/17th</u>
2000	1.000	1999	1.000	1998	1.000	1997	1.000
2001	1.000	2000	1.000	1999	1.000	1998	1.000
2002	1.001	2001	0.999	2000	1.000	1999	1.001
2003	0.999	2002	0.999	2001	0.999	2000	1.000
2004	1.000	2003	1.000	2002	0.999	2001	1.000
Average	1.000	Average	1.000	Average	1.000	Average	1.000
Policy Year	<u>17th/18th</u>	Policy Year	<u>18th/19th</u>				
1996	0.999	1995	1.000				
1997	1.000	1996	1.004				
1998	1.000	1997	1.000				
1999	1.000	1998	1.000				
2000	1.000	1999	1.000				
Average	1.000	Average	1.001				



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## APPENDIX A-II

### Determination of Premium and Losses Developed to an Ultimate Report

#### Section F - Limited Medical Paid + Case Loss Development Factors

Policy Year	<u>1st/2nd</u>	Policy Year	<u>2nd/3rd</u>	Policy Year	<u>3rd/4th</u>	Policy Year	<u>4th/5th</u>
2012	1.043	2011	0.991	2010	1.004	2009	0.999
2013	1.002	2012	0.989	2011	0.998	2010	0.995
2014	0.988	2013	0.997	2012	0.983	2011	0.996
2015	1.001	2014	0.992	2013	0.988	2012	0.998
2016	0.979	2015	1.008	2014	0.984	2013	0.994
Average	1.003	Average	0.995	Average	0.991	Average	0.996
Policy Year	<u>5th/6th</u>	Policy Year	<u>6th/7th</u>	Policy Year	<u>7th/8th</u>	Policy Year	<u>8th/9th</u>
2008	0.993	2007	1.005	2006	0.996	2005	0.999
2009	1.001	2008	0.996	2007	1.006	2006	1.006
2010	0.998	2009	1.003	2008	0.999	2007	1.002
2011	1.012	2010	0.996	2009	1.001	2008	0.998
2012	0.999	2011	0.998	2010	1.001	2009	0.999
Average	1.001	Average	1.000	Average	1.001	Average	1.001
Policy Year	<u>9th/10th</u>	Policy Year	<u>10th/11th</u>	Policy Year	<u>11th/12th</u>	Policy Year	<u>12th/13th</u>
2004	1.000	2003	0.999	2002	1.001	2001	1.004
2005	0.999	2004	1.004	2003	1.004	2002	0.999
2006	1.002	2005	1.002	2004	1.004	2003	1.009
2007	1.000	2006	1.002	2005	0.996	2004	1.001
2008	1.001	2007	1.001	2006	1.002	2005	1.000
Average	1.000	Average	1.002	Average	1.001	Average	1.003
Policy Year	<u>13th/14th</u>	Policy Year	<u>14th/15th</u>	Policy Year	<u>15th/16th</u>	Policy Year	<u>16th/17th</u>
2000	1.001	1999	1.000	1998	0.999	1997	1.000
2001	1.004	2000	1.000	1999	1.000	1998	0.999
2002	0.999	2001	0.996	2000	0.999	1999	1.000
2003	0.994	2002	1.002	2001	1.003	2000	1.000
2004	1.003	2003	1.000	2002	0.999	2001	1.001
Average	1.000	Average	1.000	Average	1.000	Average	1.000
Policy Year	<u>17th/18th</u>	Policy Year	<u>18th/19th</u>				
1996	0.999	1995	1.000				
1997	1.001	1996	1.002				
1998	1.000	1997	1.000				
1999	0.999	1998	0.997				
2000	0.999	1999	1.002				
Average	1.000	Average	1.000				





# INDIANA

## APPENDIX A-II

### Determination of Premium and Losses Developed to an Ultimate Report

#### Section G - Determination of Policy Year Loss Development Factors (19th-to-Ultimate Report)

##### Indemnity Paid+Case Data for Matching Companies

(1) Policy Year	(2) <u>Losses for Policy Year</u> 19th Report	(3) <u>Losses for Policy Year</u> 20th Report	(4) <u>Losses for All Prior Policy Years</u> Previous	(5) <u>Losses for All Prior Policy Years</u> Current	(6) Factor to Adjust Losses for Prior Policy Years	(7) Indicated 19th-to-Ult Development for Policy Year
1989	116,058,644	116,061,522	936,621,902	936,438,493	0.475	0.997
1990	115,887,595	115,864,234	1,031,922,300	1,032,118,894	0.529	1.003
1991	111,694,592	111,685,133	1,147,983,128	1,148,551,878	0.619	1.008
1992	95,588,037	95,755,950	1,259,952,491	1,260,377,855	0.801	1.007
1993	93,024,429	93,021,427	1,356,158,382	1,356,576,490	0.886	1.005
1994	86,763,019	86,774,518	1,440,762,911	1,440,900,984	0.999	1.002
1995	81,745,960	81,776,925	1,525,011,995	1,525,700,495	1.112	1.008
1996	80,089,797	80,458,308	1,606,212,584	1,606,074,544	1.162	1.003
1997	86,111,470	86,111,471	1,684,966,942	1,685,049,508	1.100	1.001
1998	98,688,814	98,688,412	1,769,832,586	1,770,116,472	0.968	1.003

Selected Indemnity 19th-to-Ultimate Loss Development Factor 1.004

##### Medical Paid+Case Data for Matching Companies

(8) Policy Year	(9) <u>Losses for Policy Year</u> 19th Report	(10) <u>Losses for Policy Year</u> 20th Report	(11) <u>Losses for All Prior Policy Years</u> Previous	(12) <u>Losses for All Prior Policy Years</u> Current	(13) Factor to Adjust Losses for Prior Policy Years	(14) Indicated 19th-to-Ult Development for Policy Year
1989	164,417,397	164,376,250	1,025,806,893	1,025,502,698	0.463	0.996
1990	186,637,360	187,253,894	1,165,296,134	1,168,337,713	0.462	1.039
1991	184,721,640	184,680,004	1,355,591,607	1,352,468,853	0.546	0.969
1992	182,351,703	181,469,369	1,537,080,009	1,534,434,935	0.627	0.972
1993	173,839,979	173,669,517	1,715,882,236	1,714,325,706	0.733	0.987
1994	178,598,308	178,555,296	1,876,593,330	1,876,889,821	0.773	1.002
1995	169,217,843	169,232,774	2,051,923,751	2,055,827,297	0.878	1.026
1996	168,697,175	168,797,115	2,224,531,435	2,229,946,456	0.934	1.035
1997	170,606,286	170,611,970	2,396,901,764	2,397,801,712	0.969	1.005
1998	190,872,874	190,768,047	2,567,414,073	2,567,511,201	0.895	1.000

Selected Medical 19th-to-Ultimate Loss Development Factor 1.003

$$(7) = 1 + [(3)-(2) + ((5)-(4)) / (6)] / (2)$$

$$(14) = 1 + [(10)-(9) + ((12)-(11)) / (13)] / (9)$$

Columns (4) and (11) are valued as of the date at which the given policy year is at a 19th report.

Columns (5) and (12) are valued as of the date at which the given policy year is at a 20th report.



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### APPENDIX A-II

#### Determination of Premium and Losses Developed to an Ultimate Report

##### Section H - Derivation of Policy Year Limited 19th-to-Ultimate Loss Development Factors

<u>Policy Year</u>	<u>Indemnity Paid-to-Paid + Case Ratio 19th Report</u>	<u>Medical Paid-to-Paid + Case Ratio 19th Report</u>
1995	0.999	0.989
1996	1.000	0.996
1997	0.995	0.985
1998	1.000	0.999
1999	0.995	0.997
Average	0.998	0.993

	<u>Indemnity</u>	<u>Medical</u>
(1) Paid+Case 19th-to-Ultimate Loss Development Factor (Section G)	1.004	1.003
(2) Factor to Adjust 19th-to-Ultimate Development Factor to a Limited I	0.806	0.806
(3) Limited Paid+Case 19th-to-Ultimate Loss Development Factor = [(1	1.003	1.002
(4) Limited Paid-to-Paid+Case Ratio (Section H)	0.998	0.993
(5) Limited Paid 19th-to-Ultimate Loss Development Factor = (3) / (4)	1.005	1.009

##### Section I - Summary of Limited Paid Loss Development Factors

<u>Report</u>	(1) <u>Indemnity Paid Loss Development to Next Report</u>	(2) <u>to Ultimate</u>	<u>Report</u>	(3) <u>Medical Paid Loss Development to Next Report</u>	(4) <u>to Ultimate</u>
1st	1.555	2.314	1st	1.214	1.366
2nd	1.195	1.488	2nd	1.040	1.125
3rd	1.100	1.245	3rd	1.017	1.082
4th	1.050	1.132	4th	1.013	1.064
5th	1.025	1.078	5th	1.011	1.050
6th	1.014	1.052	6th	1.004	1.039
7th	1.010	1.037	7th	1.003	1.035
8th	1.008	1.027	8th	1.002	1.032
9th	1.004	1.019	9th	1.003	1.030
10th	1.002	1.015	10th	1.002	1.027
11th	1.003	1.013	11th	1.002	1.025
12th	1.001	1.010	12th	1.003	1.023
13th	1.002	1.009	13th	1.004	1.020
14th	1.000	1.007	14th	1.001	1.016
15th	1.001	1.007	15th	1.002	1.015
16th	1.000	1.006	16th	1.001	1.013
17th	1.001	1.006	17th	1.001	1.012
18th	1.000	1.005	18th	1.002	1.011
19th		1.005	19th		1.009

(2) = Cumulative upward product of column (1).  
 (4) = Cumulative upward product of column (3).



## INDIANA

### APPENDIX A-II

#### Determination of Premium and Losses Developed to an Ultimate Report

##### Section J - Summary of Limited Paid+Case Loss Development Factors

Report	(1) Indemnity Paid+Case Loss Development	(2) to Ultimate
	to Next Report	
1st	1.110	1.203
2nd	1.049	1.084
3rd	1.022	1.033
4th	1.002	1.011
5th	0.998	1.009
6th	1.003	1.011
7th	1.001	1.008
8th	1.001	1.007
9th	1.001	1.006
10th	1.001	1.005
11th	1.000	1.004
12th	1.000	1.004
13th	1.000	1.004
14th	1.000	1.004
15th	1.000	1.004
16th	1.000	1.004
17th	1.000	1.004
18th	1.001	1.004
19th		1.003

Report	(3) Medical Paid+Case Loss Development	(4) to Ultimate
	to Next Report	
1st	1.003	0.996
2nd	0.995	0.993
3rd	0.991	0.998
4th	0.996	1.007
5th	1.001	1.011
6th	1.000	1.010
7th	1.001	1.010
8th	1.001	1.009
9th	1.000	1.008
10th	1.002	1.008
11th	1.001	1.006
12th	1.003	1.005
13th	1.000	1.002
14th	1.000	1.002
15th	1.000	1.002
16th	1.000	1.002
17th	1.000	1.002
18th	1.000	1.002
19th		1.002

(2) = Cumulative upward product of column (1).

(4) = Cumulative upward product of column (3).



## INDIANA

### APPENDIX A-II

#### Determination of Premium and Losses Developed to an Ultimate Report

##### Section K - Factor to Adjust Limited Losses to an Unlimited Basis

(1) Threshold at the Midpoint of the Rate Effective Period*	7,682,406
(2) Statewide Excess Ratio for (1)	0.008
(3) Market Share for Carriers Missing from Large Loss and Catastrophe Call	0.000
(4) Factor to Adjust Limited Losses to an Unlimited Basis = $1.0 / \{1.0 - [(2) \times (1.0 - (3))]\}$	1.008

##### Section L - Policy Year Large Loss Limits

Experience Year	Policy Year Detrended Limit
2017	6,871,531
2016	6,656,139
2015	6,499,086
2014	6,341,507
2013	6,179,705
2012	6,084,949
2011	5,963,950
2010	5,807,156
2009	5,648,106
2008	5,611,013
2007	5,554,464
2006	5,415,071
2005	5,257,878
2004	5,126,643
2003	4,967,813
2002	4,814,383
2001	4,695,040
2000	4,585,730
1999	4,457,397
1998	4,317,424
1997	4,126,225
1996	3,929,422
1995	3,776,930

\* November 29, 2020 is the midpoint of the effective period for which the revised rates are being proposed.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Appendix A – Factors Underlying the Proposed Rate Level Change

##### Appendix A-III Trend Factors

NCCI separately analyzes a measure of the number of workplace injuries (claim frequency) and the average indemnity and medical costs of each of these injuries (claim severity). Premium, lost-time claim counts, and limited losses used in these frequency and severity calculations are developed to ultimate and adjusted for changes in the level of workers' wages over time using the United States Bureau of Labor Statistics Quarterly Census of Employment and Wages for Indiana. Note that medical-only claim counts are excluded from the claim frequency and severity calculations, but the losses associated with medical-only claims are included.

While claim frequency and average costs per case are reviewed separately, NCCI selects annual indemnity and medical loss ratio trend factors based on an analysis of historical indemnity and medical loss ratios, along with other pertinent considerations, including, but not limited to, changes in system benefits and administration, economic environment, credibility of state data, and prior trend approach and selection.

The lost-time claim frequency, average costs per case, and loss ratios for Policy Years 2010 through 2017 are shown in Appendix A-III, along with the impact of the trend selection for each policy year in the experience period. The trend lengths displayed in Section B(3) are calculated by comparing the average accident date for the effective period of the proposed rates to each of the policy years in the experience period. The average accident dates are based on an Indiana distribution of policy writings by month and assume a uniform probability of loss over the coverage period.



## INDIANA

### APPENDIX A-III

#### Policy Year Trend Factors

##### Section A - Summary of Policy Year Data

(1)	(2)	(3)	(4)	(5)	(6)
Policy Year	Lost-Time Claim Frequency*	Indemnity		Medical	
		Avg Cost Per Case**	Loss Ratio^	Avg Cost Per Case**	Loss Ratio^
2010	27.183	16,524	0.449	36,628	0.995
2011	25.524	16,089	0.410	37,297	0.951
2012	23.933	16,232	0.389	38,086	0.912
2013	24.420	16,101	0.393	38,770	0.947
2014	22.551	14,465	0.326	35,112	0.792
2015	21.454	15,367	0.330	36,162	0.776
2016	20.208	14,805	0.299	36,675	0.742
2017	20.026	15,017	0.301	35,354	0.708

\* Figures have been adjusted to the common wage level.

^ Based on an average of paid and paid+case losses.

##### Section B - Summary of Annual Trend Factors

	<u>Indemnity</u>	<u>Medical</u>
(1) Current Approved Annual Loss Ratio Trend Factor	0.960	0.985
(2) Selected Annual Loss Ratio Trend Factor	<b>0.960</b>	<b>0.975</b>
(3) Length of Trend Period from Midpoint of Policy Year to Midpoint of Effective Period:		
	<u>Years</u>	
Policy Year 2016	4.001	
Policy Year 2017	3.001	
(4) Trend Factor Applied to Experience Year = (2) ^ (3)	<u>Indemnity</u>	<u>Medical</u>
Policy Year 2016	0.849	0.904
Policy Year 2017	0.885	0.927



## INDIANA

### APPENDIX A-IV

#### Derivation of Industry Group Differentials

Industry group differentials are used to more equitably distribute the overall rate level change based on the individual experience of each industry group. The payroll, losses and claim counts used in the calculations below are from NCCI's Workers Compensation Statistical Plan (WCSP) data.

#### I. Expected Losses

The current expected losses (columns (1) and (2)) are the payroll extended by the pure premiums underlying the latest approved rates. The proposed expected losses (3) are the current expected losses adjusted to the proposed level. These adjustments include the proposed experience, trend, benefit and, if applicable, loss-based expense changes as well as any miscellaneous premium adjustments.

Industry Group	(1) Latest Year Current Expected Losses Prior to Adjustment for Change in Off-Balance	(2) Five Year Current Expected Losses Prior to Adjustment for Change in Off-Balance	(3) Five Year Proposed Expected Losses Prior to Adjustment for Change in Off-Balance	(4) Current Ratio of Manual to Standard Premium	(5) Proposed Ratio of Manual to Standard Premium
Manufacturing	202,578,562	900,939,051	837,782,055	1.120	1.132
Contracting	114,893,682	507,437,932	472,383,591	1.136	1.133
Office & Clerical	68,760,633	317,975,004	295,477,788	1.113	1.128
Goods & Services	222,131,584	1,024,926,340	952,756,922	1.049	1.064
Miscellaneous	123,297,410	578,451,231	538,915,339	1.065	1.074
Statewide	731,661,870	3,329,729,558	3,097,315,696		

Industry Group	(6) Latest Year Current Expected Losses Adjusted for Change in Off-Balance (1)x(4)/(5)	(7) Five Year Current Expected Losses Adjusted for Change in Off-Balance (2)x(4)/(5)	(8) Five Year Proposed Expected Losses Adjusted for Change in Off-Balance (3)x(4)/(5)	(9) Current/ Proposed (7)/(8)	(10) Adjustment to Proposed for Current Relativity (9)IG/(9)SW
Manufacturing	200,431,086	891,388,460	828,900,974	1.075	1.000
Contracting	115,197,901	508,781,545	473,634,386	1.074	0.999
Office & Clerical	67,846,263	313,746,613	291,548,562	1.076	1.001
Goods & Services	219,000,030	1,010,477,191	939,325,199	1.076	1.001
Miscellaneous	122,264,191	573,603,875	534,399,289	1.073	0.998
Statewide	724,739,471	3,297,997,684	3,067,808,410	1.075	



## INDIANA

### APPENDIX A-IV

#### II. Industry Group Differentials

To calculate the converted indicated balanced losses (11) the reported losses are limited to \$500,000 for a single claim occurrence and \$1,500,000 for each multiple claim occurrence. After the application of limited development, trend and benefit factors, the limited losses are brought to an unlimited level through the application of the expected excess provision. The proposed experience change, applicable loss-based expenses and any miscellaneous premium adjustments are applied to calculate the indicated losses. These indicated losses are then balanced to the expected losses using the factors shown in Appendix B-I, Section A-3.

Industry Group	(11) Converted Indicated Balanced Losses	(12) Indicated/ Expected Ratio (11)/[(8)x(10)]	(13) Indicated Differential (12)IG/(12)SW	(14) Lost-Time Claim Counts
Manufacturing	831,389,906	1.003	1.004	19,511
Contracting	459,784,922	0.972	0.973	7,866
Office & Clerical	293,029,311	1.004	1.005	6,115
Goods & Services	930,280,482	0.989	0.990	23,432
Miscellaneous	550,423,827	1.032	1.033	11,256
Statewide	3,064,908,448	0.999		

Industry Group	(15) Full Credibility Standard for Lost-Time Claim Counts	(16) Credibility Minimum of 1.000 and ((14)/(15))^0.5	(17) Credibility Weighted Indicated/Expected Ratio [(16)IGx(12)IG] + [1-(16)IG]x(12)SW*	(18) Final Industry Group Differential (17)IG/(17)SW
Manufacturing	12,000	1.00	1.003	1.004
Contracting	12,000	0.81	0.977	0.978
Office & Clerical	12,000	0.71	1.003	1.004
Goods & Services	12,000	1.00	0.989	0.990
Miscellaneous	12,000	0.97	1.031	1.032
Statewide			0.999	1.000

\*Statewide ratio (column 17) =  $\Sigma_{IG}[(6)x(17)] \div \Sigma_{IG}(6)$





## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Appendix B – Calculations Underlying the Rate Change by Classification**

NCCI separately determines advisory rates for each workers compensation classification. The proposed change from the current advisory rate will vary depending on the classification. The following are the general steps utilized to determine the individual classification rates:

1. Calculate industry group differentials, which are used to more equitably distribute the proposed overall average advisory rate level change based on the individual experience of each industry group
2. For each classification, determine the indicated pure premiums based on the most recently-available five policy periods of Indiana payroll and loss experience
3. Indicated pure premiums are credibility-weighted with present on rate level pure premiums and national pure premiums to generate derived by formula pure premiums
4. Final adjustments include the application of a test correction factor, the ratio of manual-to-standard premium, and swing limits.



## INDIANA

### APPENDIX B-I

#### Distribution of Rate Level Change to Occupational Classification

After determining the required changes in the overall rate level for the state and by industry group, the next step in the ratemaking procedure is to distribute these changes among the various occupational classifications. In order to do this, the pure premiums by classification must be adjusted, by policy period, industry group, or on an overall basis, to incorporate the changes proposed in the filing. There are three sets of pure premiums for each classification: indicated, present on rate level, and national pure premiums.

#### Section A – Calculation of Indicated Pure Premiums

The indicated pure premiums are calculated from the payroll and loss data reported, by class code and policy period, in the Workers Compensation Statistical Plan (WCSP) for the latest available five policy periods. Various adjustments are made to these pure premiums to put them at the level proposed in this filing (Sections A-1 to A-3).

#### Section A-1 – Calculation of Primary Conversion Factors

##### 1. Limited Loss Development Factors

The following factors are applied to develop the losses from first through fifth report to an ultimate basis.

Policy Period	Indemnity		Medical	
	Likely-to-Develop	Not-Likely-to-Develop	Likely-to-Develop	Not-Likely-to-Develop
7/12-6/13	1.015	1.004	1.029	1.002
7/13-6/14	1.023	1.010	1.029	1.003
7/14-6/15	1.077	1.029	1.022	1.003
7/15-6/16	1.197	1.074	1.027	1.004
7/16-6/17	1.531	1.167	1.076	1.015

##### 2. Factors to Adjust to the Proposed Trend Level

The proposed trend factors are applied to adjust the losses to the proposed level.

Policy Period	Indemnity	Medical
7/12-6/13	0.736	0.827
7/13-6/14	0.767	0.848
7/14-6/15	0.799	0.870
7/15-6/16	0.832	0.892
7/16-6/17	0.867	0.915

##### 3. Factors to Adjust to the Proposed Benefit Level

The following factors are applied to adjust the losses to the proposed benefit level.

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
7/12-6/13	1.080	1.157	1.174	1.069	0.960
7/13-6/14	1.069	1.131	1.144	1.057	0.990
7/14-6/15	1.045	1.075	1.082	1.032	1.020
7/15-6/16	1.023	1.025	1.029	1.011	1.016
7/16-6/17	1.013	1.000	1.000	1.000	1.009



## INDIANA

### APPENDIX B-I

#### 4. Primary Conversion Factors: Indicated Pure Premiums

The factors above, contained within Section A-1, are combined multiplicatively, resulting in the following factors for the Likely-to-Develop (L) and Not-Likely-to-Develop (NL) groupings.

Policy Period	Fatal (L)	Fatal (NL)	P.T.*	P.P. (L)	P.P. (NL)	T.T. (L)	T.T. (NL)	Medical (L)	Medical (NL)
7/12-6/13	0.807	0.798	0.864	0.877	0.868	0.799	0.790	0.817	0.796
7/13-6/14	0.839	0.828	0.887	0.898	0.886	0.829	0.819	0.864	0.842
7/14-6/15	0.899	0.859	0.925	0.931	0.890	0.888	0.848	0.907	0.890
7/15-6/16	1.019	0.914	1.021	1.025	0.919	1.007	0.903	0.931	0.910
7/16-6/17	1.345	1.025	1.327	1.327	1.012	1.327	1.012	0.993	0.937

\* Permanent total losses are always assigned to the Likely-to-Develop grouping.

#### Section A-2 – Expected Excess Provision and Redistribution

After the application of the primary conversion factors, the limited losses are brought to an expected unlimited level through the application of excess loss factors by hazard group. These factors are shown below.

Hazard Group	A	B	C	D	E	F	G
(1) Excess Ratios	0.041	0.058	0.071	0.091	0.116	0.146	0.180
(2) Excess Factors 1/(1-(1))	1.043	1.062	1.076	1.100	1.131	1.171	1.220

As the excess loss factors are on a combined (indemnity and medical) basis, a portion (40%) of the indemnity expected excess losses are redistributed to medical in order to more accurately allocate expected excess losses. Since a portion of the expected excess losses are redistributed in an additive manner, the expected excess factors shown above cannot be combined multiplicatively with either the primary or secondary loss conversion factors.



## INDIANA

### APPENDIX B-I

#### Section A-3 – Calculation of Secondary Conversion Factors

##### 1. Factors to Adjust for Proposed Industry Group Differentials

The following factors are applied to adjust the indicated industry group differentials for the effects of credibility weighting the industry group differentials and weighting the differentials by the latest year expected losses.

	Manufacturing	Contracting	Office and Clerical	Goods and Services	Miscellaneous
(1) Indicated Differentials*	1.004	0.973	1.005	0.990	1.033
(2) Final Differentials**	1.004	0.978	1.004	0.990	1.032
(3) Adjustment (2)/(1)	1.000	1.005	0.999	1.000	0.999

\*See Appendix A-IV, column (13).

\*\*See Appendix A-IV, column (18).

##### 2. Factors to Balance Indicated to Expected Losses

The expected losses are calculated as the pure premium underlying the current rates, adjusted to the proposed level and adjusted for the Experience Rating Plan off-balance. The indicated losses are balanced to the expected losses by applying the following factors.

Policy Period	(1) Adjustment of Indicated Losses to Pure Premium at Proposed Level	(2) Current Ratio of Manual to Standard Premium	(3) Proposed Ratio of Manual to Standard Premium	(4) Off-balance Adjustment (2)/(3)	(5) Balancing Indicated to Expected Losses (1)x(4)
7/12-6/13	0.891	1.090	1.080	1.009	0.899
7/13-6/14	0.907	1.090	1.096	0.995	0.902
7/14-6/15	1.005	1.090	1.109	0.983	0.988
7/15-6/16	0.984	1.090	1.105	0.986	0.970
7/16-6/17	0.983	1.091	1.114	0.979	0.962

##### 3. Adjustment for Experience Change

A factor of 0.954 is applied to adjust for the experience change in the proposed rate level.

##### 4. Factor to Reflect the Proposed Loss-Based Expense Provisions

A factor of 1.161 is applied to include the proposed loss-based expense provisions.

##### 5. Secondary Conversion Factors: Indicated Pure Premiums

The factors above, contained within section A-3, are combined multiplicatively, resulting in the following factors:

Policy Period	Manufacturing	Contracting	Office and Clerical	Goods and Services	Miscellaneous
7/12-6/13	0.996	1.001	0.995	0.996	0.995
7/13-6/14	0.999	1.004	0.998	0.999	0.998
7/14-6/15	1.094	1.100	1.093	1.094	1.093
7/15-6/16	1.074	1.080	1.073	1.074	1.073
7/16-6/17	1.066	1.071	1.064	1.066	1.064



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### APPENDIX B-I

#### Section B – Calculation of Present on Rate Level Pure Premiums

The present on rate level pure premiums are the pure premiums underlying the current rates, adjusted to the proposed level. The data sources for the above-captioned pure premiums are the partial pure premiums underlying the current rates.

##### 1. Adjustment for Experience Change

A factor of 0.954 is applied to adjust for the experience change in the proposed rate level.

##### 2. Factors to Adjust to the Proposed Trend Level

The pure premiums underlying the current rates contain the current trend. The change in trend factors, 1.000 and 0.965, for indemnity and medical, respectively, are applied to adjust to the proposed trend level.

##### 3. Factors to Adjust to the Proposed Benefit Level

The following factors are applied to adjust the pure premiums underlying the current rates to the proposed benefit level.

Effective Date	Indemnity	Medical
October 1, 2018	1.000	1.003
January 1, 2019	1.000	1.002
July 1, 2019	1.001	1.000
Combined Benefit Adjustment	1.001	1.005

##### 4. Factors to Include the Proposed Loss-Based Expense Provisions

The pure premiums underlying the current rates include the current loss-based expense provisions and must be adjusted to the proposed level.

	(a) Current		(b) Proposed	
	Indemnity	Medical	Indemnity	Medical
(1) Loss Adjustment Expense	1.162	1.162	1.161	1.161
(2) Loss-based Assessment	1.0075	1.000	1.000	1.000
(3) = (1) + (2) – 1.000	1.1695	1.162	1.161	1.161
(4) Overall Change (3b)/(3a)			0.993	0.999

##### 5. Adjustment to Obtain Expected Losses

The pure premiums underlying the current rates reflect the current Experience Rating Plan off-balance. The change in off-balance must be applied.

Industry Group	(1) Current Ratio of Manual to Standard Premium	(2) Proposed Ratio of Manual to Standard Premium	(3) Off-balance Adjustment (1)/(2)
Manufacturing	1.120	1.132	0.989
Contracting	1.136	1.133	1.003
Office & Clerical	1.113	1.128	0.987
Goods & Services	1.049	1.064	0.986
Miscellaneous	1.065	1.074	0.992



## INDIANA

### APPENDIX B-I

#### 6. Factors to Adjust for Proposed Industry Group Differentials

The pure premiums underlying the current rates are adjusted by the proposed industry group differentials.

Industry Group	(1) Final Differential*	(2) Adjustment to Proposed for Current Relativities**	(3) Adjusted Differential (1)x(2)
Manufacturing	1.004	1.000	1.004
Contracting	0.978	0.999	0.977
Office & Clerical	1.004	1.001	1.005
Goods & Services	0.990	1.001	0.991
Miscellaneous	1.032	0.998	1.030

\*See Appendix A-IV, column (18).

\*\*See Appendix A-IV, column (10).

#### 7. Combined Conversion Factors

The factors above, contained within Section B, are combined multiplicatively, resulting in the following factors.

Industry Group	Indemnity	Medical
Manufacturing	0.941	0.917
Contracting	0.929	0.905
Office & Clerical	0.940	0.917
Goods & Services	0.926	0.903
Miscellaneous	0.969	0.944



## INDIANA

### APPENDIX B-I

#### Section C – Calculation of National Pure Premiums

Finally, there are the national pure premiums, which reflect the countrywide experience for each classification adjusted to state conditions. These pure premiums reflect the countrywide experience for each classification as indicated by the latest available individual classification experience for all states for which the National Council on Compensation Insurance compiles workers compensation data.

Countrywide data is adjusted to Indiana conditions in four steps. First, statewide indicated pure premiums are determined for Indiana. Second, using Indiana payrolls as weights, corresponding statewide-average pure premiums are computed for each remaining state. Third, the ratios of Indiana statewide pure premiums to those for other states are used as adjustment factors to convert losses for other states to a basis that is consistent with the Indiana indicated pure premiums. The quotient of the countrywide total of such adjusted losses divided by the total countrywide payroll for the classification is the initial pure premium indicated by national relativity. Finally, national pure premiums are balanced to the level of the state indicated pure premiums to ensure unbiased derived by formula pure premiums. Indemnity and medical pure premiums are computed separately.

#### Section D – Calculation of Derived by Formula Pure Premiums

The indicated, present on rate level and national pure premiums are credibility weighted, and the resulting derived by formula pure premiums are used to determine the final class rates.

As for the preceding pure premiums, separate computations are performed for each partial pure premium: indemnity and medical. Each partial formula pure premium is derived by the weighting of the indicated, present on rate level and national partial pure premiums. The weight assigned to the policy year indicated pure premium varies in one-percent intervals from zero percent to one hundred percent, depending upon the volume of expected losses (i.e. the product of the underlying pure premiums and the payroll in hundreds). To achieve full state credibility, a classification must have expected losses of at least: \$20,674,706 for indemnity and \$26,597,520 for medical.

The partial credibilities formula is:

$$z = [ (\text{expected losses}) / (\text{full credibility standard}) ]^{0.5}$$

For the national pure premiums, credibility is determined from the number of lost-time claims. Full credibility standards are: 2,300 lost-time claims for indemnity and 2,000 lost-time claims for medical.

Partial credibilities are assigned using a credibility formula similar to that used for indicated pure premiums but based on the number of national cases. In no case is the national credibility permitted to exceed 50% of the complement of the state credibility.

National Credibility equals the smaller of:

$$[ (\text{national cases}) / (\text{full credibility standard}) ]^{0.5} \text{ and } [ (1 - \text{state credibility}) / 2 ]$$

The residual credibility (100% minus the sum of the state and national credibilities) is assigned to the present on rate level pure premium.

For example, if the state credibility is 40%, the national pure premium is assigned a maximum credibility of 30%  $((100 - 40) / 2)$ . The remainder is assigned to the present on rate level pure premium.

The total pure premium shown on the attached Appendix B-III is obtained by adding the indemnity and medical partial pure premiums obtained above and rounding the sum to two decimal places.



## INDIANA

### APPENDIX B-II

#### Adjustments to Obtain Rates

The following items are combined with the derived by formula pure premium to obtain the proposed rate:

##### 1. Test Correction Factor

The payrolls are now extended by the rates presently in effect and by the indicated rates to determine if the required change in manual premium level as calculated in Exhibit I has been achieved. Since at first this calculation may not yield the required results, an iterative process is initiated which continuously tests the proposed rates including tentative test correction factors until the required change in manual premium level is obtained. The test correction factor is applied to the derived by formula pure premiums.

The factors referred to above are set out as follows:

	Test Correction Factor
Manufacturing	1.0144
Contracting	1.0069
Office & Clerical	0.9862
Goods & Services	1.0055
Miscellaneous	1.0125

##### 2. Ratios of Manual to Standard Premiums

The ratios of manual to standard premiums by industry group have also been excluded from the classification experience, and it is necessary to apply these factors to the derived by formula pure premiums.

	Ratio of Manual to Standard Premiums
Manufacturing	1.132
Contracting	1.133
Office & Clerical	1.128
Goods & Services	1.064
Miscellaneous	1.074

##### 3. Expense Allowance

The expense allowance is introduced into the rate by dividing the product of the proposed pure premium and the appropriate factors above by the proposed target cost ratio of 0.745 (see Exhibit II-A for derivation of this factor). This operation produces the proposed rate prior to the addition of a disease loading, if any.

##### 4. Disease Loadings

The proposed manual rates shown in this filing include specific disease loadings for those classifications where they apply. The proposed specific disease loadings are shown on the footnotes page.





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**APPENDIX B-II**

**5. Swing Limits**

As a further step, a test is made to make certain that the proposed rates fall within the following departures from the present rates:

Manufacturing	from 19% above to 31% below
Contracting	from 16% above to 34% below
Office & Clerical	from 19% above to 31% below
Goods & Services	from 17% above to 33% below
Miscellaneous	from 21% above to 29% below

These limits have been calculated in accordance with the following formula:

Max. Deviation = Effect of the final change in rate level by industry group plus or minus 25% rounded to the nearest 1%.

The product of the swing limits and the present rate sets bounds for the proposed rate. If the calculated rate falls outside of the bounds, the closest bound is chosen as the proposed rate. When a code is limited, the underlying pure premiums are adjusted to reflect the limited rate. The classifications which have been so limited are shown below. Note that classifications that are subject to special handling may fall outside of the swing limits. A code listed below with an asterisk indicates the code's swing limit was adjusted by one cent before being applied; this is only performed when the upper and lower bounds calculated by the swing limit are equal.

An illustrative example showing the calculation of a proposed manual class rate is attached as Appendix B-III. This example demonstrates the manner in which the partial pure premiums are combined to produce a total pure premium, and shows the steps in the calculation at which the rounding takes place. The rates for other classifications are calculated in the same manner.

List of Classifications Limited by the Upper Swing

2021   7016   7024   7047   7152   7711

List of Classifications Limited by the Lower Swing

None



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### APPENDIX B-III

#### Derivation of Proposed Rate - Code 8810

As previously explained in Appendix B-I, the indicated pure premiums are developed by adjusting the limited losses by a set of conversion factors. The converted losses are then summarized into indemnity and medical and then divided by payroll (in hundreds). The derivation of the indicated pure premium for the above-captioned classification follows:

#### LIMITED LOSSES (Workers Compensation Statistical Plan)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
07/01/12 - 06/30/13	0	0	0	948,751	1,328,827	631,783	1,034,574	3,299,336	11,319,937
07/01/13 - 06/30/14	0	27,373	17,389	918,862	1,775,087	405,578	1,097,453	3,163,467	11,347,858
07/01/14 - 06/30/15	0	56,500	0	1,509,073	1,311,018	645,109	775,470	4,176,608	10,232,802
07/01/15 - 06/30/16	0	15,000	312,816	509,687	1,570,094	638,021	979,741	3,391,886	9,509,283
07/01/16 - 06/30/17	0	498,619	20,081	280,329	1,177,666	372,703	1,137,681	1,902,100	11,136,182

#### PRIMARY CONVERSION FACTORS (Appendix B-I, Section A-1)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
07/01/12 - 06/30/13	0.807	0.798	0.864	0.877	0.868	0.799	0.790	0.817	0.796
07/01/13 - 06/30/14	0.839	0.828	0.887	0.898	0.886	0.829	0.819	0.864	0.842
07/01/14 - 06/30/15	0.899	0.859	0.925	0.931	0.890	0.888	0.848	0.907	0.890
07/01/15 - 06/30/16	1.019	0.914	1.021	1.025	0.919	1.007	0.903	0.931	0.910
07/01/16 - 06/30/17	1.345	1.025	1.327	1.327	1.012	1.327	1.012	0.993	0.937

#### EXPECTED EXCESS PROVISION AND REDISTRIBUTION (Appendix B-I, Section A-2)

After the application of the primary conversion factors, the limited losses are brought to an expected unlimited level through the application of a hazard group-specific excess loss factor. The factor is shown below:

	HAZARD GROUP: C
Excess Factor	1.076

As the excess loss factor is on a combined (indemnity and medical) basis, the following portion of the indemnity expected excess losses are redistributed to medical in order to more accurately allocate expected excess losses:

Redistribution %	40%
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## INDIANA

### APPENDIX B-III

#### Derivation of Proposed Rate - Code 8810

#### EXPECTED UNLIMITED LOSSES (Limited Losses x Primary Conversion Factors, then adjusted for the Excess Provision and Redistribution)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
07/01/12 - 06/30/13	0	0	0	870,210	1,206,313	527,943	854,791	2,942,437	9,759,568
07/01/13 - 06/30/14	0	23,704	16,131	862,975	1,644,846	351,642	940,030	2,978,101	10,361,390
07/01/14 - 06/30/15	0	50,759	0	1,469,372	1,220,311	599,126	687,754	4,138,162	9,860,480
07/01/15 - 06/30/16	0	14,339	334,030	546,385	1,509,082	671,949	925,275	3,444,564	9,386,375
07/01/16 - 06/30/17	0	534,520	27,869	389,055	1,246,449	517,256	1,204,128	2,060,444	11,319,336

#### SECONDARY CONVERSION FACTORS (Appendix B-I, Section A-3)

Policy Period	INDUSTRY GROUP: Office and Clerical
07/01/12 - 06/30/13	0.995
07/01/13 - 06/30/14	0.998
07/01/14 - 06/30/15	1.093
07/01/15 - 06/30/16	1.073
07/01/16 - 06/30/17	1.064

#### PAYROLL, FINAL CONVERTED LOSSES (Expected Unlimited Losses x Secondary Conversion Factors)

Policy Period	Payroll	Indemnity Likely	Indemnity Not-Likely	Medical Likely	Medical Not-Likely	Total Indemnity	Total Medical	Total
07/01/12 - 06/30/13	21,491,617,892	1,391,162	2,050,798	2,927,725	9,710,770	3,441,960	12,638,495	16,080,455
07/01/13 - 06/30/14	22,003,422,021	1,228,287	2,603,363	2,972,145	10,340,667	3,831,650	13,312,812	17,144,462
07/01/14 - 06/30/15	23,064,798,371	2,260,868	2,140,995	4,523,011	10,777,505	4,401,863	15,300,516	19,702,379
07/01/15 - 06/30/16	24,132,979,363	1,665,687	2,627,451	3,696,017	10,071,580	4,293,138	13,767,597	18,060,735
07/01/16 - 06/30/17	24,781,298,668	993,968	3,176,143	2,192,312	12,043,774	4,170,111	14,236,086	18,406,197
Total	115,474,116,315	7,539,972	12,598,750	16,311,210	52,944,296	20,138,722	69,255,506	89,394,228
<b>INDICATED PURE PREMIUM</b>						<b>0.017</b>	<b>0.060</b>	<b>0.08</b>

The present on rate level pure premiums are developed by adjusting the pure premiums underlying the current rate by the conversion factors calculated in Appendix B-I. The derivation of the present on rate level pure premiums for the above-captioned classification follows:

	Indemnity	Medical	Total
Pure Premiums Underlying Current Rate	0.015	0.065	0.08
Conversion Factors (App. B-I, Section B)	0.940	0.917	xxx
<b>PURE PREMIUMS PRESENT ON RATE LEVEL</b>			
<b>(Underlying Pure Premiums) x (Conversion Factor)</b>	0.014	0.060	0.07



## INDIANA

### APPENDIX B-III

#### Derivation of Proposed Rate - Code 8810 Industry Group - Office and Clerical, Hazard Group - C

The rate for the above-captioned classification is derived as follows:

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Indicated Pure Premium	0.017	0.060	0.08
2. Pure Premium Indicated by National Relativity	0.015	0.048	0.06
3. Pure Premium Present on Rate Level	0.014	0.060	0.07
4. State Credibilities	89%	100%	xxx
5. National Credibilities	5%	0%	xxx
6. Residual Credibilities = 100% - (4) - (5)	6%	0%	xxx
7. Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	0.017	0.060	0.08
8. Test Correction Factor	0.9862	0.9862	xxx
9. Underlying Pure Premiums = (7) x (8) *	0.021	0.059	0.08
10. Ratio of Manual to Standard Premium			1.128
11. Target Cost Ratio			0.745
12. Rate = (9) x (10) / (11)			0.12
13. Rate Within Swing Limits			0.12
Current Rate x Swing Limits			
a) Lower bound = 0.12 x 0.690 = 0.09			
b) Upper bound = 0.12 x 1.190 = 0.14			
14. Pure Premiums Underlying Proposed Rate* = ((14TOT) / (9TOT)) x (9) ; (14TOT) = (13) x (11) / (10)	0.021	0.059	0.08
15. Disease, Catastrophe and/or Miscellaneous Loadings			0.00
16. Final Loaded Rate			0.12

\* Indemnity pure premium is adjusted for the rounded total pure premium:  
Indemnity Pure Premium = Total Pure Premium - Medical Pure Premium



## INDIANA

### APPENDIX B-IV

#### I. Determination and Distribution of Premium Level Change to “F” Classifications

The Workers Compensation Statistical Plan (WCSP) data is used to determine the overall “F” classifications (F-class) premium level change as well as the individual change by the various classifications. There are three sets of pure premiums for each classification: indicated, present on rate level, and national pure premiums. All sets of pure premiums are adjusted to the common proposed level that is explained further in this exhibit. These three sets of pure premiums are credibility weighted and the results, the derived by formula pure premiums, are adjusted for additional proposed components (Section II) to determine the indicated rates. The payrolls are extended by the rates presently in effect and by the indicated rates. The rates are limited to the swing limits based on 25% above and 25% below the current rates. This results in the indicated rate level change of -6.4%.

#### Section A – Calculation of F-Class Indicated Pure Premiums

The payroll and loss data reported are from the WCSP data by class code for the latest available five policy periods.

##### Section A-1 – Calculation of Primary Conversion Factors

##### 1. Factors to Adjust to the Proposed Benefit Levels

The state and federal losses are adjusted to the proposed state and federal benefit levels, respectively.

###### STATE ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/12 - 12/12	1.080	1.157	1.174	1.069	0.960
1/13 - 12/13	1.078	1.151	1.167	1.067	0.968
1/14 - 12/14	1.056	1.103	1.113	1.045	1.014
1/15 - 12/15	1.034	1.050	1.054	1.022	1.018
1/16 - 12/16	1.017	1.007	1.008	1.004	1.014

###### FEDERAL ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/12 - 12/12	1.000	1.000	1.000	1.000	1.000
1/13 - 12/13	1.000	1.000	1.000	1.000	1.000
1/14 - 12/14	1.000	1.000	1.000	1.000	1.000
1/15 - 12/15	1.000	1.000	1.000	1.000	1.000
1/16 - 12/16	1.000	1.000	1.000	1.000	1.000

##### 2. Factors to Adjust to the Proposed Trend Level

The following factors are applied to trend the losses in each policy year to the proposed rating year. The selected annual trends utilized were 0.960 and 0.975 for indemnity and medical, respectively.

Policy Period	Indemnity	Medical
1/12 - 12/12	0.721	0.817
1/13 - 12/13	0.751	0.838
1/14 - 12/14	0.783	0.859
1/15 - 12/15	0.815	0.881
1/16 - 12/16	0.849	0.904



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### APPENDIX B-IV

#### Section A-1 Calculation of Primary Conversion Factors (continued)

##### 3. Limited Loss Development Factors

The following factors are applied to develop the losses from first through fifth report to an ultimate basis utilizing countrywide data.

Policy Period	Indemnity		Medical	
	Likely-to-Develop	Not-Likely-to-Develop	Likely-to-Develop	Not-Likely-to-Develop
1/12 - 12/12	1.096	1.034	1.192	1.025
1/13 - 12/13	1.141	1.045	1.237	1.020
1/14 - 12/14	1.329	1.095	1.288	1.044
1/15 - 12/15	1.528	1.241	1.435	1.071
1/16 - 12/16	2.480	1.785	1.703	1.136

##### 4. Primary Conversion Factors = (1) x (2) x (3)

The factors above contained within Section A-1, are combined multiplicatively, resulting in the following factors for the Likely-to-Develop (L) and Not-Likely-to-Develop (NL) groupings.

##### STATE ACT

Policy Period	Fatal (L)	Fatal (NL)	P.T.*	P.P. (L)	P.P. (NL)	T.T. (L)	T.T. (NL)	Medical (L)	Medical (NL)
1/12 - 12/12	0.853	0.805	0.914	0.928	0.875	0.845	0.797	0.935	0.804
1/13 - 12/13	0.924	0.846	0.986	1.000	0.916	0.914	0.837	1.003	0.827
1/14 - 12/14	1.099	0.905	1.148	1.158	0.954	1.087	0.896	1.122	0.909
1/15 - 12/15	1.288	1.046	1.308	1.313	1.066	1.273	1.034	1.287	0.961
1/16 - 12/16	2.141	1.541	2.120	2.122	1.528	2.114	1.522	1.561	1.041

##### FEDERAL ACT

Policy Period	Fatal (L)	Fatal (NL)	P.T.*	P.P. (L)	P.P. (NL)	T.T. (L)	T.T. (NL)	Medical (L)	Medical (NL)
1/12 - 12/12	0.790	0.746	0.790	0.790	0.746	0.790	0.746	0.974	0.837
1/13 - 12/13	0.857	0.785	0.857	0.857	0.785	0.857	0.785	1.037	0.855
1/14 - 12/14	1.041	0.857	1.041	1.041	0.857	1.041	0.857	1.106	0.897
1/15 - 12/15	1.245	1.011	1.245	1.245	1.011	1.245	1.011	1.264	0.944
1/16 - 12/16	2.106	1.515	2.106	2.106	1.515	2.106	1.515	1.540	1.027

\* Permanent Total losses are always assigned to the Likely-to-Develop grouping.



## INDIANA

### APPENDIX B-IV

#### Section A-2 – Expected Excess Provision and Redistribution

To reduce distortions in individual class rate indications, individual claim amounts are subject to a maximum limit of \$500,000. Multiple claim accidents are limited to three times the individual claim loss limitation. After the application of the primary conversion factors, the limited losses are brought to an expected unlimited level through the application of excess loss factors by hazard group. These factors are shown below.

Hazard Group	A	B	C	D	E	F	G
(1) Excess Ratios	0.041	0.058	0.071	0.091	0.116	0.146	0.180
(2) Excess Factors 1/(1-(1))	1.043	1.062	1.076	1.100	1.131	1.171	1.220

As the excess loss factors are on a combined (indemnity and medical) basis, a portion (40%) of the indemnity expected excess losses are redistributed to medical in order to more accurately allocate expected excess losses. Since a portion of the expected excess losses are redistributed in an additive manner, the expected excess factors shown above cannot be combined multiplicatively with either the primary or secondary loss conversion factors.

#### Section A-3 – Calculation of Secondary Conversion Factors

The following factors are applied to include the proposed loss-based expenses. The state losses are adjusted to reflect the proposed loss-based expenses. The federal losses are adjusted to reflect the proposed USL&HW Special Fund Assessment and loss adjustment expense. The combined\*\* factors are based on a combined indemnity and medical loss-weighted average of the above loss-based expenses by policy period.

Policy Period	State Act	Federal Act
1/12 - 12/12	1.161	1.182
1/13 - 12/13	1.161	1.198
1/14 - 12/14	1.161	1.179
1/15 - 12/15	1.161	1.181
1/16 - 12/16	1.161	1.161

\*\* See Section B.3 for the indemnity and medical breakdown of the proposed loss-based expenses.



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**Section B – Present on Rate Level**

**1. Benefits**

The underlying pure premiums are adjusted by the weighted impact of the proposed state and federal benefit levels. The distribution of state and federal losses was used to determine the weighted effects.

State Weight (St%)	0.235
Federal Weight (Fed%)	0.765

	Indemnity	Medical	Total
(a) State Laws	1.001	1.005	1.003
(b) Federal Laws	1.000	1.000	1.000
(c) Weighted Laws = [(a)xSt%] + [(b)xFed%]	1.000	1.001	1.001

**2. Trend**

Since the trend in the current underlying pure premiums is adequate for the current rating year, additional trend is applied to bring the underlyings to the proposed rating year.

Indemnity	Medical
0.959	0.974





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**APPENDIX B-IV**

**Section B – Present on Rate Level (continued)**

**3. Loss-Based Expenses**

The current underlying pure premiums are adjusted to reflect the change in the weighted effect of the loss-based expense provisions.

Proposed:

STATE ACT			
	Indemnity	Medical	Total
(a) Loss Adjustment Expense	1.161	1.161	1.161
(b) Loss-Based Assessment	1.000	1.000	1.000
(c) Total = (a) + (b) - 1	1.161	1.161	1.161

FEDERAL ACT			
	Indemnity	Medical	Total
(d) Loss Adjustment Expense	1.161	1.161	1.161
(e) Loss-Based Assessment	1.120	1.000	1.068
(f) Total = (d) + (e) - 1	1.281	1.161	1.229

	Indemnity	Medical	Total
(g) Weighted Proposed Expenses = [(c) x St%] + [(f) x Fed%]	1.253	1.161	1.213

Current:

STATE ACT			
	Indemnity	Medical	Total
(h) Loss Adjustment Expense	1.162	1.162	1.162
(i) Loss-Based Assessment	1.0075	1.000	1.002
(j) Total = (h) + (i) - 1	1.1695	1.162	1.164

FEDERAL ACT			
	Indemnity	Medical	Total
(k) Loss Adjustment Expense	1.162	1.162	1.162
(l) Loss-Based Assessment	1.113	1.000	1.065
(m) Total = (k) + (l) - 1	1.275	1.162	1.227

	Indemnity	Medical	Total
(n) Weighted Current Expenses = [(j) x St%] + [(m) x Fed%]	1.250	1.162	1.212

Change:

	Indemnity	Medical	Total
Weighted Expense Change in Loss-Based Expenses = [(g) / (n)]	1.002	0.999	1.001

**4. Conversion Factors = (1) x (2) x (3)**

The factors have been applied multiplicatively resulting in the following factors.

Indemnity	Medical
0.961	0.974



## INDIANA

### APPENDIX B-IV

#### Section C – National Pure Premiums

The latest three years of state and federal losses for states in which NCCI compiles workers compensation data are separately adjusted to the same level as the indicated and present on rate level pure premiums.

#### Class Code 9077

For Code 9077, the indicated, national and present on rate level pure premiums were calculated as described previously in Sections A, B and C but using the non-appropriated benefit changes and the federal loss-based expenses.

#### Section D – Derived by Formula Pure Premiums

The derived by formula pure premiums are calculated by a process similar to that of the industrial codes, which is described in Appendix B-I, Section D. To achieve full state credibility, a classification must have expected losses of at least: \$117,062,000 for indemnity and \$53,131,200 for medical.

### II. Calculation of Proposed Rates

The following items are combined with the derived by formula pure premiums to obtain the proposed rate:

<b>A. Test Correction Factor</b>	<b>1.0000</b>
<b>B. Ratio of Manual Premium to Earned Premium</b> (determined on a countrywide basis)	<b>1.230</b>
<b>C. Expense Allowance</b>	<b>0.745</b>

The expense allowance is introduced into the rate by dividing the product of the proposed pure premiums and the appropriate factors above by the proposed target cost ratio.

#### D. Swing Limits

No classifications were adjusted on account of swing limits.



# INDIANA

## APPENDIX B-IV

### Derivation of Proposed Rate - Code 7313

The indicated pure premiums are developed by adjusting the limited losses by a set of conversion factors. The converted losses are then summarized into indemnity and medical and then divided by payroll (in hundreds). The derivation of the indicated pure premium for the above-captioned classification follows:

#### STATE ACT - LIMITED LOSSES (Workers Compensation Statistical Plan)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/12 - 12/31/12	0	0	0	0	0	0	0	0	257
01/01/13 - 12/31/13	0	0	0	0	0	0	0	0	133
01/01/14 - 12/31/14	0	0	0	0	0	0	0	0	0
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	0
01/01/16 - 12/31/16	0	0	0	0	0	0	0	0	0

#### FEDERAL ACT - LIMITED LOSSES (Workers Compensation Statistical Plan)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/12 - 12/31/12	0	0	0	0	0	0	0	0	0
01/01/13 - 12/31/13	0	0	0	0	0	0	0	0	0
01/01/14 - 12/31/14	0	0	0	0	0	0	0	0	0
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	0
01/01/16 - 12/31/16	0	0	0	0	0	0	0	0	3,664

#### STATE ACT - PRIMARY CONVERSION FACTORS (Appendix B-IV, Section A-1)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/12 - 12/31/12	0.853	0.805	0.914	0.928	0.875	0.845	0.797	0.935	0.804
01/01/13 - 12/31/13	0.924	0.846	0.986	1.000	0.916	0.914	0.837	1.003	0.827
01/01/14 - 12/31/14	1.099	0.905	1.148	1.158	0.954	1.087	0.896	1.122	0.909
01/01/15 - 12/31/15	1.288	1.046	1.308	1.313	1.066	1.273	1.034	1.287	0.961
01/01/16 - 12/31/16	2.141	1.541	2.120	2.122	1.528	2.114	1.522	1.561	1.041

#### FEDERAL ACT - PRIMARY CONVERSION FACTORS (Appendix B-IV, Section A-1)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/12 - 12/31/12	0.790	0.746	0.790	0.790	0.746	0.790	0.746	0.974	0.837
01/01/13 - 12/31/13	0.857	0.785	0.857	0.857	0.785	0.857	0.785	1.037	0.855
01/01/14 - 12/31/14	1.041	0.857	1.041	1.041	0.857	1.041	0.857	1.106	0.897
01/01/15 - 12/31/15	1.245	1.011	1.245	1.245	1.011	1.245	1.011	1.264	0.944
01/01/16 - 12/31/16	2.106	1.515	2.106	2.106	1.515	2.106	1.515	1.540	1.027



## INDIANA

### APPENDIX B-IV

#### Derivation of Proposed Rate - Code 7313

##### EXPECTED EXCESS PROVISION AND REDISTRIBUTION (Appendix B-IV, Section A-2)

After the application of the primary conversion factors, the limited losses are brought to an expected unlimited level through the application of a hazard group-specific excess loss factor. The factor is shown below:

HAZARD GROUP: G	
Excess Factor	1.220

As the excess loss factor is on a combined (indemnity and medical) basis, the following portion of the indemnity expected excess losses are redistributed to medical in order to more accurately allocate expected excess losses:

Redistribution %	40%
------------------	-----

##### STATE ACT - EXPECTED UNLIM LOSSES (Lim Losses x Primary Conv Factors, then adjusted for the Excess Provision and Redistribution)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/12 - 12/31/12	0	0	0	0	0	0	0	0	252
01/01/13 - 12/31/13	0	0	0	0	0	0	0	0	134
01/01/14 - 12/31/14	0	0	0	0	0	0	0	0	0
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	0
01/01/16 - 12/31/16	0	0	0	0	0	0	0	0	0

##### FEDERAL ACT - EXPECTED UNLIM LOSSES (Lim Losses x Primary Conv Factors, then adjusted for the Excess Provision and Redistribution)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/12 - 12/31/12	0	0	0	0	0	0	0	0	0
01/01/13 - 12/31/13	0	0	0	0	0	0	0	0	0
01/01/14 - 12/31/14	0	0	0	0	0	0	0	0	0
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	0
01/01/16 - 12/31/16	0	0	0	0	0	0	0	0	4,589

##### STATE ACT - SECONDARY CONVERSION FACTORS (Appendix B-IV, Section A-3)

Policy Period	INDUSTRY GROUP: F-Class
01/01/12 - 12/31/12	1.161
01/01/13 - 12/31/13	1.161
01/01/14 - 12/31/14	1.161
01/01/15 - 12/31/15	1.161
01/01/16 - 12/31/16	1.161

##### FEDERAL ACT - SECONDARY CONVERSION FACTORS (Appendix B-IV, Section A-3)

Policy Period	INDUSTRY GROUP: F-Class
01/01/12 - 12/31/12	1.182
01/01/13 - 12/31/13	1.198
01/01/14 - 12/31/14	1.179
01/01/15 - 12/31/15	1.181
01/01/16 - 12/31/16	1.161



# INDIANA

## APPENDIX B-IV

### Derivation of Proposed Rate - Code 7313

#### TOTAL - PAYROLL, FINAL CONVERTED LOSSES

Policy Period	Payroll	Indemnity Likely	Indemnity Not-Likely	Medical Likely	Medical Not-Likely	Total Indemnity	Total Medical	Total
01/01/12 - 12/31/12	1,622,349	0	0	0	293	0	293	293
01/01/13 - 12/31/13	3,468,127	0	0	0	156	0	156	156
01/01/14 - 12/31/14	4,573,466	0	0	0	0	0	0	0
01/01/15 - 12/31/15	2,981,817	0	0	0	0	0	0	0
01/01/16 - 12/31/16	2,524,417	0	0	0	5,328	0	5,328	5,328
Total	15,170,176	0	0	0	5,777	0	5,777	5,777
INDICATED PURE PREMIUM						0.000	0.038	0.04

The present on rate level pure premiums are developed by adjusting the pure premiums underlying the current rate by the conversion factors. The derivation of the present on rate level pure premiums for the above-captioned classification follows:

	Indemnity	Medical	Total
Pure Premiums Underlying Current Rate	1.158	1.452	2.61
Conversion Factors (Section B)	0.961	0.974	xxx
<b>PURE PREMIUMS PRESENT ON RATE LEVEL</b>			
<b>(Underlying Pure Premiums) x (Conversion Factor)</b>	1.113	1.414	2.53



## INDIANA

### APPENDIX B-IV

#### Derivation of Proposed Rate - Code 7313

Industry Group - F-Class, Hazard Group - G

The rate for the above-captioned classification is derived as follows:

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Indicated Pure Premium	0.000	0.038	0.04
2. Pure Premium Indicated by National Relativity	1.642	1.681	3.32
3. Pure Premium Present on Rate Level	1.113	1.414	2.53
4. State Credibilities	4%	6%	xxx
5. National Credibilities	13%	14%	xxx
6. Residual Credibilities = 100% - (4) - (5)	83%	80%	xxx
7. Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	1.137	1.369	2.51
8. Test Correction Factor	1.0000	1.0000	xxx
9. Underlying Pure Premiums = (7) x (8) *	1.141	1.369	2.51
10. Ratio of Manual to Standard Premium			1.230
11. Target Cost Ratio			0.745
12. Rate = (9) x (10) / (11)			4.14
13. Rate Within Swing Limits			4.14
Current Rate x Swing Limits			
a) Lower bound = 4.25 x 0.750 = 3.19			
b) Upper bound = 4.25 x 1.250 = 5.31			
14. Pure Premiums Underlying Proposed Rate* = ((14TOT) / (9TOT)) x (9) ; (14TOT) = (13) x (11) / (10)	1.141	1.369	2.51
15. Disease, Catastrophe and/or Miscellaneous Loadings			0.00
16. Final Loaded Rate			4.14

\* Indemnity pure premium is adjusted for the rounded total pure premium:

Indemnity Pure Premium = Total Pure Premium - Medical Pure Premium



## INDIANA

### APPENDIX B-V

#### Derivation of Proposed Traumatic Rate - Code 1016

As previously explained in Appendix B-I, the indicated pure premiums are developed by adjusting the limited losses by a set of conversion factors. The converted losses are then summarized into indemnity and medical and then divided by payroll (in hundreds). The derivation of the indicated pure premium for classification 1016 follows:

#### LIMITED LOSSES (Workers Compensation Statistical Plan)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
07/01/12 - 06/30/13	0	332,500	0	597,261	387,073	0	125,281	459,647	1,301,621
07/01/13 - 06/30/14	0	0	0	325,137	207,321	3,807	80,212	220,031	1,181,593
07/01/14 - 06/30/15	0	0	0	151,312	390,756	0	64,956	391,637	957,185
07/01/15 - 06/30/16	0	0	0	85,441	141,308	25,162	77,332	230,553	529,777
07/01/16 - 06/30/17	0	0	0	254,892	219,457	30,890	49,560	684,341	796,133

#### PRIMARY PARTIAL CONVERSION FACTORS (Appendix B-I, Section A-1)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
07/01/12 - 06/30/13	0.807	0.798	0.864	0.877	0.868	0.799	0.790	0.817	0.796
07/01/13 - 06/30/14	0.839	0.828	0.887	0.898	0.886	0.829	0.819	0.864	0.842
07/01/14 - 06/30/15	0.899	0.859	0.925	0.931	0.890	0.888	0.848	0.907	0.890
07/01/15 - 06/30/16	1.019	0.914	1.021	1.025	0.919	1.007	0.903	0.931	0.910
07/01/16 - 06/30/17	1.345	1.025	1.327	1.327	1.012	1.327	1.012	0.993	0.937

#### EXPECTED EXCESS PROVISION AND REDISTRIBUTION (Appendix B-I, Section A-2)

After the application of the primary conversion factors, the limited losses are brought to an expected unlimited level through the application of a hazard group-specific excess loss factor. The factor is shown below:

	HAZARD GROUP: G
Excess Factor	1.220

As the excess loss factor is on a combined (indemnity and medical) basis, the following portion of the indemnity expected excess losses are redistributed to medical in order to more accurately allocate expected excess losses:

Redistribution %	40%
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## INDIANA

### APPENDIX B-V

#### Derivation of Proposed Traumatic Rate - Code 1016

#### EXPECTED UNLIMITED LOSSES (Limited Losses x Primary Conversion Factors, then adjusted for the Excess Provision and Redistribution)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
07/01/12 - 06/30/13	0	300,281	0	592,786	380,230	0	112,008	503,958	1,325,012
07/01/13 - 06/30/14	0	0	0	330,428	207,879	3,572	74,347	257,752	1,235,191
07/01/14 - 06/30/15	0	0	0	159,425	393,577	0	62,338	445,558	1,074,268
07/01/15 - 06/30/16	0	0	0	99,111	146,966	28,675	79,028	271,676	605,457
07/01/16 - 06/30/17	0	0	0	382,791	251,341	46,390	56,761	862,019	933,632

#### SECONDARY PARTIAL CONVERSION FACTOR (Loss-based expense, if applicable)

	Indemnity	Medical
Loss Based Expense	1.161	1.161

#### PAYROLL, FINAL CONVERTED LOSSES (Expected Unlimited Losses x Loss-Based Expenses, if applicable)

Policy Period	Payroll	Indemnity Likely	Indemnity Not-Likely	Medical Likely	Medical Not-Likely	Total Indemnity	Total Medical	Total
07/01/12 - 06/30/13	106,988,102	688,225	920,115	585,095	1,538,339	1,608,339	2,123,434	3,731,773
07/01/13 - 06/30/14	78,438,249	387,774	327,664	299,250	1,434,057	715,438	1,733,307	2,448,745
07/01/14 - 06/30/15	86,001,423	185,092	529,317	517,293	1,247,225	714,410	1,764,518	2,478,928
07/01/15 - 06/30/16	70,495,318	148,360	262,379	315,416	702,936	410,739	1,018,351	1,429,090
07/01/16 - 06/30/17	68,907,395	498,279	357,706	1,000,804	1,083,947	855,986	2,084,751	2,940,736
Total	410,830,487	1,907,730	2,397,182	2,717,858	6,006,503	4,304,911	8,724,361	13,029,273
<b>INDICATED PURE PREMIUM</b>						<b>1.048</b>	<b>2.124</b>	<b>3.17</b>

The present on rate level pure premiums are developed by adjusting the pure premiums underlying the current rate by the conversion factors calculated in Appendix B-I. The derivation of the present on rate level pure premiums for the above-captioned classification follows:

	Indemnity	Medical	Total
Pure Premiums Underlying Current Rate	1.395	2.535	3.93
Conversion Factors *	0.994	0.969	xxx
<b>PURE PREMIUMS PRESENT ON RATE LEVEL</b> <b>(Underlying Pure Premiums) x (Conversion Factor)</b>	<b>1.387</b>	<b>2.456</b>	<b>3.84</b>

\* Conversion factors only adjust for changes in trend, benefit, and if applicable, loss-based expense provision.





## INDIANA

### APPENDIX B-V

#### Derivation of Proposed Traumatic Rate - Code 1016

COAL MINING—NOC, Hazard Group - G

The traumatic rate for classification 1016 is derived as follows:

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Indicated Pure Premium	1.048	2.124	3.17
2. Pure Premium Indicated by National Relativity	2.055	3.191	5.25
3. Pure Premium Present on Rate Level	1.387	2.456	3.84
4. State Credibilities†	36%	55%	xxx
5. National Credibilities	32%	22%	xxx
6. Residual Credibilities = 100% - (4) - (5)	32%	23%	xxx
7. Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	1.479	2.435	3.91
8. Voluntary Offset	1.000	1.000	xxx
9. Underlying Pure Premiums = (7) x (8) *	1.475	2.435	3.91
10. Ratio of Manual to Standard Premium			1.074
11. Target Cost Ratio			0.745
12. Rate = (9) x (10) / (11)			5.64
13. Rate Within Swing Limits			5.64
Current Rate x Swing Limits			
a) Lower bound = 5.60 x 0.75 = 4.20			
b) Upper bound = 5.60 x 1.25 = 7.00			
14. Pure Premiums Underlying Proposed Rate* = ((14TOT) / (9TOT)) x (9) ; (14TOT) = (13) x (11) / (10)	1.475	2.435	3.91
15. Proposed Traumatic Rate			5.64
16. Proposed Traumatic Loss Cost = (15) x 0.745 #			4.20

† To achieve full state credibility, the classification must have expected losses of at least: \$44,449,164 for indemnity, and \$32,892,580 for medical.

\* Indemnity pure premium is adjusted for the rounded total pure premium:

Indemnity Pure Premium = Total Pure Premium - Medical Pure Premium

# 0.745 = Factor to convert from Traumatic Rate to Traumatic Loss Costs



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Appendix C – Memoranda for Laws and Assessments**

Appendix C provides details on changes affecting workers compensation benefit costs that are not yet reflected in the on-level factors shown in Appendix A-I. Such changes may result from legislative changes to the maximum weekly wage used for calculating benefits along with changes to the awards per degree of permanent partial impairment, changes to medical reimbursement levels, or other changes that directly affect worker compensation benefit levels. In addition, changes to the administration of the workers compensation system, including benefit levels, may result from specific regulatory, legislative, or judicial action. The overall effect of benefit changes displayed in Appendix C is calculated as of the benefit effective date, which may differ from the overall impact on the filing as shown in the Executive Summary.

The following changes affecting Indiana benefit levels are detailed in this section of the filing:

- Annual Update to the Medical Fee Schedule
- House Bill 1182 (Change in Maximum Burial Expense), Effective July 1, 2019
- Longshore and Harbor Workers' Compensation Act Annual Assessment



## Indiana

### Appendix C-I

#### **ANALYSIS OF INDIANA MEDICAL FEE SCHEDULE CHANGES EFFECTIVE OCTOBER 1, 2018 AND JANUARY 1, 2019**

**NCCI estimates that the changes to the medical fee schedules in Indiana, effective October 1, 2018 and January 1, 2019, will result in impacts of +0.2% and +0.1%, respectively, on overall workers compensation system costs.**

#### **SUMMARY OF CHANGES**

The Indiana medical fee schedule changes are described below:

- Maximum reimbursement for Hospital Inpatient services was updated to 200% of Medicare's 2019 Inpatient Prospective Payment System (IPPS), effective October 1, 2018. Previously, maximum reimbursement for Hospital Inpatient services was 200% of Medicare's 2018 IPPS.
- Maximum reimbursement for Hospital Outpatient services was updated to 200% of Medicare's 2019 Outpatient Prospective Payment System (OPPS), effective January 1, 2019. Previously, maximum reimbursement for Hospital Outpatient services was 200% of Medicare's 2018 OPPS.

#### **ACTUARIAL ANALYSIS**

NCCI's methodology to evaluate the impact of medical fee schedule changes includes three major steps:

1. Calculate the percentage change in maximum reimbursements
  - Compare the prior and revised maximum reimbursements by procedure code and determine the percentage change by procedure code.
  - Calculate the weighted-average percentage change in maximum reimbursements for the fee schedule using observed payments by procedure code as weights.
2. Estimate the price level change as a result of the revised fee schedule
  - NCCI research by David Colón and Paul Hendrick, "The Impact of Fee Schedule Updates on Physician Payments" (2018), suggests that approximately 80% of the change in maximum reimbursements for physician fee schedules is realized on payments impacted by the change. For non-physician fee schedule changes, a price realization factor of 80% is assumed.
3. Determine the share of costs that are subject to the fee schedule
  - The share is based on a combination of fields, such as procedure code, provider type, and place of service, as reported on the NCCI Medical Data Call, to categorize payments that are subject to the fee schedule.



## Indiana

### Appendix C-I

#### **ANALYSIS OF INDIANA MEDICAL FEE SCHEDULE CHANGES EFFECTIVE OCTOBER 1, 2018 AND JANUARY 1, 2019**

- The share is calculated as the greater of the percent of observed payments with a maximum allowable reimbursement (MAR) or 75%. NCCI assumes no change for the share of costs not subject to the fee schedule.

In this analysis, NCCI relies primarily on two data sources:

- Detailed medical data underlying the calculations in this analysis are based on NCCI's Medical Data Call for Indiana for Service Year 2017.
- The share of benefit costs attributed to medical benefits is based on NCCI's Financial Call data for Indiana from Policy Years 2015 and 2016 projected to the effective date of the benefit changes.

#### *Hospital Inpatient Fee Schedule*

In Indiana, payments for hospital inpatient services represent 10.0% of total medical costs. Of these payments, 59.5% have a MAR. The overall change in maximums for hospital inpatient services is a weighted average of the percentage change in MAR by episode (Revised MAR/Prior MAR). The weights are based on Service Year 2017 observed payments by episode for Indiana, as reported on NCCI's Medical Data Call. The overall weighted-average percentage change in maximums for hospital inpatient services is +3.5%.

A price realization factor of 80% was applied. The impact on hospital inpatient payments after applying the price realization factor is +2.8% ( $= +3.5\% \times 0.80$ ).

The above impact of +2.8% is then multiplied by the percentage of medical costs attributed to hospital inpatient payments in Indiana (10.0%) to arrive at an impact of +0.3% on medical costs. This is then multiplied by the percentage of benefit costs attributed to medical benefits in Indiana (72%) to arrive at an impact of +0.2% on overall workers compensation costs.

#### *Hospital Outpatient Fee Schedule*

In Indiana, payments for hospital outpatient services represent 16.9% of total medical payments. Of these payments, 81.5% have a MAR. The overall change in maximums for hospital outpatient services is a weighted average of the percentage change in MAR by procedure code (Revised MAR/Prior MAR). The weights are based on Service Year 2017 observed payments by procedure code for Indiana, as reported on NCCI's Medical Data Call. The overall weighted-average percentage change in maximums for hospital outpatient services is +1.8%.

A price realization factor of 80% was applied. The impact on hospital outpatient payments after applying the price realization factor is +1.4% ( $= +1.8\% \times 0.80$ ).



## Indiana

### Appendix C-I

#### ANALYSIS OF INDIANA MEDICAL FEE SCHEDULE CHANGES EFFECTIVE OCTOBER 1, 2018 AND JANUARY 1, 2019

The above impact of +1.4% is then multiplied by the percentage of medical costs attributed to hospital outpatient payments in Indiana (16.9%) to arrive at an impact of +0.2% on medical costs. This is then multiplied by the percentage of benefit costs attributed to medical benefits in Indiana (73%) to arrive at an impact of +0.1% on overall workers compensation costs.

Note that Medicare rules for outpatient services contain a comprehensive payment policy that packages payment for adjunctive and secondary items, services, and procedures into the primary procedure under certain circumstances. For this analysis, the experience is aggregated according to the packaging rules reflected under Medicare, if applicable.

#### SUMMARY OF IMPACTS

The impacts from the medical fee schedule changes in Indiana are summarized in the following table:

Effective Date	Type of Service	(A) Impact on Type of Service	(B) Share of Medical Costs	(C) = (A) x (B) Impact on Medical Costs	(D) Medical Costs as a Share of Overall Costs	(E)=(C) x (D) Impact on Overall Costs
10/1/2018	Hospital Inpatient	+2.8%	10.0%	+0.3%	72%	+0.2%
1/1/2019	Hospital Outpatient	+1.4%	16.9%	+0.2%	73%	+0.1%



## Indiana

### Appendix C-II

#### ANALYSIS OF ENACTED HOUSE BILL 1182

*Effective July 1, 2019*

**NCCI estimates that the fatal benefit provisions of enacted House Bill (HB) 1182<sup>1</sup>, effective July 1, 2019, will result in a negligible<sup>2</sup> increase on overall workers compensation (WC) system costs in Indiana.**

#### SUMMARY AND ACTUARIAL ANALYSIS OF FATAL BENEFIT PROVISIONS OF ENACTED HB 1182

Currently in Indiana, if an employee's death results from a compensable workplace accident or occupational disease, the employer is liable for burial benefits up to a maximum of \$7,500 in addition to other indemnity and medical benefits required by Indiana WC statutes. Enacted HB 1182, effective July 1, 2019, will increase the maximum burial benefit from \$7,500 to \$10,000.

In analyzing the cost impact of raising the maximum burial benefit, NCCI compared total fatal indemnity costs payable for 1,000 hypothetical cases under both the prior and revised maximum burial benefit scenarios. To determine the fatal indemnity benefits payable under each scenario, NCCI estimated fatal dependency benefits using a countrywide distribution of dependents and assumed that all fatal claims would receive the maximum burial benefits under both the prior and revised scenarios (i.e., fatal claims would see a uniform increase in burial benefits of +33.3% (= \$10,000 / \$7,500)).

The impact of increasing the maximum burial expense to \$10,000 is summarized in the table below:

Component	Impact
(1) Impact of change in maximum burial expense on indemnity fatal benefit costs	+1.3%
(2) % of indemnity fatal benefit costs to total indemnity benefit costs	4.3% <sup>3</sup>
(3) Impact on indemnity benefit costs = (1) x (2)	+0.1%
(4) % of indemnity benefit costs to overall benefit costs	27% <sup>4</sup>
<b>(5) Impact on overall system costs = (3) x (4)</b>	<b>Less than +0.1%</b>

<sup>1</sup> Enacted HB 1182 also contains a provision related to WC coverage of volunteer firefighters. Such provisions are outside of the scope of this analysis.

<sup>2</sup> Negligible is defined in this context to be an impact on overall system costs of less than +/-0.1%

<sup>3</sup> Based on NCCI Workers Compensation Statistical Plan (WCSP) data for Indiana for policies becoming effective during the 24-month period ending 06/30/2016 on the 01/01/2019 law level and developed to an ultimate basis by type of injury.

<sup>4</sup> Based on NCCI Financial Call Data for Indiana for Policy Years 2015 and 2016 projected to 07/01/2019.



## INDIANA

### APPENDIX C-III

#### U.S. Longshore and Harbor Workers' Compensation Act Assessment

The F-class and Program II, Option II maritime class voluntary loss costs/rates and assigned risk rates include the following provision for the federal assessment:

1.) Estimated Total Expense Needed for 2019 *	100,000,000
2.) Compensation Payments Reported (on indemnity only) in 2018 *	832,150,055
3.) Assessment Rate on Indemnity Losses (1) / (2)	12.0%

#### Breakdown of Losses Under the Longshore and Harbor Workers Act

4.) Indemnity Losses (Combination of 1st through 3rd reports) #	38,892,262
5.) Medical Losses (Combination of 1st through 3rd reports) #	30,237,088
6.) Total Losses (4) + (5)	69,129,350
7.) Assessment Rate on Total Losses { (3) x (4) } / (6)	6.8%

\* Source: U.S. Department of Labor

# Source: On-leveled and developed USL&HW losses - statistical plan data



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Appendix D - Indicated Assigned Risk Premium Surcharge

##### Section A - Impact of Current Surcharge in the Experience Period

##### 25% Surcharge for Assigned Risk Policies With Premium Greater than \$2,500 on the Premium in Excess of \$2,500

###### Policy Year 2017

(1) <u>Premium Interval</u>	(2) <u>Policy Count</u>	(3) <u>% of Policies</u>	(4) <u>Total State Premium</u>	(5) <u>% of Total Premium</u>	(6) <u>Premium &gt;2500</u>	(7) <u>Premium &gt;2500 (No Surcharge)</u>	(8) <u>Surcharge Premium</u>
\$0-999	1,904	23.9%	\$1,112,608	2.6%			
\$1,000-2,499	3,149	39.5%	\$4,859,178	11.2%			
\$2,500-4,999	1,221	15.3%	\$4,329,139	10.0%	\$1,276,639	\$1,021,311	\$255,328
\$5,000-9,999	788	9.9%	\$5,508,708	12.7%	\$3,538,708	\$2,830,966	\$707,742
\$10,000-24,999	555	7.0%	\$8,501,698	19.6%	\$7,114,198	\$5,691,358	\$1,422,840
\$25,000-49,999	210	2.6%	\$7,198,932	16.6%	\$6,673,932	\$5,339,146	\$1,334,786
\$50,000-99,999	108	1.4%	\$7,339,637	16.9%	\$7,069,637	\$5,655,710	\$1,413,927
\$100,000-249,999	32	0.4%	\$4,567,575	10.5%	\$4,487,575	\$3,590,060	\$897,515
<u>\$250,000+</u>	<u>0</u>	<u>0.0%</u>	<u>\$0</u>	<u>0.0%</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Totals</b>	<b>7,967</b>	<b>100.0%</b>	<b>\$43,417,475</b>	<b>100.0%</b>	<b>\$30,160,689</b>	<b>\$24,128,551</b>	<b>\$6,032,138</b>

(a) 2017 Surcharge Impact 16.1%

###### Policy Year 2016

<u>Premium Interval</u>	<u>Policy Count</u>	<u>% of Policies</u>	<u>Total State Premium</u>	<u>% of Total Premium</u>	<u>Premium &gt;2500</u>	<u>Premium &gt;2500 (No Surcharge)</u>	<u>Surcharge Premium</u>
\$0-999	1,584	19.7%	\$840,935	1.7%			
\$1,000-2,499	3,308	41.1%	\$5,185,436	10.3%			
\$2,500-4,999	1,212	15.0%	\$4,253,352	8.4%	\$1,223,352	\$978,682	\$244,670
\$5,000-9,999	913	11.3%	\$6,395,711	12.6%	\$4,113,211	\$3,290,569	\$822,642
\$10,000-24,999	616	7.6%	\$9,328,952	18.4%	\$7,788,952	\$6,231,162	\$1,557,790
\$25,000-49,999	245	3.0%	\$8,600,040	17.0%	\$7,987,540	\$6,390,032	\$1,597,508
\$50,000-99,999	127	1.6%	\$8,922,452	17.6%	\$8,604,952	\$6,883,962	\$1,720,990
\$100,000-249,999	46	0.6%	\$6,175,293	12.2%	\$6,060,293	\$4,848,234	\$1,212,059
<u>\$250,000+</u>	<u>3</u>	<u>0.0%</u>	<u>\$865,822</u>	<u>1.7%</u>	<u>\$858,322</u>	<u>\$686,658</u>	<u>\$171,664</u>
<b>Totals</b>	<b>8,054</b>	<b>100.0%</b>	<b>\$50,567,993</b>	<b>100.0%</b>	<b>\$36,636,622</b>	<b>\$29,309,298</b>	<b>\$7,327,324</b>

(b) 2016 Surcharge Impact 16.9%

(c) Experience Period Average 16.5%

##### Key

- (2), (4) = NCCI Unit Statistical Data
- (3) = (2) / (2 total)
- (5) = (4) / (4 total)
- (6) = (4) - [(2) \* 2500], when (1) > 2500
- (7) = (6) / [1 + 25%]
- (8) = (6) - (7)
- (a), (b) = (8 total) / [(4 total) - (8 total)]
- (c) = Average [(a), (b)]





## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Appendix D - Indicated Assigned Risk Premium Surcharge

##### Section B - Derivation of Assigned Risk Differential

Policy Year	(1) Standard Pure Premiums	(2) Unlimited Undeveloped Paid+Case Losses	(3) Ratio of Losses to Premiums (2)/(1)	(4) Indicated Assigned Risk Pure Prem Diff (3-I)/(3-II)
<b>I. Assigned Risk Experience Valued as of 12/31/2018</b>				
2008	11,486,067	18,766,708	1.634	
2009	11,029,670	16,591,740	1.504	
2010	11,116,348	28,758,271	2.587	
2011	12,700,019	30,098,096	2.370	
2012	19,608,336	29,628,149	1.511	
2013	23,962,403	33,609,763	1.403	
2014	26,859,965	42,267,472	1.574	
2015	25,457,874	41,505,767	1.630	
2016	23,382,373	26,610,599	1.138	
2017	21,918,111	27,581,770	1.258	
<b>II. Statewide Experience Valued as of 12/31/2018</b>				
2008	310,115,504	421,063,055	1.358	1.203
2009	301,555,251	399,999,975	1.326	1.134
2010	318,800,548	444,853,567	1.395	1.854
2011	335,644,594	439,147,144	1.308	1.812
2012	335,242,902	419,931,555	1.253	1.206
2013	328,252,184	432,440,515	1.317	1.065
2014	339,589,099	378,419,241	1.114	1.413
2015	353,217,785	391,071,633	1.107	1.472
2016	367,624,483	383,776,333	1.044	1.090
2017	388,050,745	375,271,106	0.967	1.301
<b>Average Differential (10-year)</b>				1.355

(a) Indicated Differential in Standard Premium Based on Experience	1.355
(b) Current Impact of Net Premium Programs*	1.041
(c) Indicated Differential After Accounting for Net Premium Programs =(a)/(b)	1.302
(d) Estimated Impact of Current Approved Surcharge in Rate Effective Period (Section A)	1.165
(e) Indicated Premium Need from Assigned Risk Programs =(c)/(d)	1.118

\*Removal of Premium Discounts



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Appendix E – Factor to Convert Advisory Rates

I. **Factor to Convert Advisory Rates to Assigned Risk Rates**

A factor of 1.000 is applied to the advisory rates in order to convert to assigned risk rates.

II. **Factor to Convert Advisory Rates to Advisory Loss Costs**

A factor of 0.745 is applied to the advisory rates in order to convert to advisory loss costs. This factor is the proposed target cost ratio for advisory rates.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Appendix F – Derivation of Experience Rating Values

##### 1. Expected Loss Rate (ELR) factors

An expected loss rate for a classification is used to estimate the expected losses per \$100 of payroll during the experience rating period for risks within that classification. These *expected* losses are then compared with the *actual* losses of a risk during the experience rating period to determine the experience modification (mod).

The actual losses reflect the loss data during the experience rating period. Expected losses and actual losses must be at the same level to enable an appropriate comparison for purposes of the experience mod calculation. As such, the pure premiums underlying the proposed loss costs/rates are adjusted to reflect the average loss levels of the proposed experience rating period. This is accomplished through the application of ELR factors to the proposed underlying pure premiums. These ELR factors, calculated by hazard group, remove the effects of items such as: loss development, expected losses above the State Accident Limit, a portion of medical-only losses, benefit changes, trend, loss-based expenses, experience, and offsets for assigned risk programs.

An adjustment is made to the ELR factors so that the resulting ELRs produce an expected experience rating off-balance that equals the targeted experience rating off-balance used in the calculation of the overall loss cost/rate level change for the state (Appendix A–I).

The final ELR for each classification is calculated as follows:

$$\text{ELR} = \{(\text{Hazard Group indemnity ELR factor}) \times (\text{indemnity pure premium}) +$$
$$(\text{Hazard Group medical ELR factor}) \times (\text{medical pure premium})\} \times \text{Manual/Standard Ratio}$$

##### 2. Discount Ratio (D-Ratio) factors

In experience rating, losses are divided into primary and excess portions. For each claim, losses below the split point are primary losses, while losses above the split point are excess losses. The D-ratio represents the estimated ratio of expected primary losses to expected total losses for a classification. The D-ratio is used to determine the expected primary losses to be used in the experience mod calculation.

D-ratio factors are calculated separately for indemnity and medical losses by hazard group and are based on the latest three years of Unit Statistical data. A comparison of the resulting D-ratio



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Appendix F – Derivation of Experience Rating Values

factors across hazard groups is done to ensure that the factors monotonically decrease from hazard group A to hazard group G. If they do not, an adjustment is made by averaging the D-ratios over adjacent hazard groups.

The final D-ratio for each classification is calculated as follows:

$$\text{D-ratio} = \{(\text{HG indemnity D-ratio factor}) \times (\text{indemnity pure premium}) + (\text{HG medical D-ratio factor}) \times (\text{medical pure premium})\} / \text{total pure premium}$$

#### 3. Additional experience rating values

##### *Table of Weighting Values*

The Weighting Value (W) determines how much actual excess and expected excess losses will enter the experience modification formula. The weighting value increases as expected losses increase with larger insureds receiving a larger weighting value. The weighting value for various levels of expected losses is provided in the Table of Weighting Values. The table is updated based on the state reference point, which is updated with Unit Statistical data each experience filing.

The state reference point is calculated as the state average cost per case for the experience rating period multiplied by 250. The state reference point serves to determine how much credibility to give to the losses of an individual risk and as an index of claim cost differences by state. The state per claim accident limitation shown on the Table of Weighting Values is 10% of the state reference point.

##### *Table of Ballast Values*

The Ballast Value (B) is a stabilizing value designed to limit the effect of any actual loss experience on the experience rating modification. It is added to both the numerator and denominator of the mod calculation and increases as expected losses increase. The ballast value for various levels of expected loss ranges is provided in the Table of Ballast Values. The table is updated based on the state reference point, which is updated with Unit Statistical data.

The G value used in the ballast formula is the state reference point / 250,000, rounded to the nearest 0.05.



## Indiana

### **Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020**

#### **Part 4 Additional Information**

- Definitions
- Key Contacts



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Definitions

**Accident Year (AY):** A loss accounting definition in which experience is summarized by the calendar year in which an accident occurred.

**Calendar Year (CY):**

1. The 12-month period beginning January 1 and ending December 31.
2. Method of accounting for all financial transactions occurring during a specific year.

**Case Reserves:** Reserves that an insurance company establishes for specific (known) claims.

**DSR Level Premium:** The standard earned premium that would result if business were written at NCCI state-approved loss costs or rates instead of at the company rates. It is the common benchmark level at which carriers report premium on the Financial Calls.

**Frequency:** The number of lost-time claims per million dollars of on-leveled, wage-adjusted premium.

**Incurred Claim Count:** The total of all claims reported, whether open or closed, as of a given valuation date. An indemnity claim is associated with a payment or case reserve for an indemnity loss (i.e., lost work time-related benefits) and excludes claims closed without an indemnity payment.

**Lost-time Claims:** Claims where an injured employee has received wage replacement benefits due to a compensable workplace injury.

**Limited Losses:** Losses that result after the application of NCCI's large loss procedure—in which individual large claims are limited to jurisdiction and year-specific large loss thresholds.

**On-Level Factor:** Applied to historical premiums and losses to adjust the historical experience to reflect approved loss cost/rate level changes as well as statutory benefit level changes implemented since that time.

**Paid+Case Losses:** The sum of paid losses and case reserves. Also known as “case incurred losses.”

**Paid Losses:** Losses that an insurance company has paid as a result of claim activity.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Definitions

**Policy Year:**

- The one-year period beginning with the effective date or anniversary of a policy.
- A premium and loss accounting definition in which experience is summarized for all policies with effective dates in a given calendar year period.

**Severity:** The average cost per case (claim) calculated as ultimate losses divided by ultimate lost-time claim counts.

**Ultimate Development Factor:** For an aggregation of data, an estimate of the development that will occur between the data's current valuation date and the time when all claims are closed.

**Unlimited Losses:** Losses that have not been limited to jurisdiction and year-specific large loss thresholds as part of NCCI's large loss procedure.

**Valuation Date:** The date that premiums and losses are evaluated for reporting purposes. Premiums and losses may change over time from initial estimates to final values. Therefore, interim snapshots have associated valuation dates.

**Wage Level Adjustment Factor:** The ratio of the average workers' wages during the most recent time period to the average workers' wages during a historical time period.



## Indiana

### Advisory Loss Costs, Advisory Rates, and Assigned Risk Rates Filing – January 1, 2020

#### Key Contacts

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