Tennessee

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

Proposed Effective March 1, 2018

http://www.treasury.state.tn.us/claims/wcac/TN-3-1-2018-Filing.pdf
(retrieved 21 January 2019)

National Council on
Compensation Insurance

Amy Quinn
State Relations Executive
Regulatory Services

August 24, 2017

Honorable Julie M. McPeak
Commissioner of Commerce and Insurance
State of Tennessee
500 James Robertson Parkway
Nashville, Tennessee 37243-0565

Re: **Tennessee Workers Compensation Voluntary Loss Costs, Assigned Risk Rates, and Rating Values Filing— Proposed Effective March 1, 2018**

Dear Commissioner McPeak:

In accordance with the applicable statutes and regulations of the state of Tennessee, we are filing for your consideration and approval prospective loss costs and rating values for the voluntary market, and rates and rating values for the assigned risk market, to become effective March 1, 2018.

The voluntary loss costs, which are proposed to be effective March 1, 2018, reflect a decrease of 12.6 percent from the loss costs effective March 1, 2017.

The assigned risk rates, also proposed to be effective March 1, 2018, reflect a decrease of 12.2 percent from the rates effective March 1, 2017.

Please note the following in connection with this filing:

- As a result of Item B-1397, effective March 1, 2008, a single combined loss cost is still calculated for Class Codes 7710 and 7711 via a payroll-weighted average of the separately indicated loss costs for these two Class Codes.
- As a result of Item B-1435, effective March 1, 2018:
    - Class Code 0400 is discontinued and the loss cost for Class Code 8103 is payroll weighted to reflect the combined experience of Class Codes 0400 and 8103.
    - Class Code 1429 is discontinued and the loss cost for Class Code 1438 is payroll weighted to reflect the combined experience of Class Codes 1429 and 1438.
    - Class Code 1655 is discontinued and the loss cost for Class Code 1642 is payroll weighted to reflect the combined experience of Class Codes 1642 and 1655.
    - Class Codes 1741 and 1853 are discontinued and the loss cost for Class Code 1701 is payroll weighted to reflect the combined experience of Class Codes 1701, 1741, and 1853.
    - Class Codes 1860 and 4282 are discontinued and the loss cost for Class Code 4279 is payroll weighted to reflect the combined experience of Class Codes 1860, 4279, and 4282.
    - Class Code 2534 is discontinued and the loss cost for Class Code 2501 is payroll weighted to reflect the combined experience of Class Codes 2501 and 2534.
    - Class Codes 2883 and 2913 are combined to reflect the first year of a three-year transition program. In the third year of the transition, Class Code 2913 will be discontinued.

204 Caughman Farm Lane, Suite 303
Lexington, SC 29072

  - Class Code 3175 is discontinued and the loss cost for Class Code 3169 is payroll weighted to reflect the combined experience of Class Codes 3169 and 3175.
  - Class Code 3223 is discontinued and the loss cost for Class Code 3180 is payroll weighted to reflect the combined experience of Class Codes 3180 and 3223.
  - Class Codes 3632 and 3639 are combined to reflect the first year of a three-year transition program. In the third year of the transition, Class Code 3639 will be discontinued.
  - Class Codes 4053 and 4061 are discontinued and the loss cost for Class Code 4062 is payroll weighted to reflect the combined experience of Class Codes 4053, 4061, and 4062.
  - Class Code 4113 is discontinued and the loss cost for Class Code 4111 is payroll weighted to reflect the combined experience of Class Codes 4111 and 4113.
  - Class Code 4439 is discontinued and the loss cost for Class Code 4558 is payroll weighted to reflect the combined experience of Class Codes 4439 and 4558.
  - Class Codes 5059, 5069, and 5539 are combined to reflect the first year of a two-year transition program. In the second year of the transition, Class Codes 5069 and 5539 will be discontinued.
  - Class Code 6017 is discontinued and the loss cost for Class Code 5213 is payroll weighted to reflect the combined experience of Class Codes 5213 and 6017.
  - Class Codes 7228 and 7229 are discontinued and the loss cost for Class Code 7219 is established and payroll weighted to reflect the combined experience of Class Codes 7228 and 7229.
  - Class Code 7225 is established.
  - Class Codes 7500 and 7502 are combined to reflect the first year of a three-year transition program. In the third year of the transition, Class Code 7500 will be discontinued.
- As a result of Item R-1413, the retrospective rating plan parameters were updated.

This filing is made exclusively on behalf of the companies that have given valid consideration for the express purpose of fulfilling regulatory rate or pure premium filing requirements and other private use of this information.

In the enclosed appendix is a list of companies, which, at the time this filing is being submitted, are eligible to reference this information. The inclusion of a company on this list merely indicates that the company, or the group to which it belongs, is affiliated with NCCI in this state, or has licensed this information as a non-affiliate, and is not intended to indicate whether the company is currently writing business or is even licensed to write business in this state.

Please contact me (803-356-0851) if you have any questions or need any further information.

Respectfully submitted,

NATIONAL COUNCIL ON COMPENSATION INSURANCE, INC.

A Quinn

Amy Quinn
State Relations Executive
Regulatory Services Division

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Actuarial Certification

I, Ann Marie Smith, am a Director & Actuary for the National Council on Compensation Insurance, Inc. I am a Fellow 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.

Ann Marie Smith, FCAS, MAAA
Director & Actuary
Actuarial and Economic Services

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Disclosures

Purpose of the Report

The purpose of this report is to provide the proposed voluntary loss costs and assigned risk rates for workers compensation policies in Tennessee, proposed to be effective March 1, 2018. The intended users of this report are:

- State of Tennessee Department of Commerce and Insurance
- Affiliated carriers, for their reference in determining workers compensation rates

Scope

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.).

Each insurance company offering workers compensation insurance in Tennessee must file a loss cost multiplier to be applied to the approved advisory prospective loss costs in order to compute the final workers compensation rates they intend 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 assigned risk 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.).

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 25, 2017 were not considered for inclusion in the analysis.

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 June 23, 2017 were not considered for inclusion in the analysis.

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Disclosures

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 July 31, 2017. 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.

Data for all carriers writing at least one-tenth of one percent of the Tennessee workers compensation written premium volume have been included in the experience period on which this filing is based.

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

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 loss costs proposed in this filing.

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Table of Contents

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Part 1 Filing Overview

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

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Executive Summary

Based on its review of the most recently available data, NCCI has proposed an overall average workers compensation voluntary market loss cost level change of –12.6% to become effective March 1, 2018. In addition, NCCI has proposed an overall average assigned risk rate level change of –12.2%, also to become effective March 1, 2018.

Key Components	Percentage Change
Impact of change in Experience and Development	–11.1%
Impact of change in Trend	–1.9%
Impact of change in Benefits	+0.5%
Impact of change in Loss-based Expenses	–0.3%
Proposed Change in Overall Voluntary Loss Cost Level	**–12.6%**
Impact of change in Assigned Risk Loss Cost Multiplier	+0.5%
Proposed Change in Overall Assigned Risk Rate Level	**–12.2%**

Key observations:

- The filing is based on premium and loss experience for policy years 2014 and 2015. Experience for both policy years is favorable.
- Tennessee's lost-time claim frequency continues to decrease.
- After adjusting to a common wage level, both indemnity average cost per case and medical average cost per case remain relatively stable in recent years.

Proposed Changes in Voluntary Loss Cost Level by Industry Group:

Industry Group	Average Change	Maximum Increase	Maximum Decrease
Manufacturing	-11.3%	+14.0%	-36.0%
Contracting	-15.0%	+10.0%	-40.0%
Office and Clerical	-13.2%	+12.0%	-38.0%
Goods and Services	-12.9%	+12.0%	-38.0%
Miscellaneous	-11.4%	+14.0%	-36.0%

Additional Notable Change(s) Proposed in the Filing:

- Updated terrorism loss cost and assigned risk rate

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Overview of Methodology

Aggregate Ratemaking

http://www.treasury.state.tn.us/claims/wcac/TN-3-1-2018-Filing.pdf
(retrieved 21 January 2019)

NCCI's approach to determining the proposed overall average loss cost 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 a Tennessee 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 loss cost 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 loss cost level is indicated.

Class Ratemaking

Once the proposed overall average voluntary loss cost level change has been determined, NCCI separately determines loss costs per $100 of payroll for each workers compensation job classification (class); the loss costs and year-over-year changes vary by class. Three sets of pure premiums are combined as part of each class code's loss cost 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")

Assigned Risk Rates

The proposed assigned risk rates are then determined for each job classification as the product of the classification's voluntary loss cost and a loss cost multiplier (LCM). The LCM incorporates the indicated assigned risk market expense need, changes to the assigned risk differential, and the proposed uncollectible premium provision.

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Overview of Methodology

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.

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Summary of Selections

The following is a summary of selections underlying the voluntary loss costs and assigned risk rates proposed to be effective March 1, 2018, along with the selections underlying the currently-approved loss costs and rates.

Voluntary Loss Costs	**Currently Approved March 1, 2017**	**Proposed Effective March 1, 2018**
Experience Period	Policy Years 2013 and 2014	Policy Years 2014 and 2015
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	Selected
Indemnity Annual Loss Ratio Trend Factor	0.950	0.945
Medical Annual Loss Ratio Trend Factor	0.985	0.980
Loss Adjustment Expense Provision	20.1%	19.7%
Base Threshold for Limiting Losses	$7,518,887	$7,994,236
Large Loss Excess Ratio	1.2%	1.1%
Classification Swing Limits (applied by Industry Group)	+/-25%	+/-25%

*Five-year average excludes the years with the lowest and highest factors for the medical 1st/2nd link ratio

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Summary of Selections

Assigned Risk Rates	Currently Approved March 1, 2017	Proposed Effective March 1, 2018
Assigned Risk Loss Cost Multiplier	1.700	1.709
Assigned Risk Loss Cost Differential	1.250	1.350
Assigned Risk Permissible Loss Ratio	0.632	0.681
Uncollectible Premium Provision	1.032	1.032
Expense Constant	$160	$160
Maximum Minimum Premium	$1,250	$1,250
Minimum Premium Multiplier	200	200

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Selections Underlying the Proposed Changes

Experience and Development

NCCI analyzed the emerging experience of Tennessee workers compensation policies in recent years. The primary focus of our analysis was on premiums and losses from policy years 2014 and 2015 evaluated as of December 31, 2016. The most recently available full policy year is 2015 since the last policy had an effective date of December 31, 2015 and did not expire until December 31, 2016. 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.

NCCI performs analysis on different subsets of data including (i) paid losses and (ii) the sum of paid losses plus case reserves. For use in this filing, NCCI utilized loss development factors based on the average of these two loss aggregations. This is consistent with NCCI filings made in the past two filings in Tennessee. 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. The specific development link ratio selections underlying this filing are shown below:

- A three-year average of historical premium development factors
- A two-year average of historical paid loss development factors through a 19th report
- A five-year average of historical paid plus case loss development factors through a 19th report, except for the medical 1st/2nd link ratio where a five-year average excluding the years with the lowest and highest factors was used
- Loss development tail factors from a 19th report to ultimate were selected based on a review of the ten most recently available factors

Trend

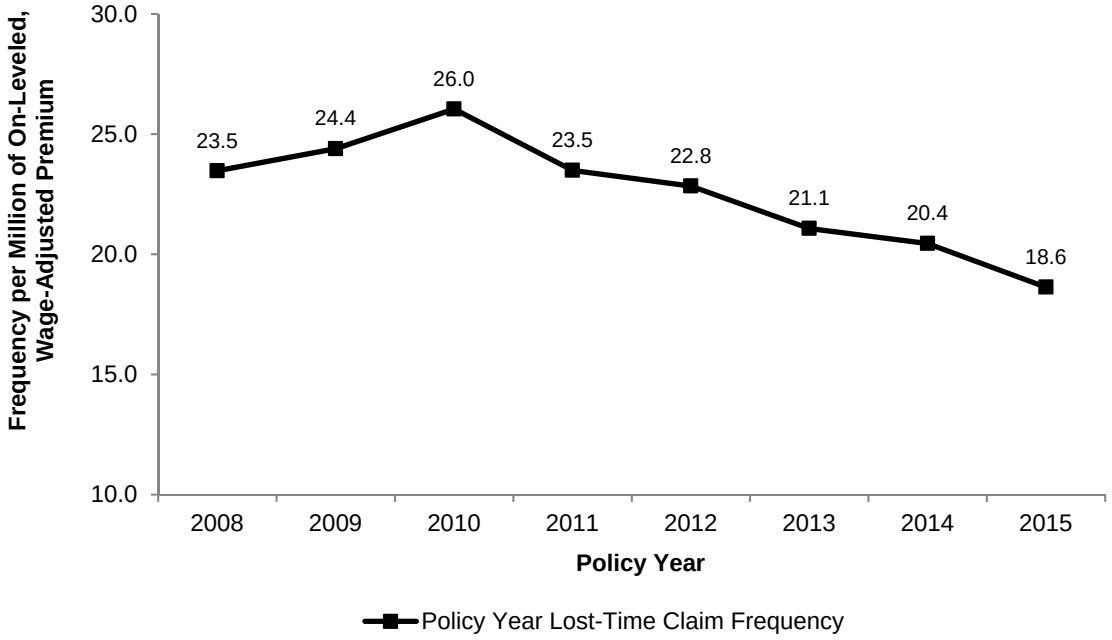
This filing relies primarily on the experience from policy years 2014 and 2015. However, the proposed loss costs and assigned risk rates are intended for use with policies with effective dates starting on March 1, 2018. It is necessary to use trend factors that forecast how much the future Tennessee 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.

Selections Underlying the Proposed Changes

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 loss cost level change.

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).

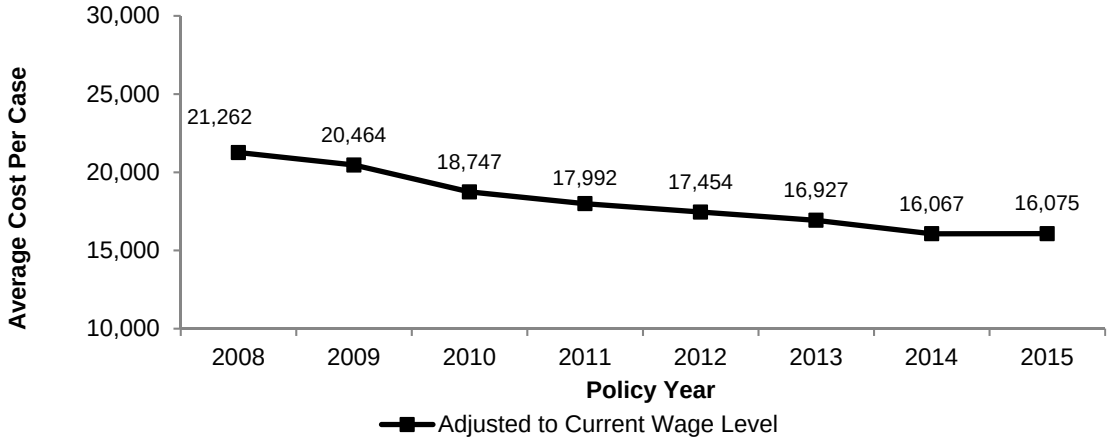
Tennessee Claim Frequency



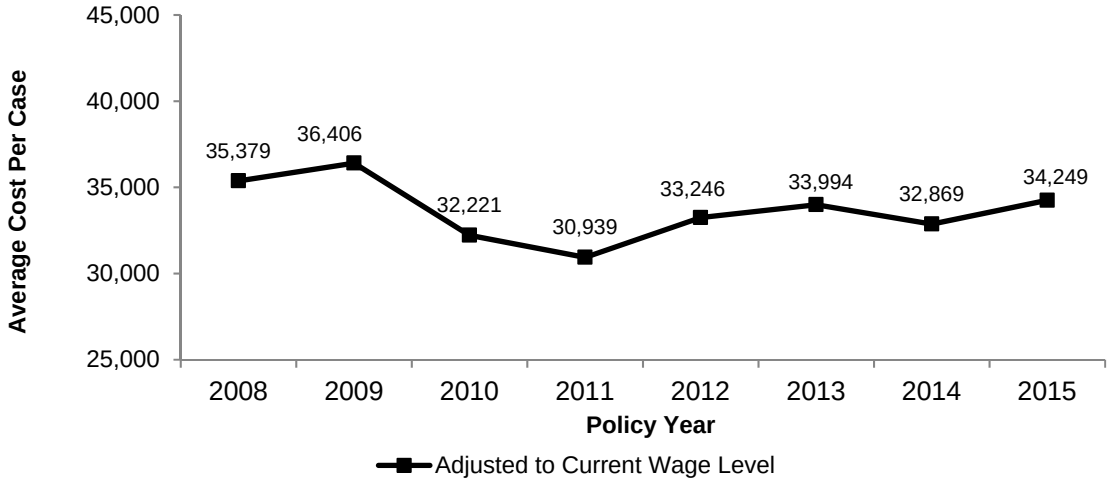
Tennessee's lost-time claim frequency has generally declined since 2010, as shown immediately above. The data in this chart reflects premiums at today's loss cost and wage levels.

Selections Underlying the Proposed Changes

Tennessee Indemnity Cost Per Case Adjusted to Current Wage Level



Tennessee Medical Cost Per Case Adjusted to Current Wage Level



As these two charts illustrate, Tennessee's average indemnity cost per case in excess of wage growth remains flat during the latest year after declining since 2008, while the average Tennessee medical cost per case after adjustment to the current wage level increased at the latest point following a decrease in 2014.

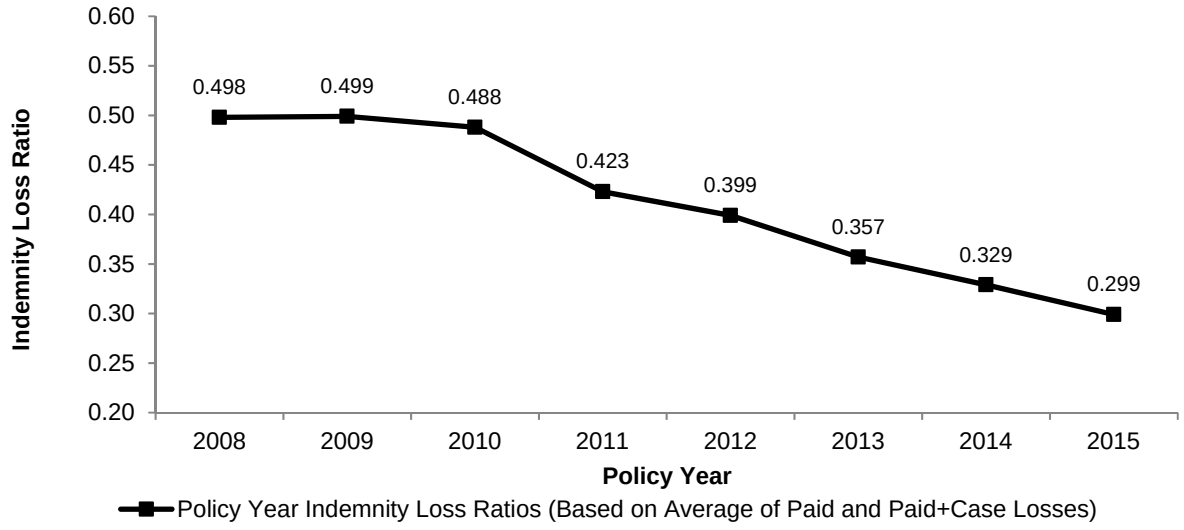
Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

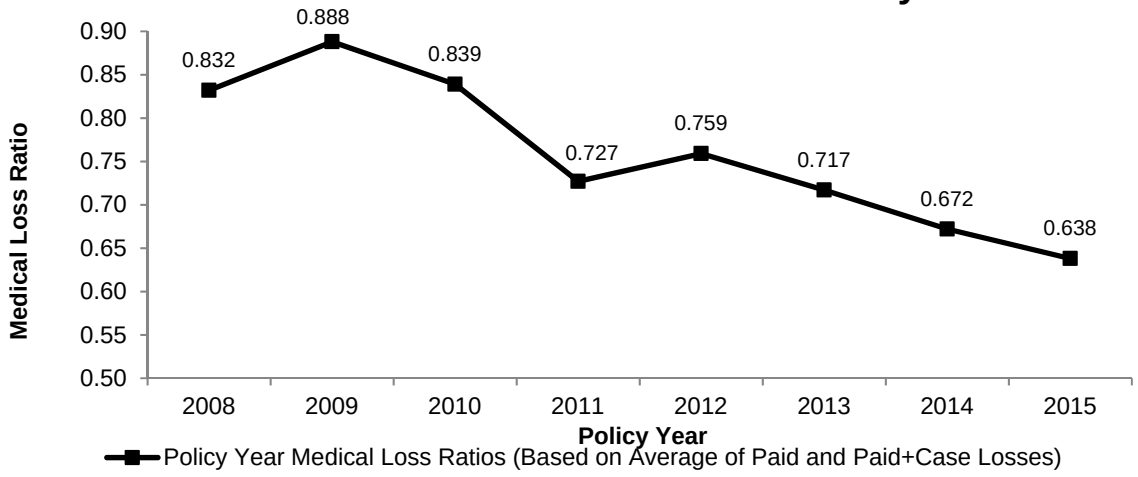
Selections Underlying the Proposed Changes

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

Tennessee Indemnity Loss Ratio History



Tennessee Medical Loss Ratio History



Based on our analysis this year, we are proposing to decrease the annual indemnity loss ratio trend from –5.0% to –5.5% and the annual medical loss ratio trend from –1.5% to –2.0%.

Selections Underlying the Proposed Changes

Benefit Changes

NCCI has included the impact of the most recent Medical Fee Schedule update effective January 1, 2017. This change is estimated to increase medical costs by 0.6% and overall workers compensation system costs by 0.4%. Please see Appendix C-I for additional detail.

NCCI has included the impact of SB 297 effective May 18, 2017, which increased the burial allowance from $7,500 to $10,000. This change is estimated to have 0.0% impact to both indemnity costs and the overall system costs. Please see Appendix C-II for additional detail.

Workers injured in Tennessee receive wage replacement (indemnity) benefits at a rate of two-thirds of their pre-injury weekly wage. These benefits are subject to a weekly minimum and maximum. Each July 1, the minimum and maximum weekly benefits are updated based on Tennessee's most recent state average weekly wage. The latest increase in Tennessee's state average weekly wage is estimated to increase indemnity costs by 0.3% and overall system costs by 0.1%. Please see Appendix C-III for additional detail.

Loss Based Expenses

The proposed 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 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 voluntary LAE provision from 20.1% to 19.7% of losses. Please see Exhibit II for additional detail.

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Additional Proposed Changes

Updated Terrorism Voluntary Loss Cost and Assigned Risk Rate

As a result of NCCI's most recent analysis, the proposed terrorism loss cost per $100 of payroll in Tennessee decreased from $0.01 to $0.005.

The proposed assigned risk terrorism rate per $100 of payroll in Tennessee decreased from $0.02 to $0.01.

http://www.treasury.state.tn.us/claims/wcac/TN-3-1-2018-Filing.pdf
(retrieved 21 January 2019)

Background

The Terrorism Risk Insurance Act of 2002 ("TRIA" or the "Act") was implemented since Congress recognized that terrorism is a catastrophe exposure that is real and significant for insurers of workers compensation and other lines of insurance. Each state's current terrorism Miscellaneous Value was initially based on the result of one of six modeled states. The current values are rounded to the nearest $0.01 (i.e. penny).

TRIA 2002 was renewed and amended as TRIE in 2005 and as TRIPRA in 2007. NCCI submitted several Item filings over the years that proposed changes to the Miscellaneous Values, rules, and policy forms to implement these changes.

The U.S. Congress passed the Terrorism Risk Insurance Plan Reauthorization Act (TRIPRA 2015), which changed various coverage parameters for certified terrorism losses and generally increased carriers' financial responsibility (and thus decreased the U.S government's financial support). TRIPRA of 2015 is set to expire on 12/31/2020.

However, NCCI anticipated that in addition to changes in the law itself, the risk and cost of terrorism losses may have changed over time.

NCCI Analysis

NCCI worked with expert catastrophe loss modeling firms to assess the impact of terrorism risk on workers compensation insurance losses. NCCI selected results which included an estimated average terrorism workers compensation loss dollar amount per worker for each NCCI state under TRIPRA 2015 parameters and provisions.

NCCI converted those estimates from the modeling firms to a loss cost per $100 payroll using average weekly wage information and currently approved loss-based expense provisions, by state. NCCI relied on average weekly wage information from the Bureau of Labor Statistics

Additional Proposed Changes

Quarterly Census of Employment and Wages, and is consistent with that which NCCI uses in other areas of its filings.

The indicated terrorism Miscellaneous Value loss cost is rounded to the nearest $0.005, and set to a minimum of $0.005 (i.e. half-penny).

Part 2 Proposed Values

- Proposed Voluntary 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

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Proposed Voluntary Loss Costs and Rating Values

The following pages include proposed voluntary loss costs and rating values:

- Voluntary loss costs, expected loss rates, and d-ratios by class code, along with associated footnotes

- Advisory miscellaneous values, such as:

    - Advisory loss elimination ratios
    - Maximum and minimum weekly payroll applicable for select class codes
    - Premium determination for Partners and Sole Proprietors
    - Terrorism advisory loss cost
    - United States Longshore and Harbor Workers' Compensation Coverage Percentage

Effective March 1, 2018

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
0005	1.75	1.17	0.41	2003	2.06	1.44	0.43	2702*	59.21	30.33	0.26
0008	2.09	1.36	0.38	2014	3.13	1.94	0.35	2705X*	15.95	9.62	0.34
0016	4.28	2.56	0.33	2016	2.49	1.74	0.46	2709	8.82	5.41	0.34
0034	1.91	1.30	0.42	2021	2.05	1.32	0.38	2710	8.11	4.58	0.29
0035	1.66	1.16	0.45	2039	1.74	1.24	0.47	2714	3.17	2.24	0.46
0036	2.21	1.50	0.42	2041	1.58	1.12	0.47	2731	2.45	1.49	0.34
0037	2.13	1.36	0.37	2065	1.34	0.92	0.43	2735	3.00	2.07	0.45
0042	3.38	2.18	0.38	2070	3.20	2.24	0.43	2759	3.66	2.56	0.46
0050	2.68	1.85	0.43	2081	2.42	1.63	0.42	2790	1.03	0.71	0.45
0059D	0.27	0.07	0.35	2089	2.43	1.65	0.42	2797	2.37	1.62	0.42
0065D	0.05	0.02	0.34	2095	1.95	1.31	0.42	2799	3.65	2.40	0.39
0066D	0.05	0.02	0.35	2105	2.41	1.67	0.45	2802	2.98	1.96	0.38
0067D	0.05	0.02	0.35	2110	1.53	1.07	0.46	2835	1.57	1.16	0.51
0079	2.19	1.31	0.33	2111	1.87	1.31	0.46	2836	1.37	1.01	0.50
0083	3.37	2.30	0.42	2112	1.88	1.32	0.46	2841	2.89	2.01	0.45
0106	5.37	3.12	0.30	2114	1.99	1.39	0.45	2881	2.20	1.63	0.51
0113	2.10	1.44	0.42	2121	1.06	0.72	0.42	2883	2.74	1.86	0.42
0170	1.34	0.92	0.42	2130	1.04	0.72	0.43	2913X	2.03	1.49	0.50
0251	2.06	1.42	0.43	2131	1.09	0.77	0.44	2915	1.69	1.12	0.39
0400	–	0.80	0.38	2143	1.22	0.86	0.46	2916	3.21	1.84	0.29
0401	7.57	4.48	0.30	2157	2.65	1.85	0.44	2923	1.51	1.07	0.46
0771N	0.40	–	–	2172	1.14	0.76	0.39	2942	–	0.68	0.49
0908P	64.00	44.44	0.43	2174	1.83	1.28	0.45	2960	2.37	1.65	0.43
0913P	220.00	152.49	0.43	2211	6.84	4.17	0.34	3004	1.53	0.93	0.34
0917	2.84	1.98	0.46	2220	1.44	1.01	0.43	3018	2.06	1.26	0.34
1005*	3.67	1.72	0.30	2286	1.07	0.76	0.46	3022	1.85	1.32	0.47
1016X*	11.93	5.68	0.30	2288	2.29	1.59	0.45	3027	1.91	1.17	0.34
1164D	3.57	1.85	0.28	2300	–	1.28	0.42	3028	3.27	2.22	0.42
1165D	6.15	3.41	0.28	2302	1.05	0.71	0.42	3030	4.99	3.00	0.33
1320	1.04	0.60	0.30	2305	1.26	0.84	0.39	3040	4.10	2.50	0.34
1322	7.49	4.23	0.29	2361	1.41	0.94	0.41	3041	2.64	1.79	0.42
1429	–	1.90	0.30	2362	1.05	0.71	0.42	3042	2.68	1.79	0.39
1430	3.05	1.86	0.34	2380	1.42	0.96	0.42	3064	2.55	1.75	0.43
1438X	3.27	1.90	0.30	2386	–	1.28	0.42	3069	–	1.63	0.43
1452	1.64	1.00	0.34	2388	0.96	0.66	0.45	3076	2.37	1.63	0.43
1463	7.67	4.47	0.30	2402	1.64	1.01	0.35	3081D	2.10	1.28	0.35
1472	2.60	1.48	0.29	2413	1.94	1.31	0.42	3082D	2.27	1.34	0.34
1604X	2.61	1.65	0.36	2416	1.06	0.73	0.43	3085D	2.27	1.38	0.35
1624D	2.57	1.51	0.30	2417	0.93	0.64	0.42	3110	2.76	1.90	0.43
1642	1.37	0.86	0.35	2501	1.90	1.28	0.42	3111	1.69	1.15	0.42
1654	3.23	2.02	0.35	2503	0.98	0.69	0.46	3113	1.31	0.91	0.43
1655	–	0.86	0.35	2534	–	1.28	0.42	3114	1.45	0.99	0.42
1699	1.64	1.01	0.35	2570	3.10	2.16	0.45	3118	1.18	0.84	0.47
1701	2.42	1.49	0.35	2585	2.72	1.91	0.46	3119	0.46	0.34	0.51
1710D	2.44	1.50	0.35	2586	1.54	1.06	0.42	3122	1.19	0.83	0.46
1741	–	1.49	0.35	2587	1.28	0.92	0.47	3126	1.51	1.02	0.42
1747	1.15	0.72	0.35	2589	1.39	0.95	0.42	3131	1.06	0.72	0.42
1748	2.91	1.74	0.33	2600	2.42	1.74	0.47	3132	2.07	1.38	0.41
1803D	3.45	1.90	0.30	2623	5.20	3.39	0.38	3145	1.50	1.01	0.42
1852	–	0.71	0.26	2651	0.70	0.49	0.46	3146	1.97	1.34	0.42
1853	–	1.49	0.35	2660	1.49	1.03	0.45	3169	1.83	1.25	0.42
1860	–	1.26	0.43	2670	1.37	0.99	0.50	3175	–	1.25	0.42
1924	1.53	1.09	0.46	2683	1.14	0.78	0.44	3179	1.24	0.87	0.46
1925	1.74	1.15	0.39	2688	1.84	1.31	0.47	3180	1.81	1.28	0.46
2002	2.42	1.63	0.44	2701	11.55	6.95	0.34	3188	1.39	0.98	0.46

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

Effective March 1, 2018

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
3220	1.29	0.88	0.42	3865	0.89	0.64	0.49	4581	0.48	0.27	0.29
3223	–	1.28	0.46	3881	2.38	1.63	0.42	4583	2.40	1.38	0.29
3224	2.00	1.46	0.48	4000	2.69	1.60	0.31	4611	0.93	0.65	0.45
3227	1.58	1.13	0.47	4021	4.45	2.70	0.34	4635	1.79	0.95	0.28
3240	1.70	1.19	0.46	4024D	3.38	1.96	0.32	4653	0.90	0.64	0.47
3241	1.79	1.24	0.43	4034	4.04	2.48	0.34	4665	3.72	2.27	0.34
3255	1.36	1.01	0.51	4036	1.66	1.01	0.34	4670	3.62	2.20	0.34
3257	1.62	1.10	0.42	4038	1.68	1.27	0.52	4683	2.55	1.80	0.44
3270	1.88	1.28	0.42	4053	–	1.24	0.42	4686	1.36	0.83	0.34
3300	2.95	1.98	0.41	4061	–	1.24	0.42	4692	0.35	0.25	0.47
3303	3.80	2.59	0.44	4062	1.82	1.24	0.42	4693	0.61	0.41	0.42
3307	2.57	1.76	0.42	4101	2.05	1.34	0.38	4703	1.07	0.75	0.44
3315	2.47	1.77	0.47	4109	0.44	0.31	0.47	4717	1.81	1.39	0.53
3334	1.16	0.81	0.43	4110	0.58	0.39	0.42	4720	1.68	1.13	0.42
3336	1.60	0.99	0.35	4111	1.10	0.75	0.45	4740	1.01	0.64	0.36
3365	3.07	1.92	0.35	4113	–	0.75	0.45	4741	2.20	1.51	0.43
3372	2.41	1.56	0.38	4114	1.69	1.16	0.43	4751	1.01	0.62	0.34
3373	2.85	1.96	0.43	4130	2.68	1.84	0.42	4761	–	1.20	0.28
3383	1.13	0.81	0.47	4131	2.87	1.99	0.45	4771N	2.27	1.20	0.28
3385	0.47	0.34	0.47	4133	1.70	1.16	0.44	4777	2.96	1.58	0.28
3400	2.48	1.62	0.38	4149	0.96	0.71	0.51	4825	0.59	0.36	0.34
3507	1.53	1.06	0.43	4206	2.62	1.82	0.43	4828	1.42	0.92	0.38
3515	1.52	1.02	0.42	4207	0.99	0.62	0.36	4829	0.88	0.51	0.30
3548	0.77	0.52	0.42	4239	1.57	0.99	0.36	4902	1.83	1.28	0.46
3559	2.34	1.58	0.42	4240	2.00	1.39	0.45	4923	1.42	0.93	0.40
3565	–	0.51	0.46	4243	1.29	0.89	0.43	5020	4.63	2.86	0.35
3574	0.73	0.51	0.46	4244	1.44	0.99	0.42	5022	5.55	3.22	0.30
3581	0.54	0.38	0.46	4250	1.47	1.02	0.43	5037	18.58	9.72	0.27
3612	1.12	0.74	0.39	4251	1.60	1.12	0.43	5040	5.15	2.76	0.29
3620	2.18	1.33	0.34	4263	1.44	0.97	0.42	5057	2.41	1.28	0.28
3629	0.94	0.67	0.46	4273	1.99	1.37	0.43	5059	10.81	5.66	0.27
3632	2.31	1.51	0.38	4279	1.83	1.26	0.43	5069X	9.50	5.10	0.29
3634	1.95	1.41	0.48	4282	–	1.26	0.43	5102X	3.61	2.08	0.29
3635	1.56	1.06	0.42	4283	1.19	0.81	0.42	5146	3.32	2.05	0.35
3638	1.30	0.91	0.45	4299	1.22	0.87	0.47	5160	1.63	0.97	0.31
3639X	1.74	0.91	0.27	4304	3.28	2.12	0.38	5183	1.58	0.98	0.35
3642	0.74	0.51	0.43	4307	1.15	0.85	0.50	5188	2.17	1.35	0.35
3643	1.42	0.98	0.43	4351	0.59	0.40	0.42	5190	1.78	1.11	0.35
3647	2.21	1.47	0.39	4352	1.13	0.79	0.45	5191	0.61	0.42	0.43
3648	0.89	0.62	0.46	4360	0.70	0.50	0.47	5192	1.83	1.26	0.43
3681	0.48	0.34	0.46	4361	0.77	0.54	0.45	5213	4.67	2.73	0.30
3685	0.65	0.45	0.46	4410	1.85	1.28	0.43	5215	3.23	2.15	0.39
3719	0.80	0.44	0.29	4420	2.10	1.24	0.30	5221	3.28	2.00	0.34
3724	2.58	1.54	0.31	4431	0.97	0.71	0.50	5222	5.96	3.48	0.30
3726	2.48	1.38	0.30	4432	0.93	0.68	0.49	5223	3.21	1.97	0.35
3803	1.16	0.80	0.43	4439	–	0.82	0.43	5348	2.46	1.52	0.35
3807	1.52	1.07	0.46	4452	2.63	1.74	0.41	5402	3.24	2.28	0.46
3808	1.31	0.87	0.39	4459	1.61	1.10	0.42	5403X	4.67	2.69	0.29
3821	3.77	2.45	0.38	4470	1.38	0.96	0.43	5437	3.80	2.34	0.35
3822	2.36	1.51	0.37	4484	1.82	1.24	0.42	5443	1.94	1.32	0.42
3824	2.86	1.87	0.38	4493	2.17	1.49	0.43	5445	4.13	2.41	0.30
3826	0.44	0.31	0.43	4511	0.33	0.21	0.38	5462	4.87	2.96	0.34
3827	2.05	1.31	0.37	4557	1.41	0.99	0.46	5472	2.93	1.58	0.29
3830	0.99	0.66	0.39	4558	1.19	0.82	0.43	5473	3.52	1.87	0.28
3851	2.45	1.75	0.47	4568	1.43	0.88	0.35	5474	3.98	2.29	0.29

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

Effective March 1, 2018

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
5478	2.82	1.73	0.35	6845F	4.80	2.33	0.25	7515	0.83	0.44	0.28
5479	3.62	2.39	0.39	6854	2.88	1.55	0.29	7520	2.17	1.47	0.42
5480	5.48	3.36	0.32	6872F	7.05	3.43	0.25	7538	4.62	2.44	0.28
5491	1.15	0.67	0.30	6874F	12.45	6.05	0.25	7539	2.14	1.23	0.29
5506	4.83	2.58	0.28	6882	2.10	1.12	0.28	7540	4.20	2.24	0.28
5507	2.24	1.31	0.30	6884	5.23	2.97	0.31	7580	2.02	1.28	0.36
5508D	6.89	4.31	0.35	7016M	1.18	0.65	0.30	7590	1.80	1.18	0.38
5535	3.39	2.09	0.35	7024M	1.31	0.72	0.30	7600	3.63	2.28	0.35
5537	2.92	1.80	0.35	7038M	3.95	1.97	0.25	7601	–	2.28	0.35
5539X	9.66	5.88	0.34	7046M	5.50	3.07	0.30	7605	1.56	0.96	0.35
5551	12.59	6.45	0.26	7047M	2.88	1.48	0.30	7610	0.27	0.17	0.39
5604X	1.39	0.82	0.30	7050M	9.66	4.51	0.25	7611	–	2.28	0.35
5606	0.79	0.46	0.30	7090M	4.39	2.19	0.25	7612	–	2.28	0.35
5610	3.62	2.47	0.42	7098M	6.11	3.41	0.30	7613	–	2.28	0.35
5613X	5.98	4.09	0.42	7099M	13.44	7.03	0.30	7705	3.56	2.33	0.38
5645	10.88	6.14	0.29	7133	1.41	0.82	0.30	7710	3.31	1.90	0.29
5651	–	6.14	0.29	7151M	1.71	0.99	0.30	7711	3.31	1.90	0.29
5703	11.13	6.81	0.34	7152M	4.19	2.28	0.30	7720	1.79	1.07	0.33
5705	16.65	9.95	0.33	7153M	1.90	1.10	0.30	7855	2.36	1.44	0.34
5951	0.29	0.20	0.45	7219	4.44	2.63	0.31	8001	1.17	0.81	0.45
6003	3.35	2.11	0.36	7222	4.91	3.12	0.36	8002	1.21	0.80	0.41
6005	2.91	1.76	0.34	7225	3.88	2.44	0.36	8006	1.61	1.08	0.41
6017	–	2.73	0.30	7228	–	2.63	0.31	8008	0.80	0.55	0.45
6018	1.24	0.81	0.38	7229	–	2.63	0.31	8010	1.12	0.78	0.45
6045	2.46	1.59	0.37	7230	4.80	3.18	0.39	8013	0.23	0.15	0.41
6204	5.55	3.24	0.30	7231	4.15	2.81	0.40	8015	0.46	0.31	0.42
6206	1.55	0.83	0.29	7232	4.85	2.96	0.32	8017	0.86	0.60	0.45
6213	1.15	0.68	0.31	7309F	6.56	3.19	0.25	8018	1.52	1.07	0.46
6214	1.15	0.61	0.28	7313F	2.58	1.25	0.25	8021	1.66	1.13	0.42
6216	4.50	2.48	0.30	7317F	6.73	3.27	0.26	8031	1.54	1.03	0.41
6217	3.59	2.08	0.30	7327F	15.68	7.63	0.24	8032	1.24	0.86	0.45
6229	2.53	1.46	0.29	7333M	1.28	0.70	0.30	8033	1.13	0.76	0.42
6233	1.69	1.01	0.31	7335M	1.42	0.78	0.30	8037	1.36	0.96	0.46
6235	6.41	3.44	0.29	7337M	3.12	1.61	0.30	8039	0.90	0.62	0.45
6236	5.12	3.19	0.35	7350F	9.99	5.18	0.27	8044	1.53	1.00	0.38
6237	1.04	0.65	0.35	7360	1.99	1.23	0.35	8045	0.26	0.18	0.46
6251D	3.26	1.98	0.32	7370	2.92	2.00	0.42	8046	1.31	0.88	0.41
6252D	3.45	1.85	0.29	7380	3.48	2.31	0.39	8047	0.39	0.28	0.46
6260	–	1.98	0.32	7382	2.87	1.93	0.41	8058	1.37	0.92	0.41
6306	5.55	3.14	0.29	7390	4.29	2.89	0.42	8061	–	1.08	0.41
6319	3.43	2.00	0.30	7394M	1.76	0.95	0.29	8072	0.44	0.31	0.45
6325	1.94	1.14	0.30	7395M	1.95	1.05	0.29	8102	1.31	0.92	0.46
6400	4.61	2.99	0.38	7398M	4.29	2.16	0.29	8103	1.24	0.80	0.38
6503	1.11	0.78	0.46	7402	0.09	0.06	0.43	8105	–	1.07	0.46
6504	1.57	1.11	0.46	7403	2.56	1.58	0.35	8106	3.44	2.11	0.34
6702M*	2.87	1.75	0.34	7405N	0.29	0.18	0.35	8107	2.45	1.50	0.34
6703M*	7.01	4.01	0.34	7420	3.86	2.16	0.31	8111	1.00	0.69	0.43
6704M*	3.19	1.94	0.34	7421	0.78	0.47	0.32	8116	1.70	1.17	0.43
6801F	2.64	1.41	0.32	7422	0.76	0.41	0.29	8203	5.24	3.52	0.42
6811	3.15	1.97	0.35	7425	1.13	0.65	0.32	8204	3.07	1.83	0.33
6824F	8.68	4.51	0.27	7431N	0.47	0.26	0.30	8209	2.57	1.76	0.42
6826F	3.56	1.90	0.32	7445N	0.16	–	–	8215	1.86	1.13	0.34
6834	1.52	1.00	0.38	7453N	0.25	–	–	8227	3.14	1.64	0.27
6836	2.67	1.61	0.34	7500X	1.84	1.11	0.34	8232	3.17	1.95	0.34
6843F	2.74	1.33	0.25	7502	2.11	1.27	0.34	8233	1.78	1.12	0.36

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

Effective March 1, 2018

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
8235	3.81	2.54	0.41	8864	1.17	0.78	0.41				
8263	3.38	2.14	0.37	8868	0.20	0.14	0.45				
8264	2.76	1.68	0.34	8869	0.59	0.40	0.44				
8265	3.28	1.90	0.30	8871	0.06	0.04	0.47				
8279	3.36	1.92	0.29	8901	0.13	0.09	0.39				
8288	5.96	3.47	0.32	9012	0.71	0.46	0.38				
8291	2.26	1.48	0.38	9014	1.60	1.08	0.42				
8292	1.62	1.10	0.42	9015	1.74	1.19	0.43				
8293	4.71	2.88	0.34	9016	1.32	0.88	0.41				
8295	–	0.80	0.38	9019	1.03	0.62	0.34				
8304	2.96	1.79	0.34	9033	1.14	0.78	0.43				
8350	3.69	2.17	0.30	9040	2.56	1.77	0.45				
8380X	1.60	1.05	0.38	9052	1.21	0.83	0.45				
8381	1.80	1.14	0.37	9058	0.95	0.69	0.49				
8385	1.52	0.92	0.34	9060	1.00	0.69	0.45				
8392	1.42	0.94	0.41	9061	0.73	0.54	0.50				
8393	1.02	0.70	0.43	9063	0.55	0.37	0.44				
8500	4.02	2.43	0.34	9077F	2.60	1.47	0.42				
8601	0.18	0.12	0.39	9082	0.74	0.54	0.49				
8602	0.77	0.51	0.38	9083	0.74	0.53	0.49				
8603	0.04	0.03	0.42	9084	1.05	0.71	0.41				
8606	1.18	0.69	0.30	9088a	a	a	a				
8709F	3.81	1.85	0.25	9089	1.22	0.84	0.45				
8719	1.84	0.99	0.29	9093	0.89	0.61	0.44				
8720	0.85	0.52	0.34	9101	1.77	1.22	0.45				
8721	0.15	0.10	0.35	9102	1.82	1.24	0.42				
8723	0.13	0.09	0.43	9154X	1.05	0.71	0.42				
8725	1.88	1.13	0.33	9156	0.93	0.60	0.38				
8726F	1.93	1.03	0.32	9170	6.49	3.31	0.26				
8734M	0.28	0.17	0.35	9178	3.05	2.14	0.48				
8737M	0.26	0.16	0.35	9179	5.54	3.84	0.45				
8738M	0.62	0.36	0.35	9180	3.74	2.19	0.32				
8742	0.21	0.13	0.35	9182	1.30	0.86	0.41				
8745	2.36	1.53	0.38	9186	10.05	5.59	0.28				
8748X	0.29	0.19	0.39	9220	3.00	1.96	0.38				
8755	0.17	0.10	0.34	9402	3.28	2.06	0.35				
8799	0.33	0.22	0.42	9403	4.82	2.83	0.30				
8800	0.80	0.59	0.51	9410	1.33	0.91	0.42				
8803	0.04	0.03	0.34	9501	1.97	1.28	0.38				
8805M	0.14	0.09	0.42	9505	1.96	1.29	0.39				
8810	0.10	0.07	0.42	9516	2.84	1.76	0.35				
8814M	0.12	0.08	0.42	9519	3.16	1.96	0.35				
8815M	0.30	0.19	0.42	9521	1.89	1.15	0.34				
8820	0.12	0.08	0.37	9522	1.69	1.14	0.42				
8824	2.43	1.66	0.44	9534	2.42	1.42	0.30				
8825	1.06	0.78	0.50	9554	6.39	3.69	0.29				
8826	1.28	0.86	0.42	9586	0.31	0.23	0.50				
8829	1.43	0.96	0.41	9600	1.54	1.11	0.47				
8831	0.79	0.52	0.41	9620	0.55	0.36	0.38				
8832	0.18	0.12	0.42								
8833	0.70	0.48	0.42								
8835	1.58	1.09	0.43								
8842	1.55	1.03	0.41								
8855	0.12	0.08	0.42								
8856	0.20	0.14	0.44								

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

FOOTNOTES

a Advisory loss cost for each individual risk must be obtained from NCCI Customer Service or the Rating Organization having jurisdiction.

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	0.27	S	1624D	0.01	S	4024D	0.03	S
0065D	0.05	S	1710D	0.03	S	5508D	0.03	S
0066D	0.05	S	1803D	0.16	S	6251D	0.02	S
0067D	0.05	S	3081D	0.03	S	6252D	0.02	S
1164D	0.07	S	3082D	0.06	S			
1165D	0.06	S	3085D	0.04	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 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
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 $0.57. (For coverage written separately for federal benefits only, $0.56. For coverage written separately for state benefits only, $0.01.)

1016 Advisory loss cost includes a non-ratable disease element of $1.72. (For coverage written separately for federal benefits only, $1.68. For coverage written separately for state benefits only, $0.04.)

2702,2705 An upset payroll of $10.00 per cord shall be used for premium computation when payroll records are not available.

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 2.97 and elr x 2.782.

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 March 1, 2018

ADVISORY MISCELLANEOUS VALUES

Advisory Loss Elimination Ratios - The following percentages represent the portion of total loss eliminated per claim and are applicable by hazard group. They do not include a safety factor.

Advisory Loss Elimination Ratios							
Deductible	**HAZARD GROUP**						
Amount	**A**	**B**	**C**	**D**	**E**	**F**	**G**
$100	1.8%	1.2%	1.0%	0.8%	0.5%	0.4%	0.3%
$200	3.3%	2.2%	1.9%	1.4%	1.0%	0.7%	0.6%
$300	4.6%	3.1%	2.7%	2.0%	1.4%	1.0%	0.9%
$400	5.7%	4.0%	3.4%	2.6%	1.8%	1.3%	1.1%
$500	6.7%	4.7%	4.1%	3.1%	2.1%	1.5%	1.3%
$1,000	10.4%	7.6%	6.6%	5.1%	3.6%	2.7%	2.3%
$1,500	13.0%	9.8%	8.5%	6.6%	4.7%	3.6%	3.1%
$2,000	15.0%	11.5%	10.0%	7.9%	5.7%	4.4%	3.8%
$2,500	16.8%	13.0%	11.4%	9.0%	6.6%	5.2%	4.4%

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

Employee operated vehicle..... $70,400
Leased or rented vehicle..... $46,900

Catastrophe (other than Certified Acts of Terrorism) - (Advisory Loss Cost)..... 0.02

Maximum Weekly Payroll applicable in accordance with ***Basic Manual*** footnote instructions for Code 9178 -- "Athletic Sports or Park: Non-Contact Sports," and Code 9179 -- "Athletic Sports or Park: Contact Sports" $3,600

Maximum Weekly Payroll applicable in accordance with ***Basic Manual*** Rule 2-E-1:

Executive officers in the construction industry..... $1,330
All other executive officers..... $3,600

Minimum Weekly Payroll applicable in accordance with ***Basic Manual*** Rule 2-E-1:

Executive officers in the construction industry..... $450
All other executive officers..... $900

Premium Determination for Partners and Sole Proprietors in accordance with ***Basic Manual*** Rule 2-E-3 (Annual Payroll) $46,900

Premium Determination for Partners and Sole Proprietors (Construction Industry Only):

Minimum Annual Payroll applicable in accordance with ***Basic Manual*** Rule 2-E-3..... $23,400
Maximum Annual Payroll applicable in accordance with ***Basic Manual*** Rule 2-E-3..... $68,900

Terrorism - (Advisory Loss Cost) 0.005

United States Longshore and Harbor Workers' Compensation Coverage Percentage applicable only in connection with ***Basic Manual*** Rule 3-A-4..... 147%

(Multiply a Non-F classification loss cost by a factor of 2.47 to adjust for differences in benefits and loss-based expenses. This factor is the product of the adjustment for differences in benefits (2.33) 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.

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

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

Effective March 1, 2018

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	2.99	758	1.17	0.41	2003	3.52	864	1.44	0.43	2702*	101.19	1250	30.33	0.26
0008	3.57	874	1.36	0.38	2014	5.35	1230	1.94	0.35	2705X*	27.26	1250	9.62	0.34
0016	7.31	1250	2.56	0.33	2016	4.26	1012	1.74	0.46	2709	15.07	1250	5.41	0.34
0034	3.26	812	1.30	0.42	2021	3.50	860	1.32	0.38	2710	13.86	1250	4.58	0.29
0035	2.84	728	1.16	0.45	2039	2.97	754	1.24	0.47	2714	5.42	1244	2.24	0.46
0036	3.78	916	1.50	0.42	2041	2.70	700	1.12	0.47	2731	4.19	998	1.49	0.34
0037	3.64	888	1.36	0.37	2065	2.29	618	0.92	0.43	2735	5.13	1186	2.07	0.45
0042	5.78	1250	2.18	0.38	2070	5.47	1250	2.24	0.43	2759	6.25	1250	2.56	0.46
0050	4.58	1076	1.85	0.43	2081	4.14	988	1.63	0.42	2790	1.76	512	0.71	0.45
0059D	0.46	–	0.07	0.35	2089	4.15	990	1.65	0.42	2797	4.05	970	1.62	0.42
0065D	0.09	–	0.02	0.34	2095	3.33	826	1.31	0.42	2799	6.24	1250	2.40	0.39
0066D	0.09	–	0.02	0.35	2105	4.12	984	1.67	0.45	2802	5.09	1178	1.96	0.38
0067D	0.09	–	0.02	0.35	2110	2.61	682	1.07	0.46	2835	2.68	696	1.16	0.51
0079	3.74	908	1.31	0.33	2111	3.20	800	1.31	0.46	2836	2.34	628	1.01	0.50
0083	5.76	1250	2.30	0.42	2112	3.21	802	1.32	0.46	2841	4.94	1148	2.01	0.45
0106	9.18	1250	3.12	0.30	2114	3.40	840	1.39	0.45	2881	3.76	912	1.63	0.51
0113	3.59	878	1.44	0.42	2121	1.81	522	0.72	0.42	2883	4.68	1096	1.86	0.42
0170	2.29	618	0.92	0.42	2130	1.78	516	0.72	0.43	2913X	3.47	854	1.49	0.50
0251	3.52	864	1.42	0.43	2131	1.86	532	0.77	0.44	2915	2.89	738	1.12	0.39
0400	–	–	0.80	0.38	2143	2.08	576	0.86	0.46	2916	5.49	1250	1.84	0.29
0401	12.94	A	4.48	0.30	2157	4.53	1066	1.85	0.44	2923	2.58	676	1.07	0.46
0771N	0.68	–	–	–	2172	1.95	550	0.76	0.39	2942	–	–	0.68	0.49
0908P	109.00	269	44.44	0.43	2174	3.13	786	1.28	0.45	2960	4.05	970	1.65	0.43
0913P	376.00	536	152.49	0.43	2211	11.69	1250	4.17	0.34	3004	2.61	682	0.93	0.34
0917	4.85	1130	1.98	0.46	2220	2.46	652	1.01	0.43	3018	3.52	864	1.26	0.34
1005*	6.28	1250	1.72	0.30	2286	1.83	526	0.76	0.46	3022	3.16	792	1.32	0.47
1016X*	20.39	1250	5.68	0.30	2288	3.91	942	1.59	0.45	3027	3.26	812	1.17	0.34
1164D	6.10	1250	1.85	0.28	2300	–	–	1.28	0.42	3028	5.59	1250	2.22	0.42
1165D	10.51	1250	3.41	0.28	2302	1.79	518	0.71	0.42	3030	8.53	1250	3.00	0.33
1320	1.78	516	0.60	0.30	2305	2.15	590	0.84	0.39	3040	7.01	1250	2.50	0.34
1322	12.80	1250	4.23	0.29	2361	2.41	642	0.94	0.41	3041	4.51	1062	1.79	0.42
1429	–	–	1.90	0.30	2362	1.79	518	0.71	0.42	3042	4.58	1076	1.79	0.39
1430	5.21	1202	1.86	0.34	2380	2.43	646	0.96	0.42	3064	4.36	1032	1.75	0.43
1438X	5.59	1250	1.90	0.30	2386	–	–	1.28	0.42	3069	–	–	1.63	0.43
1452	2.80	720	1.00	0.34	2388	1.64	488	0.66	0.45	3076	4.05	970	1.63	0.43
1463	13.11	1250	4.47	0.30	2402	2.80	720	1.01	0.35	3081D	3.59	878	1.28	0.35
1472	4.44	1048	1.48	0.29	2413	3.32	824	1.31	0.42	3082D	3.88	936	1.34	0.34
1604X	4.46	1052	1.65	0.36	2416	1.81	522	0.73	0.43	3085D	3.88	936	1.38	0.35
1624D	4.40	1040	1.51	0.30	2417	1.59	478	0.64	0.42	3110	4.72	1104	1.90	0.43
1642	2.34	628	0.86	0.35	2501	3.25	810	1.28	0.42	3111	2.89	738	1.15	0.42
1654	5.52	1250	2.02	0.35	2503	1.67	494	0.69	0.46	3113	2.24	608	0.91	0.43
1655	–	–	0.86	0.35	2534	–	–	1.28	0.42	3114	2.48	656	0.99	0.42
1699	2.80	720	1.01	0.35	2570	5.30	1220	2.16	0.45	3118	2.02	564	0.84	0.47
1701	4.14	988	1.49	0.35	2585	4.65	1090	1.91	0.46	3119	0.79	318	0.34	0.51
1710D	4.17	994	1.50	0.35	2586	2.63	686	1.06	0.42	3122	2.03	566	0.83	0.46
1741	–	–	1.49	0.35	2587	2.19	598	0.92	0.47	3126	2.58	676	1.02	0.42
1747	1.97	554	0.72	0.35	2589	2.38	636	0.95	0.42	3131	1.81	522	0.72	0.42
1748	4.97	1154	1.74	0.33	2600	4.14	988	1.74	0.47	3132	3.54	868	1.38	0.41
1803D	5.89	1250	1.90	0.30	2623	8.89	1250	3.39	0.38	3145	2.56	672	1.01	0.42
1852	–	–	0.71	0.26	2651	1.20	400	0.49	0.46	3146	3.37	834	1.34	0.42
1853	–	–	1.49	0.35	2660	2.55	670	1.03	0.45	3169	3.13	786	1.25	0.42
1860	–	–	1.26	0.43	2670	2.34	628	0.99	0.50	3175	–	–	1.25	0.42
1924	2.61	682	1.09	0.46	2683	1.95	550	0.78	0.44	3179	2.12	584	0.87	0.46
1925	2.97	754	1.15	0.39	2688	3.14	788	1.31	0.47	3180	3.09	778	1.28	0.46
2002	4.14	988	1.63	0.44	2701	19.74	1250	6.95	0.34	3188	2.38	636	0.98	0.46

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

Effective March 1, 2018

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
3220	2.20	600	0.88	0.42	3865	1.52	464	0.64	0.49	4581	0.82	324	0.27	0.29
3223	–	–	1.28	0.46	3881	4.07	974	1.63	0.42	4583	4.10	980	1.38	0.29
3224	3.42	844	1.46	0.48	4000	4.60	1080	1.60	0.31	4611	1.59	478	0.65	0.45
3227	2.70	700	1.13	0.47	4021	7.61	1250	2.70	0.34	4635	3.06	772	0.95	0.28
3240	2.91	742	1.19	0.46	4024D	5.78	1250	1.96	0.32	4653	1.54	468	0.64	0.47
3241	3.06	772	1.24	0.43	4034	6.90	1250	2.48	0.34	4665	6.36	1250	2.27	0.34
3255	2.32	624	1.01	0.51	4036	2.84	728	1.01	0.34	4670	6.19	1250	2.20	0.34
3257	2.77	714	1.10	0.42	4038	2.87	734	1.27	0.52	4683	4.36	1032	1.80	0.44
3270	3.21	802	1.28	0.42	4053	–	–	1.24	0.42	4686	2.32	624	0.83	0.34
3300	5.04	1168	1.98	0.41	4061	–	–	1.24	0.42	4692	0.60	280	0.25	0.47
3303	6.49	1250	2.59	0.44	4062	3.11	782	1.24	0.42	4693	1.04	368	0.41	0.42
3307	4.39	1038	1.76	0.42	4101	3.50	860	1.34	0.38	4703	1.83	526	0.75	0.44
3315	4.22	1004	1.77	0.47	4109	0.75	310	0.31	0.47	4717	3.09	778	1.39	0.53
3334	1.98	556	0.81	0.43	4110	0.99	358	0.39	0.42	4720	2.87	734	1.13	0.42
3336	2.73	706	0.99	0.35	4111	1.88	536	0.75	0.45	4740	1.73	506	0.64	0.36
3365	5.25	1210	1.92	0.35	4113	–	–	0.75	0.45	4741	3.76	912	1.51	0.43
3372	4.12	984	1.56	0.38	4114	2.89	738	1.16	0.43	4751	1.73	506	0.62	0.34
3373	4.87	1134	1.96	0.43	4130	4.58	1076	1.84	0.42	4761	–	–	1.20	0.28
3383	1.93	546	0.81	0.47	4131	4.90	1140	1.99	0.45	4771N	3.88	1072	1.20	0.28
3385	0.80	320	0.34	0.47	4133	2.91	742	1.16	0.44	4777	5.06	1172	1.58	0.28
3400	4.24	1008	1.62	0.38	4149	1.64	488	0.71	0.51	4825	1.01	362	0.36	0.34
3507	2.61	682	1.06	0.43	4206	4.48	1056	1.82	0.43	4828	2.43	646	0.92	0.38
3515	2.60	680	1.02	0.42	4207	1.69	498	0.62	0.36	4829	1.50	460	0.51	0.30
3548	1.32	424	0.52	0.42	4239	2.68	696	0.99	0.36	4902	3.13	786	1.28	0.46
3559	4.00	960	1.58	0.42	4240	3.42	844	1.39	0.45	4923	2.43	646	0.93	0.40
3565	–	–	0.51	0.46	4243	2.20	600	0.89	0.43	5020	7.91	1250	2.86	0.35
3574	1.25	410	0.51	0.46	4244	2.46	652	0.99	0.42	5022	9.48	1250	3.22	0.30
3581	0.92	344	0.38	0.46	4250	2.51	662	1.02	0.43	5037	31.75	1250	9.72	0.27
3612	1.91	542	0.74	0.39	4251	2.73	706	1.12	0.43	5040	8.80	1250	2.76	0.29
3620	3.73	906	1.33	0.34	4263	2.46	652	0.97	0.42	5057	4.12	984	1.28	0.28
3629	1.61	482	0.67	0.46	4273	3.40	840	1.37	0.43	5059	18.47	1250	5.66	0.27
3632	3.95	950	1.51	0.38	4279	3.13	786	1.26	0.43	5069X	16.24	1250	5.10	0.29
3634	3.33	826	1.41	0.48	4282	–	–	1.26	0.43	5102X	6.17	1250	2.08	0.29
3635	2.67	694	1.06	0.42	4283	2.03	566	0.81	0.42	5146	5.67	1250	2.05	0.35
3638	2.22	604	0.91	0.45	4299	2.08	576	0.87	0.47	5160	2.79	718	0.97	0.31
3639X	2.97	754	0.91	0.27	4304	5.61	1250	2.12	0.38	5183	2.70	700	0.98	0.35
3642	1.26	412	0.51	0.43	4307	1.97	554	0.85	0.50	5188	3.71	902	1.35	0.35
3643	2.43	646	0.98	0.43	4351	1.01	362	0.40	0.42	5190	3.04	768	1.11	0.35
3647	3.78	916	1.47	0.39	4352	1.93	546	0.79	0.45	5191	1.04	368	0.42	0.43
3648	1.52	464	0.62	0.46	4360	1.20	400	0.50	0.47	5192	3.13	786	1.26	0.43
3681	0.82	324	0.34	0.46	4361	1.32	424	0.54	0.45	5213	7.98	1250	2.73	0.30
3685	1.11	382	0.45	0.46	4410	3.16	792	1.28	0.43	5215	5.52	1250	2.15	0.39
3719	1.37	434	0.44	0.29	4420	3.59	878	1.24	0.30	5221	5.61	1250	2.00	0.34
3724	4.41	1042	1.54	0.31	4431	1.66	492	0.71	0.50	5222	10.19	1250	3.48	0.30
3726	4.24	1008	1.38	0.30	4432	1.59	478	0.68	0.49	5223	5.49	1250	1.97	0.35
3803	1.98	556	0.80	0.43	4439	–	–	0.82	0.43	5348	4.20	1000	1.52	0.35
3807	2.60	680	1.07	0.46	4452	4.49	1058	1.74	0.41	5402	5.54	1250	2.28	0.46
3808	2.24	608	0.87	0.39	4459	2.75	710	1.10	0.42	5403X	7.98	1250	2.69	0.29
3821	6.44	1250	2.45	0.38	4470	2.36	632	0.96	0.43	5437	6.49	1250	2.34	0.35
3822	4.03	966	1.51	0.37	4484	3.11	782	1.24	0.42	5443	3.32	824	1.32	0.42
3824	4.89	1138	1.87	0.38	4493	3.71	902	1.49	0.43	5445	7.06	1250	2.41	0.30
3826	0.75	310	0.31	0.43	4511	0.56	272	0.21	0.38	5462	8.32	1250	2.96	0.34
3827	3.50	860	1.31	0.37	4557	2.41	642	0.99	0.46	5472	5.01	1162	1.58	0.29
3830	1.69	498	0.66	0.39	4558	2.03	566	0.82	0.43	5473	6.02	1250	1.87	0.28
3851	4.19	998	1.75	0.47	4568	2.44	648	0.88	0.35	5474	6.80	1250	2.29	0.29

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

Effective March 1, 2018

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
5478	4.82	1124	1.73	0.35	6845F	8.20	1250	2.33	0.25	7515	1.42	444	0.44	0.28
5479	6.19	1250	2.39	0.39	6854	4.92	1144	1.55	0.29	7520	3.71	902	1.47	0.42
5480	9.37	1250	3.36	0.32	6872F	12.05	1250	3.43	0.25	7538	7.90	1250	2.44	0.28
5491	1.97	554	0.67	0.30	6874F	21.28	1250	6.05	0.25	7539	3.66	892	1.23	0.29
5506	8.25	1250	2.58	0.28	6882	3.59	878	1.12	0.28	7540	7.18	1250	2.24	0.28
5507	3.83	926	1.31	0.30	6884	8.94	1250	2.97	0.31	7580	3.45	850	1.28	0.36
5508D	11.77	1250	4.31	0.35	7016M	2.02	564	0.65	0.30	7590	3.08	776	1.18	0.38
5535	5.79	1250	2.09	0.35	7024M	2.24	608	0.72	0.30	7600	6.20	1250	2.28	0.35
5537	4.99	1158	1.80	0.35	7038M	6.75	1250	1.97	0.25	7601	–	–	2.28	0.35
5539X	16.51	1250	5.88	0.34	7046M	9.40	1250	3.07	0.30	7605	2.67	694	0.96	0.35
5551	21.52	1250	6.45	0.26	7047M	4.92	1144	1.48	0.30	7610	0.46	252	0.17	0.39
5604X	2.38	636	0.82	0.30	7050M	16.51	1250	4.51	0.25	7611	–	–	2.28	0.35
5606	1.35	430	0.46	0.30	7090M	7.50	1250	2.19	0.25	7612	–	–	2.28	0.35
5610	6.19	1250	2.47	0.42	7098M	10.44	1250	3.41	0.30	7613	–	–	2.28	0.35
5613X	10.22	1250	4.09	0.42	7099M	22.97	1250	7.03	0.30	7705	6.08	1250	2.33	0.38
5645	18.59	1250	6.14	0.29	7133	2.41	642	0.82	0.30	7710	5.66	1250	1.90	0.29
5651	–	–	6.14	0.29	7151M	2.92	744	0.99	0.30	7711	5.66	1250	1.90	0.29
5703	19.02	1250	6.81	0.34	7152M	7.16	1250	2.28	0.30	7720	3.06	772	1.07	0.33
5705	28.45	1250	9.95	0.33	7153M	3.25	810	1.10	0.30	7855	4.03	966	1.44	0.34
5951	0.50	260	0.20	0.45	7219	7.59	1250	2.63	0.31	8001	2.00	560	0.81	0.45
6003	5.73	1250	2.11	0.36	7222	8.39	1250	3.12	0.36	8002	2.07	574	0.80	0.41
6005	4.97	1154	1.76	0.34	7225	6.63	1250	2.44	0.36	8006	2.75	710	1.08	0.41
6017	–	–	2.73	0.30	7228	–	–	2.63	0.31	8008	1.37	434	0.55	0.45
6018	2.12	584	0.81	0.38	7229	–	–	2.63	0.31	8010	1.91	542	0.78	0.45
6045	4.20	1000	1.59	0.37	7230	8.20	1250	3.18	0.39	8013	0.39	238	0.15	0.41
6204	9.48	1250	3.24	0.30	7231	7.09	1250	2.81	0.40	8015	0.79	318	0.31	0.42
6206	2.65	690	0.83	0.29	7232	8.29	1250	2.96	0.32	8017	1.47	454	0.60	0.45
6213	1.97	554	0.68	0.31	7309F	11.21	1250	3.19	0.25	8018	2.60	680	1.07	0.46
6214	1.97	554	0.61	0.28	7313F	4.41	1042	1.25	0.25	8021	2.84	728	1.13	0.42
6216	7.69	1250	2.48	0.30	7317F	11.50	1250	3.27	0.26	8031	2.63	686	1.03	0.41
6217	6.14	1250	2.08	0.30	7327F	26.80	1250	7.63	0.24	8032	2.12	584	0.86	0.45
6229	4.32	1024	1.46	0.29	7333M	2.19	598	0.70	0.30	8033	1.93	546	0.76	0.42
6233	2.89	738	1.01	0.31	7335M	2.43	646	0.78	0.30	8037	2.32	624	0.96	0.46
6235	10.95	1250	3.44	0.29	7337M	5.33	1226	1.61	0.30	8039	1.54	468	0.62	0.45
6236	8.75	1250	3.19	0.35	7350F	17.07	1250	5.18	0.27	8044	2.61	682	1.00	0.38
6237	1.78	516	0.65	0.35	7360	3.40	840	1.23	0.35	8045	0.44	248	0.18	0.46
6251D	5.57	1250	1.98	0.32	7370	4.99	1158	2.00	0.42	8046	2.24	608	0.88	0.41
6252D	5.89	1250	1.85	0.29	7380	5.95	1250	2.31	0.39	8047	0.67	294	0.28	0.46
6260	–	–	1.98	0.32	7382	4.90	1140	1.93	0.41	8058	2.34	628	0.92	0.41
6306	9.48	1250	3.14	0.29	7390	7.33	1250	2.89	0.42	8061	–	–	1.08	0.41
6319	5.86	1250	2.00	0.30	7394M	3.01	762	0.95	0.29	8072	0.75	310	0.31	0.45
6325	3.32	824	1.14	0.30	7395M	3.33	826	1.05	0.29	8102	2.24	608	0.92	0.46
6400	7.88	1250	2.99	0.38	7398M	7.33	1250	2.16	0.29	8103	2.12	584	0.80	0.38
6503	1.90	540	0.78	0.46	7402	0.15	190	0.06	0.43	8105	–	–	1.07	0.46
6504	2.68	696	1.11	0.46	7403	4.38	1036	1.58	0.35	8106	5.88	1250	2.11	0.34
6702M*	4.90	1140	1.75	0.34	7405N	0.50	314	0.18	0.35	8107	4.19	998	1.50	0.34
6703M*	11.98	1250	4.01	0.34	7420	6.60	1250	2.16	0.31	8111	1.71	502	0.69	0.43
6704M*	5.45	1250	1.94	0.34	7421	1.33	426	0.47	0.32	8116	2.91	742	1.17	0.43
6801F	4.51	1062	1.41	0.32	7422	1.30	420	0.41	0.29	8203	8.96	1250	3.52	0.42
6811	5.38	1236	1.97	0.35	7425	1.93	546	0.65	0.32	8204	5.25	1210	1.83	0.33
6824F	14.83	1250	4.51	0.27	7431N	0.80	406	0.26	0.30	8209	4.39	1038	1.76	0.42
6826F	6.08	1250	1.90	0.32	7445N	0.27	–	–	–	8215	3.18	796	1.13	0.34
6834	2.60	680	1.00	0.38	7453N	0.43	–	–	–	8227	5.37	1234	1.64	0.27
6836	4.56	1072	1.61	0.34	7500X	3.14	788	1.11	0.34	8232	5.42	1244	1.95	0.34
6843F	4.68	1096	1.33	0.25	7502	3.61	882	1.27	0.34	8233	3.04	768	1.12	0.36

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

Effective March 1, 2018

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
8235	6.51	1250	2.54	0.41	8864	2.00	560	0.78	0.41					
8263	5.78	1250	2.14	0.37	8868	0.34	228	0.14	0.45					
8264	4.72	1104	1.68	0.34	8869	1.01	362	0.40	0.44					
8265	5.61	1250	1.90	0.30	8871	0.10	180	0.04	0.47					
8279	5.74	1250	1.92	0.29	8901	0.22	204	0.09	0.39					
8288	10.19	1250	3.47	0.32	9012	1.21	402	0.46	0.38					
8291	3.86	932	1.48	0.38	9014	2.73	706	1.08	0.42					
8292	2.77	714	1.10	0.42	9015	2.97	754	1.19	0.43					
8293	8.05	1250	2.88	0.34	9016	2.26	612	0.88	0.41					
8295	–	–	0.80	0.38	9019	1.76	512	0.62	0.34					
8304	5.06	1172	1.79	0.34	9033	1.95	550	0.78	0.43					
8350	6.31	1250	2.17	0.30	9040	4.38	1036	1.77	0.45					
8380X	2.73	706	1.05	0.38	9052	2.07	574	0.83	0.45					
8381	3.08	776	1.14	0.37	9058	1.62	484	0.69	0.49					
8385	2.60	680	0.92	0.34	9060	1.71	502	0.69	0.45					
8392	2.43	646	0.94	0.41	9061	1.25	410	0.54	0.50					
8393	1.74	508	0.70	0.43	9063	0.94	348	0.37	0.44					
8500	6.87	1250	2.43	0.34	9077F	4.44	1048	1.47	0.42					
8601	0.31	222	0.12	0.39	9082	1.26	412	0.54	0.49					
8602	1.32	424	0.51	0.38	9083	1.26	412	0.53	0.49					
8603	0.07	174	0.03	0.42	9084	1.79	518	0.71	0.41					
8606	2.02	564	0.69	0.30	9088a	a	a	a	a					
8709F	6.51	1250	1.85	0.25	9089	2.08	576	0.84	0.45					
8719	3.14	788	0.99	0.29	9093	1.52	464	0.61	0.44					
8720	1.45	450	0.52	0.34	9101	3.02	764	1.22	0.45					
8721	0.26	212	0.10	0.35	9102	3.11	782	1.24	0.42					
8723	0.22	204	0.09	0.43	9154X	1.79	518	0.71	0.42					
8725	3.21	802	1.13	0.33	9156	1.59	478	0.60	0.38					
8726F	3.30	820	1.03	0.32	9170	11.09	1250	3.31	0.26					
8734M	0.48	256	0.17	0.35	9178	5.21	1202	2.14	0.48					
8737M	0.44	248	0.16	0.35	9179	9.47	1250	3.84	0.45					
8738M	1.06	372	0.36	0.35	9180	6.39	1250	2.19	0.32					
8742	0.36	232	0.13	0.35	9182	2.22	604	0.86	0.41					
8745	4.03	966	1.53	0.38	9186	17.18	1250	5.59	0.28					
8748X	0.50	260	0.19	0.39	9220	5.13	1186	1.96	0.38					
8755	0.29	218	0.10	0.34	9402	5.61	1250	2.06	0.35					
8799	0.56	272	0.22	0.42	9403	8.24	1250	2.83	0.30					
8800	1.37	434	0.59	0.51	9410	2.27	614	0.91	0.42					
8803	0.07	174	0.03	0.34	9501	3.37	834	1.28	0.38					
8805M	0.24	208	0.09	0.42	9505	3.35	830	1.29	0.39					
8810	0.17	194	0.07	0.42	9516	4.85	1130	1.76	0.35					
8814M	0.21	202	0.08	0.42	9519	5.40	1240	1.96	0.35					
8815M	0.51	262	0.19	0.42	9521	3.23	806	1.15	0.34					
8820	0.21	202	0.08	0.37	9522	2.89	738	1.14	0.42					
8824	4.15	990	1.66	0.44	9534	4.14	988	1.42	0.30					
8825	1.81	522	0.78	0.50	9554	10.92	1250	3.69	0.29					
8826	2.19	598	0.86	0.42	9586	0.53	266	0.23	0.50					
8829	2.44	648	0.96	0.41	9600	2.63	686	1.11	0.47					
8831	1.35	430	0.52	0.41	9620	0.94	348	0.36	0.38					
8832	0.31	222	0.12	0.42										
8833	1.20	400	0.48	0.42										
8835	2.70	700	1.09	0.43										
8842	2.65	690	1.03	0.41										
8855	0.21	202	0.08	0.42										
8856	0.34	228	0.14	0.44										

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

Effective March 1, 2018
APPLICABLE TO ASSIGNED RISK POLICIES ONLY

FOOTNOTES

A Minimum Premium $100 per ginning location for policy minimum premium computation.

a Rate for each individual risk must be obtained from NCCI Customer Service or the Rating Organization having jurisdiction.

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	0.46	S	1624D	0.02	S	4024D	0.05	S
0065D	0.09	S	1710D	0.05	S	5508D	0.05	S
0066D	0.09	S	1803D	0.27	S	6251D	0.03	S
0067D	0.09	S	3081D	0.05	S	6252D	0.03	S
1164D	0.12	S	3082D	0.10	S			
1165D	0.10	S	3085D	0.07	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 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
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 $0.98. (For coverage written separately for federal benefits only, $0.96. For coverage written separately for state benefits only, $0.02.)

1016 Rate includes a non-ratable disease element of $2.94. (For coverage written separately for federal benefits only, $2.87. For coverage written separately for state benefits only, $0.07.)

2702,2705 An upset payroll of $10.00 per cord shall be used for premium computation when payroll records are not available.

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 2.97 and elr x 2.782.

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 March 1, 2018
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	$70,400
Leased or rented vehicle	$46,900

Catastrophe (other than Certified Acts of Terrorism) - (Assigned Risk) 0.03

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
Minimum Premium Factor	0.75
Maximum Premium Factor	1.75
Loss Conversion Factor	1.197
Tax Multiplier	1.046

Loss Development Factors	
1st Adjustment	0.19
2nd Adjustment	0.16
3rd Adjustment	0.13
4th Adjustment	0.11

Maximum Weekly Payroll applicable in accordance with ***Basic Manual*** footnote instructions for Code 9178 -- "Athletic Sports or Park: Non-Contact Sports," and Code 9179 -- "Athletic Sports or Park: Contact Sports" $3,600

Maximum Weekly Payroll applicable in accordance with ***Basic Manual*** Rule 2-E-1:

Executive officers in the construction industry	$1,330
All other executive officers	$3,600

Minimum Weekly Payroll applicable in accordance with ***Basic Manual*** Rule 2-E-1:

Executive officers in the construction industry	$450
All other executive officers	$900

Premium Determination for Partners and Sole Proprietors in accordance with ***Basic Manual*** Rule 2-E-3 (Annual Payroll) $46,900

Premium Determination for Partners and Sole Proprietors (Construction Industry Only):

Minimum Payroll applicable in accordance with ***Basic Manual*** Rule 2-E-3	$23,400
Maximum Payroll applicable in accordance with ***Basic Manual*** Rule 2-E-3	$68,900

Terrorism - (Assigned Risk) 0.01

United States Longshore and Harbor Workers' Compensation Coverage Percentage applicable only in connection with ***Basic Manual*** Rule 3-A-4 147%

(Multiply a Non-F classification rate by a factor of 2.47 to adjust for differences in benefits and loss-based expenses. This factor is the product of the adjustment for differences in state and federal benefits (2.33) and the adjustment for differences in state and federal 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.

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

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 March 1, 2018

TABLE OF WEIGHTING VALUES
APPLICABLE TO ALL POLICIES
Experience Rating Program - ERA

Expected Losses			Weighting Values	Expected Losses			Weighting Values
0	--	1,790	0.04	1,009,661	--	1,065,353	0.44
1,791	--	7,238	0.05	1,065,354	--	1,124,270	0.45
7,239	--	12,802	0.06	1,124,271	--	1,186,700	0.46
12,803	--	18,486	0.07	1,186,701	--	1,252,969	0.47
18,487	--	24,295	0.08	1,252,970	--	1,323,441	0.48
24,296	--	40,635	0.09	1,323,442	--	1,398,531	0.49
40,636	--	60,487	0.10	1,398,532	--	1,478,707	0.50
60,488	--	78,145	0.11	1,478,708	--	1,564,507	0.51
78,146	--	95,338	0.12	1,564,508	--	1,656,544	0.52
95,339	--	112,534	0.13	1,656,545	--	1,755,524	0.53
112,535	--	129,941	0.14	1,755,525	--	1,862,263	0.54
129,942	--	147,678	0.15	1,862,264	--	1,977,714	0.55
147,679	--	165,825	0.16	1,977,715	--	2,102,986	0.56
165,826	--	184,442	0.17	2,102,987	--	2,239,391	0.57
184,443	--	203,579	0.18	2,239,392	--	2,388,482	0.58
203,580	--	223,281	0.19	2,388,483	--	2,552,115	0.59
223,282	--	243,592	0.20	2,552,116	--	2,732,529	0.60
243,593	--	264,552	0.21	2,732,530	--	2,932,443	0.61
264,553	--	286,205	0.22	2,932,444	--	3,155,203	0.62
286,206	--	308,592	0.23	3,155,204	--	3,404,960	0.63
308,593	--	331,760	0.24	3,404,961	--	3,686,941	0.64
331,761	--	355,754	0.25	3,686,942	--	4,007,814	0.65
355,755	--	380,625	0.26	4,007,815	--	4,376,219	0.66
380,626	--	406,425	0.27	4,376,220	--	4,803,567	0.67
406,426	--	433,212	0.28	4,803,568	--	5,305,233	0.68
433,213	--	461,045	0.29	5,305,234	--	5,902,451	0.69
461,046	--	489,991	0.30	5,902,452	--	6,625,395	0.70
489,992	--	520,118	0.31	6,625,396	--	7,518,440	0.71
520,119	--	551,504	0.32	7,518,441	--	8,649,626	0.72
551,505	--	584,230	0.33	8,649,627	--	10,128,865	0.73
584,231	--	618,386	0.34	10,128,866	--	12,146,003	0.74
618,387	--	654,069	0.35	12,146,004	--	15,059,642	0.75
654,070	--	691,385	0.36	15,059,643	--	19,638,210	0.76
691,386	--	730,450	0.37	19,638,211	--	27,879,622	0.77
730,451	--	771,391	0.38	27,879,623	--	47,109,568	0.78
771,392	--	814,349	0.39	47,109,569	--	143,259,252	0.79
814,350	--	859,475	0.40	143,259,253		AND OVER	0.80
859,476	--	906,941	0.41				
906,942	--	956,933	0.42				
956,934	--	1,009,660	0.43				

(a) G	8.55
(b) State Per Claim Accident Limitation	$213,500
(c) State Multiple Claim Accident Limitation	$427,000
(d) USL&HW Per Claim Accident Limitation	$831,500
(e) USL&HW Multiple Claim Accident Limitation	$1,663,000
(f) Employers Liability Accident Limitation	$55,000
(g) Primary/Excess Loss Split Point	$16,500
(h) USL&HW Act -- Expected Loss Factor -- Non-F Classes	2.30

(Multiply a Non-F classification ELR by the USL&HW Act - Expected Loss Factor of 2.30.)

8/17

Effective March 1, 2018

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	--	45,989	21,375	1,475,739	--	1,518,464	171,000	2,971,555	--	3,014,298	320,625
45,990	--	79,151	25,650	1,518,465	--	1,561,191	175,275	3,014,299	--	3,057,042	324,900
79,152	--	117,255	29,925	1,561,192	--	1,603,919	179,550	3,057,043	--	3,099,786	329,175
117,256	--	157,452	34,200	1,603,920	--	1,646,649	183,825	3,099,787	--	3,142,531	333,450
157,453	--	198,627	38,475	1,646,650	--	1,689,379	188,100	3,142,532	--	3,185,275	337,725
198,628	--	240,318	42,750	1,689,380	--	1,732,111	192,375	3,185,276	--	3,228,020	342,000
240,319	--	282,312	47,025	1,732,112	--	1,774,843	196,650	3,228,021	--	3,270,765	346,275
282,313	--	324,496	51,300	1,774,844	--	1,817,576	200,925	3,270,766	--	3,313,510	350,550
324,497	--	366,806	55,575	1,817,577	--	1,860,310	205,200	3,313,511	--	3,356,255	354,825
366,807	--	409,206	59,850	1,860,311	--	1,903,045	209,475	3,356,256	--	3,399,000	359,100
409,207	--	451,670	64,125	1,903,046	--	1,945,780	213,750	3,399,001	--	3,441,746	363,375
451,671	--	494,182	68,400	1,945,781	--	1,988,516	218,025	3,441,747	--	3,484,491	367,650
494,183	--	536,732	72,675	1,988,517	--	2,031,252	222,300	3,484,492	--	3,527,237	371,925
536,733	--	579,310	76,950	2,031,253	--	2,073,990	226,575	3,527,238	--	3,569,982	376,200
579,311	--	621,912	81,225	2,073,991	--	2,116,727	230,850	3,569,983	--	3,612,728	380,475
621,913	--	664,532	85,500	2,116,728	--	2,159,465	235,125	3,612,729	--	3,655,474	384,750
664,533	--	707,168	89,775	2,159,466	--	2,202,204	239,400	3,655,475	--	3,698,220	389,025
707,169	--	749,817	94,050	2,202,205	--	2,244,943	243,675	3,698,221	--	3,740,966	393,300
749,818	--	792,477	98,325	2,244,944	--	2,287,682	247,950	3,740,967	--	3,783,712	397,575
792,478	--	835,145	102,600	2,287,683	--	2,330,422	252,225	3,783,713	--	3,826,458	401,850
835,146	--	877,822	106,875	2,330,423	--	2,373,162	256,500	3,826,459	--	3,869,205	406,125
877,823	--	920,505	111,150	2,373,163	--	2,415,903	260,775	3,869,206	--	3,911,951	410,400
920,506	--	963,194	115,425	2,415,904	--	2,458,644	265,050	3,911,952	--	3,954,697	414,675
963,195	--	1,005,889	119,700	2,458,645	--	2,501,385	269,325	3,954,698	--	3,997,444	418,950
1,005,890	--	1,048,588	123,975	2,501,386	--	2,544,126	273,600	3,997,445	--	4,040,191	423,225
1,048,589	--	1,091,290	128,250	2,544,127	--	2,586,868	277,875	4,040,192	--	4,082,625	427,500
1,091,291	--	1,133,997	132,525	2,586,869	--	2,629,610	282,150				
1,133,998	--	1,176,706	136,800	2,629,611	--	2,672,352	286,425				
1,176,707	--	1,219,418	141,075	2,672,353	--	2,715,095	290,700				
1,219,419	--	1,262,133	145,350	2,715,096	--	2,757,837	294,975				
1,262,134	--	1,304,850	149,625	2,757,838	--	2,800,580	299,250				
1,304,851	--	1,347,570	153,900	2,800,581	--	2,843,323	303,525				
1,347,571	--	1,390,291	158,175	2,843,324	--	2,886,067	307,800				
1,390,292	--	1,433,014	162,450	2,886,068	--	2,928,810	312,075				
1,433,015	--	1,475,738	166,725	2,928,811	--	2,971,554	316,350				

For Expected Losses greater than $4,082,625, the Ballast Value can be calculated using the following formula (rounded to the nearest 1):

Ballast = (0.10)(Expected Losses) + 2500(Expected Losses)(8.55) / (Expected Losses + (700)(8.55))

G = 8.55

8/17

NATIONAL COUNCIL ON COMPENSATION INSURANCE, INC.

TENNESSEE—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. 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.

b. 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.*

c. 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 ($)	Column B ($)
TN	9/1/18 and after	9,500	4,750
	9/1/17 - 8/31/18	9,000	4,500
	8/31/17 and before	9,000	4,500

NOTE: This exhibit revises the Tennessee 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.

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Proposed Values for Inclusion in the Retrospective Rating Plan Manual

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

- Hazard group differentials
- Table of expected loss ranges
- Excess loss pure premium factors
- Retrospective pure premium development factors

1. Hazard Group Differentials

A	B	C	D	E	F	G
1.94	1.54	1.41	1.19	0.99	0.82	0.69

2. 2013 Table of Expected Loss Ranges
Effective January 1, 2013

3. 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	0.570	0.615	0.636	0.668	0.700	0.722	0.738
$15,000	0.518	0.567	0.590	0.626	0.662	0.688	0.709
$20,000	0.476	0.528	0.553	0.591	0.630	0.659	0.683
$25,000	0.442	0.496	0.521	0.560	0.601	0.633	0.660
$30,000	0.413	0.467	0.493	0.534	0.576	0.609	0.639
$35,000	0.388	0.443	0.469	0.510	0.554	0.588	0.620
$40,000	0.366	0.421	0.448	0.489	0.534	0.569	0.603
$50,000	0.330	0.385	0.412	0.453	0.499	0.536	0.573
$75,000	0.267	0.319	0.346	0.386	0.433	0.471	0.513
$100,000	0.225	0.274	0.300	0.339	0.385	0.423	0.468
$125,000	0.196	0.242	0.267	0.303	0.349	0.386	0.433
$150,000	0.173	0.217	0.242	0.276	0.321	0.356	0.404
$175,000	0.156	0.197	0.221	0.254	0.297	0.331	0.380
$200,000	0.141	0.181	0.204	0.235	0.278	0.310	0.359
$225,000	0.130	0.168	0.190	0.220	0.261	0.293	0.342
$250,000	0.120	0.156	0.178	0.206	0.247	0.277	0.326
$275,000	0.111	0.146	0.168	0.195	0.234	0.263	0.313
$300,000	0.104	0.138	0.159	0.185	0.223	0.251	0.300
$325,000	0.097	0.130	0.151	0.176	0.213	0.241	0.289
$350,000	0.091	0.123	0.143	0.168	0.205	0.231	0.280
$375,000	0.086	0.117	0.137	0.160	0.197	0.222	0.270
$400,000	0.082	0.112	0.131	0.154	0.189	0.214	0.262
$425,000	0.078	0.107	0.126	0.148	0.183	0.207	0.254
$450,000	0.074	0.102	0.121	0.142	0.177	0.200	0.247
$475,000	0.071	0.098	0.117	0.137	0.171	0.194	0.241
$500,000	0.067	0.094	0.112	0.133	0.166	0.188	0.235
$600,000	0.057	0.082	0.099	0.117	0.148	0.168	0.214
$700,000	0.050	0.072	0.088	0.105	0.134	0.153	0.197
$800,000	0.044	0.065	0.080	0.095	0.123	0.140	0.184
$900,000	0.039	0.058	0.073	0.087	0.114	0.130	0.172
$1,000,000	0.035	0.053	0.067	0.080	0.106	0.121	0.163
$2,000,000	0.017	0.028	0.037	0.046	0.064	0.074	0.107
$3,000,000	0.010	0.019	0.025	0.032	0.046	0.054	0.081
$4,000,000	0.007	0.013	0.019	0.024	0.035	0.042	0.065
$5,000,000	0.005	0.010	0.014	0.019	0.028	0.034	0.054
$6,000,000	0.004	0.008	0.012	0.015	0.023	0.028	0.045
$7,000,000	0.003	0.007	0.010	0.012	0.019	0.024	0.039
$8,000,000	0.003	0.005	0.008	0.010	0.016	0.020	0.034
$9,000,000	0.002	0.005	0.007	0.009	0.014	0.018	0.029
$10,000,000	0.002	0.004	0.006	0.008	0.012	0.015	0.026

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	0.661	0.710	0.732	0.766	0.800	0.824	0.840
$15,000	0.604	0.658	0.683	0.721	0.760	0.788	0.809
$20,000	0.559	0.616	0.642	0.683	0.725	0.757	0.781
$25,000	0.521	0.580	0.607	0.650	0.695	0.729	0.757
$30,000	0.489	0.549	0.577	0.621	0.668	0.704	0.734
$35,000	0.462	0.522	0.551	0.596	0.644	0.681	0.714
$40,000	0.438	0.498	0.527	0.573	0.622	0.660	0.695
$50,000	0.397	0.458	0.487	0.533	0.583	0.623	0.662
$75,000	0.326	0.384	0.413	0.458	0.510	0.552	0.596
$100,000	0.279	0.334	0.363	0.405	0.457	0.498	0.546
$125,000	0.245	0.297	0.325	0.365	0.416	0.457	0.507
$150,000	0.219	0.269	0.296	0.334	0.384	0.423	0.475
$175,000	0.198	0.246	0.272	0.309	0.358	0.396	0.448
$200,000	0.181	0.227	0.253	0.288	0.335	0.372	0.425
$225,000	0.167	0.211	0.236	0.270	0.316	0.352	0.405
$250,000	0.155	0.198	0.222	0.255	0.300	0.334	0.388
$275,000	0.145	0.186	0.210	0.241	0.286	0.319	0.372
$300,000	0.136	0.175	0.199	0.229	0.273	0.305	0.358
$325,000	0.128	0.166	0.189	0.219	0.261	0.293	0.346
$350,000	0.121	0.158	0.181	0.209	0.251	0.281	0.334
$375,000	0.115	0.151	0.173	0.200	0.242	0.271	0.324
$400,000	0.109	0.144	0.166	0.193	0.233	0.262	0.314
$425,000	0.104	0.138	0.160	0.185	0.225	0.253	0.305
$450,000	0.099	0.133	0.154	0.179	0.218	0.245	0.297
$475,000	0.095	0.127	0.148	0.173	0.211	0.238	0.290
$500,000	0.091	0.123	0.143	0.167	0.205	0.231	0.282
$600,000	0.078	0.107	0.126	0.148	0.184	0.208	0.258
$700,000	0.068	0.095	0.113	0.133	0.167	0.189	0.239
$800,000	0.060	0.085	0.102	0.121	0.153	0.174	0.222
$900,000	0.054	0.077	0.094	0.111	0.142	0.162	0.209
$1,000,000	0.049	0.071	0.086	0.103	0.132	0.151	0.197
$2,000,000	0.024	0.038	0.048	0.059	0.080	0.093	0.130
$3,000,000	0.015	0.025	0.033	0.041	0.057	0.067	0.099
$4,000,000	0.010	0.018	0.024	0.030	0.044	0.052	0.079
$5,000,000	0.008	0.014	0.019	0.024	0.035	0.042	0.065
$6,000,000	0.006	0.011	0.015	0.019	0.029	0.035	0.055
$7,000,000	0.005	0.009	0.012	0.016	0.024	0.030	0.047
$8,000,000	0.004	0.007	0.010	0.013	0.021	0.026	0.041
$9,000,000	0.003	0.006	0.009	0.011	0.018	0.022	0.036
$10,000,000	0.003	0.005	0.008	0.010	0.015	0.019	0.032

4. **Retrospective Pure Premium Development Factors**

With Loss Limit			Without Loss Limit			
1st Adj.	2nd Adj.	3rd Adj.	1st Adj.	2nd Adj.	3rd Adj.	4th & Subsequent Adjustment
0.08	0.06	0.05	0.23	0.20	0.16	0.00

Part 3 Supporting Exhibits

- Exhibit I: Determination of the Indicated Loss Cost Level Change
- Exhibit II: Workers Compensation Loss Adjustment Expense
- Appendix A: Factors Underlying the Proposed Loss Cost Level Change
- Appendix B: Calculations Underlying the Loss Cost Change by Classification
- Appendix C: Memoranda for Laws and Assessments
- Appendix D: Determination of Assigned Risk Rates

Exhibit I – Determination of Indicated Loss Cost 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 rate/loss cost 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 loss-based expenses is applied. The detailed calculations can be found on the following pages.

TENNESSEE

EXHIBIT I

Determination of Indicated Loss Cost Level Change

Section A - Policy Year 2015 Experience

Premium:

(1)	Standard Earned Premium Developed to Ultimate (Appendix A-II)	$586,254,981
(2)	Premium On-level Factor (Appendix A-I)	0.656
(3)	Pure Premium Available for Benefit Costs = (1) x (2)	$384,583,268

Indemnity Benefit Cost:

(4)	Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	$114,024,390
(5)	Indemnity Loss On-level Factor (Appendix A-I)	1.010
(6)	Adjusted Limited Indemnity Losses = (4) x (5)	$115,164,634
(7)	Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.299
(8)	Factor to Reflect Indemnity Trend (Appendix A-III)	0.834
(9)	Projected Limited Indemnity Cost Ratio = (7) x (8)	0.249
(10)	Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.011
(11)	Projected Indemnity Cost Ratio = (9) x (10)	0.252
(12)	Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.003
(13)	Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.253

Medical Benefit Cost:

(14)	Limited Medical Losses Developed to Ultimate (Appendix A-II)	$254,530,385
(15)	Medical Loss On-level Factor (Appendix A-I)	0.964
(16)	Adjusted Limited Medical Losses = (14) x (15)	$245,367,291
(17)	Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.638
(18)	Factor to Reflect Medical Trend (Appendix A-III)	0.937
(19)	Projected Limited Medical Cost Ratio = (17) x (18)	0.598
(20)	Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.011
(21)	Projected Medical Cost Ratio = (19) x (20)	0.605
(22)	Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.006
(23)	Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.609

Total Benefit Cost:

(24)	Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.862

TENNESSEE

EXHIBIT I

Determination of Indicated Loss Cost Level Change

Section B - Policy Year 2014 Experience

Premium:

(1)	Standard Earned Premium Developed to Ultimate (Appendix A-II)	$598,951,623
(2)	Premium On-level Factor (Appendix A-I)	0.600
(3)	Pure Premium Available for Benefit Costs = (1) x (2)	$359,370,974

Indemnity Benefit Cost:

(4)	Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	$120,682,340
(5)	Indemnity Loss On-level Factor (Appendix A-I)	0.979
(6)	Adjusted Limited Indemnity Losses = (4) x (5)	$118,148,011
(7)	Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.329
(8)	Factor to Reflect Indemnity Trend (Appendix A-III)	0.788
(9)	Projected Limited Indemnity Cost Ratio = (7) x (8)	0.259
(10)	Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.011
(11)	Projected Indemnity Cost Ratio = (9) x (10)	0.262
(12)	Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.003
(13)	Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.263

Medical Benefit Cost:

(14)	Limited Medical Losses Developed to Ultimate (Appendix A-II)	$250,121,306
(15)	Medical Loss On-level Factor (Appendix A-I)	0.966
(16)	Adjusted Limited Medical Losses = (14) x (15)	$241,617,182
(17)	Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.672
(18)	Factor to Reflect Medical Trend (Appendix A-III)	0.918
(19)	Projected Limited Medical Cost Ratio = (17) x (18)	0.617
(20)	Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.011
(21)	Projected Medical Cost Ratio = (19) x (20)	0.624
(22)	Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.006
(23)	Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.628

Total Benefit Cost:

(24)	Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.891

TENNESSEE

EXHIBIT I

Determination of Indicated Loss Cost Level Change

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

(1)	Policy Year 2015 Indicated Change Based on Experience, Trend, and Benefits	0.862
(2)	Policy Year 2014 Indicated Change Based on Experience, Trend, and Benefits	0.891
(3)	Indicated Change Based on Experience, Trend, and Benefits = [(1)+(2)] / 2	0.877

Section D - Application of the Change in Loss-based Expenses

(1)	Indicated Loss Cost Level Change	0.877
(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)	0.874

Section E - Distribution of Overall Loss Cost Level Change to Industry Groups

Industry Group Differentials (Appendix A-V):

Manufacturing	1.015
Contracting	0.972
Office & Clerical	0.993
Goods & Services	0.997
Miscellaneous	1.014

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

Industry Group	(1) Final Overall Loss Cost Level Change	(2) Industry Group Differential	(3) = (1) x (2) Final Loss Cost Level Change by Industry Group	
Manufacturing	0.874	1.015	0.887	(-11.3%)
Contracting	0.874	0.972	0.850	(-15.0%)
Office & Clerical	0.874	0.993	0.868	(-13.2%)
Goods & Services	0.874	0.997	0.871	(-12.9%)
Miscellaneous	0.874	1.014	0.886	(-11.4%)
Overall	0.874	1.000	0.874	(-12.6%)

Exhibit II – Workers Compensation Loss Adjustment Expenses

The proposed loss costs 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: Defense and Cost Containment Expenses (DCCE) and Adjusting and Other Expenses (AOE).

NCCI uses the following general methodology to determine the proposed LAE provision based on data for private carriers.

1. Using data obtained from the NCCI Call for Loss Adjustment Expense, accident year developed LAE ratios are calculated on a countrywide basis, including separate DCCE and AOE ratio components.
2. A Tennessee-to-countrywide DCCE relativity is selected based on NAIC Annual Statement data.
3. The Tennessee-specific DCCE ratio is calculated by multiplying the countrywide-selected DCCE ratio by the Tennessee-to-countrywide DCCE relativity.
4. Given the nature of AOE, it cannot be allocated to a specific claim, and hence cannot be accurately attributed to specific states. Therefore, the Tennessee-specific AOE ratio reflects the latest selected countrywide provision.

The calculation of the loss-based expense provision is shown on the following page.

TENNESSEE

EXHIBIT II

Workers Compensation Loss-based Expense Provision

Section A - Determination of Loss Adjustment Expense Provision

NCCI has computed the loss adjustment expense allowance on an accident year basis using data obtained from the NCCI Call for Loss Adjustment Expense. For this filing, NCCI proposes a 19.7% loss adjustment expense allowance as a percentage of incurred losses.

Accident Year	Accident Year Developed LAE Ratio	Accident Year Developed DCCE Ratio	Accident Year Developed AOE Ratio
2012	20.0%	13.1%	6.9%
2013	20.6%	13.2%	7.4%
2014	21.0%	13.6%	7.4%
2015	20.5%	13.2%	7.3%
2016	20.5%	13.2%	7.3%
Countrywide selected:	20.6%	13.3%	7.3%
Tennessee selected: (12.4% = 13.3% x 0.929)	**19.7%**	**12.4%**	**7.3%**

Section B - Determination of Tennessee DCCE Relativity

(1a)	Tennessee paid losses (in '000s)	1,199,278
(1b)	Tennessee paid DCCE (in '000s)	141,190
(1c)	Ratio (1b)/(1a)	11.8%
(2a)	Countrywide paid losses (in '000s)	70,418,167
(2b)	Countrywide paid DCCE (in '000s)	8,933,288
(2c)	Ratio (2b)/(2a)	12.7%
(3)	Tennessee DCCE relativity (1c)/(2c)	0.929

Section C - Proposed Change in Tennessee Loss Adjustment Expense Provision

(1)	Current Tennessee LAE Provision	20.1%
(2)	Proposed Tennessee LAE Provision	19.7%
(3)	Proposed Change in LAE Provision	0.997
	= [1.0 + (2)] / [1.0 + (1)] - 1	-0.3%

Notes

NAIC Annual Statement data is used in the above calculations. The countrywide figures exclude state funds.

Appendix A – Factors Underlying the Proposed Loss Cost 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 loss cost/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 Tennessee based on an analysis of policies reported in the Unit Statistical Data, which was updated for this filing. 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.
- Uncollectable Premium Provision Adjustment to Gross Premium Factor – This factor is applied to the assigned risk market premium in states where it is necessary to account for the difference between gross premium as reported and the ultimate premium that is collected.
- 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.

TENNESSEE

APPENDIX A-I

Determination of Policy Year On-level Factors

Section A - Factor Adjusting 2015 Policy Year Assigned Risk Premium to Present Assigned Risk Level

	Date	(1) Rate Level Change	(2) Cumulative Index	(3) Weight	(4) Product (2)x(3)	(5) Adj. Factor Present Index/ Sum Column (4)	(6) Adj. For Expense Constant Removal @	(7) Adj. For Expense Removal	(8) UPP Adj. to Gross Premium Factor	(9) Premium Adjustment Factor (5)x(6)x(7)x(8)
BOTH	07/01/14	Base	1.000	0.217	0.217	0.926	0.965	0.632	0.969	0.547
NR	03/01/15	0.930	0.930	0.783	0.728					
NR	03/01/16	1.042	0.969							
NR	08/28/16	0.973	0.943							
NR	03/01/17	0.928^	0.875							
					0.945					

Section B - Factor Adjusting 2015 Policy Year Voluntary Premium to Present Voluntary Level

	Date	(1) Loss Cost Level Change	(2) Cumulative Index	(3) Weight	(4) Product (2)x(3)	(5) Adj. Factor Present Index/ Sum Column (4)	(6) Adj. For Expense Constant Removal @	(7) Adj. For Expense Removal	(8) UPP Adj. to Gross Premium Factor	(9) Premium Adjustment Factor (5)x(6)x(7)x(8)
BOTH	07/01/14	Base	1.000	0.217	0.217	0.826	1.000	0.833	1.000	0.688
NR	03/01/15	0.918	0.918	0.783	0.719					
NR	03/01/16	0.991	0.910							
NR	08/28/16	0.973	0.885							
NR	03/01/17	0.874	0.773							
					0.936					

Section C - Factor Adjusting 2015 Policy Year Assigned Risk Premium and Voluntary Premium to Present Statewide Level

(1)	Assigned Risk Market Share PY 2015	0.126
(2)	Voluntary Market Share PY 2015	0.874
(3)	Assigned Risk Standard Premium Adjustment Factor (See Sec. A)	0.547
(4)	Voluntary Standard Premium Adjustment Factor (See Sec. B)	0.688
(5)	Premium Adjustment Factor = [(1)x(3)]/1.359+(2)x(4) #	0.652
(6)	Experience Rating Off-balance Adjustment Factor*	1.006
(7)	Final Premium Adjustment Factor = (5)x(6)	0.656

NR New and renewal business.
^ Combined impact of switching from tabular surchage plan to ARAP(1.037) and assigned risk rate level change(0.893)
@ Eliminates premium derived from expense constants.
# Current premium index (assigned risk-to-voluntary) = 1.359
* = 1.006 = 0.953 / 0.947 = (Targeted Off-balance) / (Off-balance for Policy Year 2015)

Determination of Policy Year On-level Factors

Section D - Factor Adjusting 2015 Policy Year Indemnity Losses to Present Benefit Level

Date	(1) Benefit Level Change	(2) Cumulative Index	(3) Weight	(4) Product (2)x(3)	(5) Adj. Factor Present Index/ Sum Column (4)
01/01/15	Base	1.000	0.175	0.175	1.010
07/01/15	1.003	1.003	0.412	0.413	
01/01/16	1.000	1.003	0.325	0.326	
07/01/16	1.010	1.013	0.051	0.052	
08/28/16	1.000	1.013	0.037	0.037	
				1.003	

Section E - Factor Adjusting 2015 Policy Year Medical Losses to Present Benefit Level

Date	(1) Benefit Level Change	(2) Cumulative Index	(3) Weight	(4) Product (2)x(3)	(5) Adj. Factor Present Index/ Sum Column (4)
01/01/15	Base	1.000	0.175	0.175	0.964
07/01/15	1.000	1.000	0.412	0.412	
01/01/16	1.001	1.001	0.325	0.325	
07/01/16	1.000	1.001	0.051	0.051	
08/28/16	0.962	0.963	0.037	0.036	
				0.999	

Determination of Policy Year On-level Factors

Section F - Factor Adjusting 2014 Policy Year Assigned Risk Premium to Present Assigned Risk Level

	Date	(1) Rate Level Change	(2) Cumulative Index	(3) Weight	(4) Product (2)x(3)	(5) Adj. Factor Present Index/ Sum Column (4)	(6) Adj. For Expense Constant Removal @	(7) Adj. For Expense Removal	(8) UPP Adj. to Gross Premium Factor	(9) Premium Adjustment Factor (5)x(6)x(7)x(8)
NR	03/01/13	Base	1.000	0.104	0.104	0.856	0.968	0.632	0.969	0.508
NR	03/01/14	0.955	0.955	0.071	0.068					
BOTH	07/01/14	0.941	0.941	0.113	0.106					
BOTH	07/01/14	0.941	0.899	0.712	0.640					
NR	03/01/15	0.930	0.836							
NR	03/01/16	1.042	0.871							
NR	08/28/16	0.973	0.847							
NR	03/01/17	0.928^	0.786							
					0.918					

Section G - Factor Adjusting 2014 Policy Year Voluntary Premium to Present Voluntary Level

	Date	(1) Loss Cost Level Change	(2) Cumulative Index	(3) Weight	(4) Product (2)x(3)	(5) Adj. Factor Present Index/ Sum Column (4)	(6) Adj. For Expense Constant Removal @	(7) Adj. For Expense Removal	(8) UPP Adj. to Gross Premium Factor	(9) Premium Adjustment Factor (5)x(6)x(7)x(8)
NR	03/01/13	Base	1.000	0.104	0.104	0.752	1.000	0.833	1.000	0.626
NR	03/01/14	0.931	0.931	0.071	0.066					
BOTH	07/01/14	0.941	0.941	0.113	0.106					
BOTH	07/01/14	0.941	0.876	0.712	0.624					
NR	03/01/15	0.918	0.804							
NR	03/01/16	0.991	0.797							
NR	08/28/16	0.973	0.775							
NR	03/01/17	0.874	0.677							
					0.900					

Section H - Factor Adjusting 2014 Policy Year Assigned Risk Premium and Voluntary Premium to Present Statewide Level

(1)	Assigned Risk Market Share PY 2014	0.122
(2)	Voluntary Market Share PY 2014	0.878
(3)	Assigned Risk Standard Premium Adjustment Factor (See Sec. F)	0.508
(4)	Voluntary Standard Premium Adjustment Factor (See Sec. G)	0.626
(5)	Premium Adjustment Factor = [(1)x(3)]/1.359+(2)x(4) #	0.596
(6)	Experience Rating Off-balance Adjustment Factor*	1.007
(7)	Final Premium Adjustment Factor = (5)x(6)	0.600

NR New and renewal business.
^ Combined impact of switching from tabular surchage plan to ARAP(1.037) and assigned risk rate level change (0.893)
@ Eliminates premium derived from expense constants.
# Current premium index (assigned risk-to-voluntary) = 1.359
* = 1.007 = 0.953 / 0.946 = (Targeted Off-balance) / (Off-balance for Policy Year 2014)

TENNESSEE

APPENDIX A-I

Determination of Policy Year On-level Factors

Section I - Factor Adjusting 2014 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)
01/01/14	Base	1.000	0.175	0.175	0.979
07/01/14	0.837	0.837	0.413	0.346	
01/01/15	1.000	0.837	0.325	0.272	
07/01/15	1.003	0.840	0.087	0.073	
01/01/16	1.000	0.840			
07/01/16	1.010	0.848			
08/28/16	1.000	0.848			
				0.866	

Section J - Factor Adjusting 2014 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)
01/01/14	Base	1.000	0.175	0.175	0.966
07/01/14	1.000	1.000	0.413	0.413	
01/01/15	1.005	1.005	0.325	0.327	
07/01/15	1.000	1.005	0.087	0.087	
01/01/16	1.001	1.006			
07/01/16	1.000	1.006			
08/28/16	0.962	0.968			
				1.002	

Appendix A – Factors Underlying the Proposed Loss Cost 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, as shown in Appendix A-II Sections A through J.

Limited Large Loss Methodology

In order to limit volatility on the loss cost/rate indications due to the impact of extraordinary large losses, a limited large loss methodology is used in Tennessee. 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 $7,994,236, based on the volume of premium in policy years 2013 and 2014 underlying the currently approved filing that utilizes data valued as of 12/31/2015. 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 Tennessee 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 1.1%, 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 1st report through the 19th report.

For indemnity and medical loss development past the 19th report, a “tail” factor is used to reflect all future expected emergence. The calculation of indemnity and medical paid + case 19th-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 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.

TENNESSEE

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section A - Premium and Loss Summary Valued as of 12/31/2016

Policy Year 2015

(1)	Standard Earned Premium	$582,179,723
(2)	Factor to Develop Premium to Ultimate	1.007
(3)	Standard Earned Premium Developed to Ultimate = (1)x(2)	$586,254,981
(4)	Limited Indemnity Paid Losses	$47,853,229
(5)	Limited Indemnity Paid Development Factor to Ultimate	2.354
(6)	Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	$112,646,501
(7)	Limited Indemnity Paid+Case Losses	$90,440,657
(8)	Limited Indemnity Paid+Case Development Factor to Ultimate	1.276
(9)	Limited Indemnity Paid+Case Losses Developed to Ultimate = (7)x(8)	$115,402,278
(10)	Policy Year 2015 Limited Indemnity Losses Developed to Ultimate = [(6)+(9)]/2	$114,024,390
(11)	Limited Medical Paid Losses	$119,622,226
(12)	Limited Medical Paid Development Factor to Ultimate	2.141
(13)	Limited Medical Paid Losses Developed to Ultimate = (11)x(12)	$256,111,186
(14)	Limited Medical Paid+Case Losses	$189,475,344
(15)	Limited Medical Paid+Case Development Factor to Ultimate	1.335
(16)	Limited Medical Paid+Case Losses Developed to Ultimate = (14)x(15)	$252,949,584
(17)	Policy Year 2015 Limited Medical Losses Developed to Ultimate = [(13)+(16)]/2	$254,530,385

Policy Year 2014

(1)	Standard Earned Premium	$598,951,623
(2)	Factor to Develop Premium to Ultimate	1.000
(3)	Standard Earned Premium Developed to Ultimate = (1)x(2)	$598,951,623
(4)	Limited Indemnity Paid Losses	$81,304,589
(5)	Limited Indemnity Paid Development Factor to Ultimate	1.488
(6)	Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	$120,981,228
(7)	Limited Indemnity Paid+Case Losses	$107,102,714
(8)	Limited Indemnity Paid+Case Development Factor to Ultimate	1.124
(9)	Limited Indemnity Paid+Case Losses Developed to Ultimate = (7)x(8)	$120,383,451
(10)	Policy Year 2014 Limited Indemnity Losses Developed to Ultimate = [(6)+(9)]/2	$120,682,340
(11)	Limited Medical Paid Losses	$146,146,568
(12)	Limited Medical Paid Development Factor to Ultimate	1.748
(13)	Limited Medical Paid Losses Developed to Ultimate = (11)x(12)	$255,464,201
(14)	Limited Medical Paid+Case Losses	$186,426,817
(15)	Limited Medical Paid+Case Development Factor to Ultimate	1.313
(16)	Limited Medical Paid+Case Losses Developed to Ultimate = (14)x(15)	$244,778,411
(17)	Policy Year 2014 Limited Medical Losses Developed to Ultimate = [(13)+(16)]/2	$250,121,306

TENNESSEE

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section B - Premium Development Factors

Policy Year	1st/2nd	Policy Year	2nd/3rd	Policy Year	3rd/4th	Policy Year	4th/5th
2012	1.006	2011	1.000	2010	1.000	2009	1.000
2013	1.005	2012	0.999	2011	1.000	2010	1.000
2014	1.011	2013	1.000	2012	1.000	2011	1.000
Average	1.007	Average	1.000	Average	1.000	Average	1.000

Summary of Premium Development Factors

1st/5th	2nd/5th	3rd/5th	4th/5th
1.007	1.000	1.000	1.000

TENNESSEE

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section C - Limited Indemnity Paid Loss Development Factors

Policy Year	1st/2nd	Policy Year	2nd/3rd	Policy Year	3rd/4th	Policy Year	4th/5th
2013	1.636	2012	1.215	2011	1.104	2010	1.038
2014	1.527	2013	1.216	2012	1.080	2011	1.043
Average	1.582	Average	1.216	Average	1.092	Average	1.041

Policy Year	5th/6th	Policy Year	6th/7th	Policy Year	7th/8th	Policy Year	8th/9th
2009	1.025	2008	1.013	2007	1.011	2006	1.004
2010	1.019	2009	1.016	2008	1.009	2007	1.003
Average	1.022	Average	1.015	Average	1.010	Average	1.004

Policy Year	9th/10th	Policy Year	10th/11th	Policy Year	11th/12th	Policy Year	12th/13th
2005	1.004	2004	1.003	2003	1.001	2002	1.003
2006	1.003	2005	1.002	2004	1.004	2003	1.001
Average	1.004	Average	1.003	Average	1.003	Average	1.002

Policy Year	13th/14th	Policy Year	14th/15th	Policy Year	15th/16th	Policy Year	16th/17th
2001	1.001	2000	1.001	1999	1.001	1998	1.000
2002	0.999	2001	1.001	2000	1.001	1999	1.000
Average	1.000	Average	1.001	Average	1.001	Average	1.000

Policy Year	17th/18th	Policy Year	18th/19th
1997	1.001	1996	1.001
1998	1.000	1997	1.001
Average	1.001	Average	1.001

Determination of Premium and Losses Developed to an Ultimate Report

Section D - Limited Medical Paid Loss Development Factors

Policy Year	1st/2nd	Policy Year	2nd/3rd	Policy Year	3rd/4th	Policy Year	4th/5th
2013	1.221	2012	1.070	2011	1.047	2010	1.036
2014	1.229	2013	1.073	2012	1.037	2011	1.027
Average	1.225	Average	1.072	Average	1.042	Average	1.032

Policy Year	5th/6th	Policy Year	6th/7th	Policy Year	7th/8th	Policy Year	8th/9th
2009	1.037	2008	1.044	2007	1.040	2006	1.033
2010	1.035	2009	1.028	2008	1.027	2007	1.023
Average	1.036	Average	1.036	Average	1.034	Average	1.028

Policy Year	9th/10th	Policy Year	10th/11th	Policy Year	11th/12th	Policy Year	12th/13th
2005	1.023	2004	1.021	2003	1.014	2002	1.021
2006	1.021	2005	1.024	2004	1.016	2003	1.017
Average	1.022	Average	1.023	Average	1.015	Average	1.019

Policy Year	13th/14th	Policy Year	14th/15th	Policy Year	15th/16th	Policy Year	16th/17th
2001	1.010	2000	1.011	1999	1.009	1998	1.013
2002	1.005	2001	1.009	2000	1.008	1999	1.011
Average	1.008	Average	1.010	Average	1.009	Average	1.012

Policy Year	17th/18th	Policy Year	18th/19th
1997	1.010	1996	1.018
1998	1.010	1997	1.009
Average	1.010	Average	1.014

TENNESSEE

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section E - Limited Indemnity Paid + Case Loss Development Factors

Policy Year	1st/2nd	Policy Year	2nd/3rd	Policy Year	3rd/4th	Policy Year	4th/5th
2010	1.202	2009	1.058	2008	1.036	2007	1.018
2011	1.158	2010	1.083	2009	1.027	2008	1.014
2012	1.152	2011	1.049	2010	1.025	2009	1.013
2013	1.102	2012	1.068	2011	1.025	2010	1.012
2014	1.061	2013	1.052	2012	1.015	2011	1.006
Average	1.135	Average	1.062	Average	1.026	Average	1.013

Policy Year	5th/6th	Policy Year	6th/7th	Policy Year	7th/8th	Policy Year	8th/9th
2006	1.003	2005	1.005	2004	1.002	2003	1.002
2007	0.999	2006	1.006	2005	1.005	2004	1.009
2008	1.003	2007	1.009	2006	1.001	2005	1.005
2009	1.010	2008	1.005	2007	1.004	2006	1.000
2010	1.004	2009	1.006	2008	1.002	2007	0.996
Average	1.004	Average	1.006	Average	1.003	Average	1.002

Policy Year	9th/10th	Policy Year	10th/11th	Policy Year	11th/12th	Policy Year	12th/13th
2002	0.999	2001	0.999	2000	0.997	1999	1.001
2003	0.999	2002	0.999	2001	0.999	2000	0.999
2004	1.002	2003	1.000	2002	1.000	2001	1.001
2005	1.001	2004	1.000	2003	1.001	2002	0.999
2006	1.001	2005	1.001	2004	1.002	2003	1.000
Average	1.000	Average	1.000	Average	1.000	Average	1.000

Policy Year	13th/14th	Policy Year	14th/15th	Policy Year	15th/16th	Policy Year	16th/17th
1998	1.001	1997	1.001	1996	1.000	1995	1.002
1999	1.001	1998	0.999	1997	1.001	1996	0.997
2000	1.001	1999	1.000	1998	0.998	1997	1.003
2001	1.000	2000	1.002	1999	1.000	1998	0.999
2002	0.999	2001	1.000	2000	0.999	1999	1.000
Average	1.000	Average	1.000	Average	1.000	Average	1.000

Policy Year	17th/18th	Policy Year	18th/19th
1994	1.000	1993	1.000
1995	1.001	1994	1.000
1996	1.000	1995	1.003
1997	0.999	1996	0.999
1998	1.000	1997	1.001
Average	1.000	Average	1.001

Determination of Premium and Losses Developed to an Ultimate Report

Section F - Limited Medical Paid + Case Loss Development Factors

Policy Year	1st/2nd	Policy Year	2nd/3rd	Policy Year	3rd/4th	Policy Year	4th/5th
2010	1.058	2009	1.012	2008	1.045	2007	1.059
2011	1.037	2010	1.078	2009	1.041	2008	1.041
2012	1.029	2011	1.043	2010	1.059	2009	1.031
2013	0.955	2012	1.028	2011	1.037	2010	1.023
2014	0.986	2013	1.029	2012	1.017	2011	1.000
Average*	1.017	Average	1.038	Average	1.040	Average	1.031

* Excludes the years with the lowest and highest factors.

Policy Year	5th/6th	Policy Year	6th/7th	Policy Year	7th/8th	Policy Year	8th/9th
2006	1.056	2005	1.033	2004	1.006	2003	1.021
2007	1.038	2006	1.028	2005	1.017	2004	1.015
2008	1.054	2007	1.040	2006	1.034	2005	1.034
2009	1.013	2008	1.029	2007	1.024	2006	1.000
2010	1.019	2009	1.014	2008	0.989	2007	1.023
Average	1.036	Average	1.029	Average	1.014	Average	1.019

Policy Year	9th/10th	Policy Year	10th/11th	Policy Year	11th/12th	Policy Year	12th/13th
2002	1.015	2001	1.000	2000	1.006	1999	1.008
2003	0.994	2002	0.989	2001	0.994	2000	1.011
2004	1.017	2003	1.011	2002	0.995	2001	1.017
2005	1.022	2004	1.008	2003	1.023	2002	1.006
2006	1.012	2005	1.000	2004	1.001	2003	0.998
Average	1.012	Average	1.002	Average	1.004	Average	1.008

Policy Year	13th/14th	Policy Year	14th/15th	Policy Year	15th/16th	Policy Year	16th/17th
1998	1.018	1997	1.006	1996	0.989	1995	1.018
1999	1.000	1998	1.009	1997	1.006	1996	1.001
2000	1.015	1999	1.007	1998	1.001	1997	1.000
2001	1.018	2000	1.000	1999	1.003	1998	1.006
2002	1.002	2001	1.006	2000	0.997	1999	1.005
Average	1.011	Average	1.006	Average	0.999	Average	1.006

Policy Year	17th/18th	Policy Year	18th/19th
1994	1.007	1993	0.967
1995	1.002	1994	1.013
1996	0.996	1995	1.006
1997	0.989	1996	0.992
1998	1.001	1997	1.006
Average	0.999	Average	0.997

TENNESSEE

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)	(2)	(3)	(4)	(5)	(6)	(7)
Policy Year	Losses for Policy Year 19th Report	Losses for Policy Year 20th Report	Losses for All Prior Policy Years Previous	Losses for All Prior Policy Years Current	Factor to Adjust Losses for Prior Policy Years	Indicated 19th-to-Ult Development for Policy Year
1987	168,528,560	168,659,604	1,038,268,681	1,039,114,928	0.460	1.012
1988	199,316,668	199,528,480	1,161,239,240	1,162,372,220	0.434	1.014
1989	213,445,957	213,457,838	1,397,647,429	1,397,200,057	0.463	0.996
1990	225,878,047	225,912,249	1,555,373,043	1,555,226,004	0.495	0.999
1991	216,974,067	217,008,426	1,768,789,305	1,769,290,269	0.591	1.004
1992	187,255,580	187,154,996	1,986,228,385	1,985,318,508	0.770	0.993
1993	158,868,560	158,863,379	2,172,422,665	2,173,312,271	0.990	1.006
1994	144,789,155	144,813,818	2,329,107,595	2,329,292,246	1.146	1.001
1995	125,356,885	125,212,112	2,465,552,482	2,465,751,190	1.373	1.000
1996	113,254,864	113,321,178	2,588,593,729	2,588,832,333	1.540	1.002
				Selected Indemnity 19th-to-Ultimate Loss Development Factor		1.003

Medical Paid+Case Data for Matching Companies

(8)	(9)	(10)	(11)	(12)	(13)	(14)
Policy Year	Losses for Policy Year 19th Report	Losses for Policy Year 20th Report	Losses for All Prior Policy Years Previous	Losses for All Prior Policy Years Current	Factor to Adjust Losses for Prior Policy Years	Indicated 19th-to-Ult Development for Policy Year
1987	164,467,365	162,461,704	865,678,819	878,116,997	0.459	1.153
1988	182,921,698	183,545,609	997,250,592	995,239,904	0.462	0.980
1989	225,291,337	226,021,148	1,211,362,184	1,214,244,464	0.424	1.033
1990	218,194,938	220,935,501	1,392,845,639	1,390,129,098	0.511	0.988
1991	217,678,034	218,639,691	1,600,049,877	1,608,536,398	0.589	1.071
1992	199,039,379	201,626,629	1,827,097,236	1,834,386,231	0.724	1.064
1993	179,589,256	179,545,203	2,034,904,275	2,039,772,626	0.881	1.031
1994	179,487,560	179,692,722	2,216,530,190	2,222,781,181	0.935	1.038
1995	166,318,640	166,771,950	2,393,018,576	2,397,554,094	1.066	1.028
1996	137,615,320	136,817,106	2,562,381,410	2,560,122,364	1.332	0.982
				Selected Medical 19th-to-Ultimate Loss Development Factor		1.035

(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.

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

Policy Year	Indemnity Paid-to-Paid + Case Ratio 19th Report	Medical Paid-to-Paid + Case Ratio 19th Report
1993	0.998	0.963
1994	0.997	0.899
1995	0.984	0.876
1996	0.997	0.899
1997	0.993	0.883
Selected	0.994	0.889

	Indemnity	Medical
(1) Paid+Case 19th-to-Ultimate Loss Development Factor (Section G)	1.003	1.035
(2) Factor to Adjust 19th-to-Ultimate Development Factor to a Limited Basis	0.755	0.755
(3) Limited Paid+Case 19th-to-Ultimate Loss Development Factor = [(1)-1]x(2)+1	1.002	1.026
(4) Limited Paid-to-Paid+Case Ratio (Section H)	0.994	0.889
(5) Limited Paid 19th-to-Ultimate Loss Development Factor = (3) / (4)	1.008	1.154

Section I - Summary of Limited Paid Loss Development Factors

	(1) Indemnity Paid Loss Development	(2)
Report	to Next Report	to Ultimate
1st	1.582	2.354
2nd	1.216	1.488
3rd	1.092	1.224
4th	1.041	1.121
5th	1.022	1.077
6th	1.015	1.054
7th	1.010	1.038
8th	1.004	1.028
9th	1.004	1.024
10th	1.003	1.020
11th	1.003	1.017
12th	1.002	1.014
13th	1.000	1.012
14th	1.001	1.012
15th	1.001	1.011
16th	1.000	1.010
17th	1.001	1.010
18th	1.001	1.009
19th		1.008

	(3) Medical Paid Loss Development	(4)
Report	to Next Report	to Ultimate
1st	1.225	2.141
2nd	1.072	1.748
3rd	1.042	1.631
4th	1.032	1.565
5th	1.036	1.516
6th	1.036	1.463
7th	1.034	1.412
8th	1.028	1.366
9th	1.022	1.329
10th	1.023	1.300
11th	1.015	1.271
12th	1.019	1.252
13th	1.008	1.229
14th	1.010	1.219
15th	1.009	1.207
16th	1.012	1.196
17th	1.010	1.182
18th	1.014	1.170
19th		1.154

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

Determination of Premium and Losses Developed to an Ultimate Report

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

	(1)	(2)
	Indemnity Paid+Case Loss Development	
Report	to Next Report	to Ultimate
1st	1.135	1.276
2nd	1.062	1.124
3rd	1.026	1.058
4th	1.013	1.031
5th	1.004	1.018
6th	1.006	1.014
7th	1.003	1.008
8th	1.002	1.005
9th	1.000	1.003
10th	1.000	1.003
11th	1.000	1.003
12th	1.000	1.003
13th	1.000	1.003
14th	1.000	1.003
15th	1.000	1.003
16th	1.000	1.003
17th	1.000	1.003
18th	1.001	1.003
19th		1.002

	(3)	(4)
	Medical Paid+Case Loss Development	
Report	to Next Report	to Ultimate
1st	1.017	1.335
2nd	1.038	1.313
3rd	1.040	1.265
4th	1.031	1.216
5th	1.036	1.179
6th	1.029	1.138
7th	1.014	1.106
8th	1.019	1.091
9th	1.012	1.071
10th	1.002	1.058
11th	1.004	1.056
12th	1.008	1.052
13th	1.011	1.044
14th	1.006	1.033
15th	0.999	1.027
16th	1.006	1.028
17th	0.999	1.022
18th	0.997	1.023
19th		1.026

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

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 Loss Cost Effective Period*	7,994,236
(2) Statewide Excess Ratio for (1)	0.011
(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) x (1.0 - (3))]}	1.011

Section L - Policy Year Large Loss Limits

Experience Year	Policy Year Detrended Limit
2015	7,074,509
2014	6,881,888
2013	6,691,574
2012	6,624,722
2011	6,479,685
2010	6,302,541
2009	6,120,897
2008	6,010,109
2007	5,916,131
2006	5,724,973
2005	5,478,290
2004	5,279,958
2003	5,097,594
2002	4,923,474
2001	4,773,489
2000	4,629,960
1999	4,475,688
1998	4,315,996
1997	4,136,745
1996	3,936,487
1995	3,765,197
1994	3,616,369
1993	3,495,903

* February 16, 2019 is the midpoint of the effective period for which the revised loss costs are being proposed.

Appendix A – Factors Underlying the Proposed Loss Cost 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 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 Tennessee. 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 2001 through 2015 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 loss costs to each of the policy years in the experience period. The average accident dates are based on a Tennessee distribution of policy writings by month and assume a uniform probability of loss over the coverage period.

TENNESSEE

APPENDIX A-III

Policy Year Trend Factors

Section A - Summary of Policy Year Data

(1)	(2)	(3)	(4)	(5)	(6)
	Lost-Time	Indemnity		Medical	
Policy	Claim	Avg Cost	Loss	Avg Cost	Loss
Year	Frequency*	Per Case*^	Ratio^	Per Case*^	Ratio^
2001	27.700	23,836	0.672	29,194	0.820
2002	26.910	22,688	0.610	30,347	0.818
2003	26.936	23,309	0.628	32,683	0.881
2004	25.928	22,691	0.587	34,740	0.903
2005	25.075	21,718	0.543	34,681	0.868
2006	24.932	23,024	0.576	34,912	0.880
2007	24.701	21,873	0.543	37,295	0.925
2008	23.473	21,262	0.498	35,379	0.832
2009	24.394	20,464	0.499	36,406	0.888
2010	26.040	18,747	0.488	32,221	0.839
2011	23.492	17,992	0.423	30,939	0.727
2012	22.840	17,454	0.399	33,246	0.759
2013	21.075	16,927	0.357	33,994	0.717
2014	20.448	16,067	0.329	32,869	0.672
2015	18.631	16,075	0.299	34,249	0.638

* 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

	Indemnity	Medical
(1) Current Approved Annual Loss Ratio Trend Factor	0.950	0.985
(2) Selected Annual Loss Ratio Trend Factor	**0.945**	**0.980**

(3) Length of Trend Period from Midpoint of Policy Year to Midpoint of Effective Period:

	Years
Policy Year 2014	4.217
Policy Year 2015	3.217

(4) Trend Factor Applied to Experience Year = (2) ^ (3)	Indemnity	Medical
Policy Year 2014	0.788	0.918
Policy Year 2015	0.834	0.937

TENNESSEE

APPENDIX A-IV

Derivation of Industry Group Differentials

Industry group differentials are used to more equitably distribute the overall loss cost 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 loss costs. 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	196,668,053	874,580,247	765,291,630	1.124	1.152
Contracting	149,534,707	656,291,402	574,268,734	1.112	1.114
Office & Clerical	85,562,584	384,077,036	336,116,809	1.091	1.106
Goods & Services	247,467,053	1,115,131,088	975,922,291	1.018	1.033
Miscellaneous	190,655,100	881,741,766	771,456,563	1.063	1.068
Statewide	869,887,496	3,911,821,539	3,423,056,027		

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	191,887,927	853,323,088	746,690,792	1.143	1.000
Contracting	149,266,242	655,113,141	573,237,731	1.143	1.000
Office & Clerical	84,402,151	378,868,034	331,558,263	1.143	1.000
Goods & Services	243,873,630	1,098,938,478	961,751,106	1.143	1.000
Miscellaneous	189,762,520	877,613,762	767,844,875	1.143	1.000
Statewide	859,192,470	3,863,856,503	3,381,082,767	1.143	

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	756,893,043	1.014	1.016	17,448
Contracting	553,130,369	0.965	0.967	8,035
Office & Clerical	328,239,829	0.990	0.992	6,811
Goods & Services	957,450,971	0.996	0.998	25,706
Miscellaneous	777,846,493	1.013	1.015	15,137
Statewide	3,373,560,705	0.998		

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	1.014	1.015
Contracting	12,000	0.82	0.971	0.972
Office & Clerical	12,000	0.75	0.992	0.993
Goods & Services	12,000	1.00	0.996	0.997
Miscellaneous	12,000	1.00	1.013	1.014
Statewide			0.999	1.000

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

Appendix B – Calculations Underlying the Loss Cost Change by Classification

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

1. Calculate industry group differentials, which are used to more equitably distribute the proposed overall average loss cost 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 Tennessee 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.

TENNESSEE

APPENDIX B-I

Distribution of Loss Cost Level Change to Occupational Classification

After determining the required changes in the overall loss cost 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
6/10-5/11	1.023	1.013	1.345	1.079
6/11-5/12	1.039	1.027	1.430	1.104
6/12-5/13	1.081	1.056	1.537	1.128
6/13-5/14	1.188	1.114	1.661	1.149
6/14-5/15	1.540	1.251	1.817	1.146

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
6/10-5/11	0.645	0.855
6/11-5/12	0.683	0.873
6/12-5/13	0.723	0.890
6/13-5/14	0.765	0.909
6/14-5/15	0.809	0.927

3. Factors to Adjust to the July 1, 2017 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
6/10-5/11	1.253	1.042	0.794	1.033	0.907
6/11-5/12	1.226	1.033	0.787	1.027	0.932
6/12-5/13	1.200	1.026	0.781	1.021	0.972
6/13-5/14	1.130	1.018	0.855	1.015	0.973
6/14-5/15	1.059	1.015	1.012	1.012	0.970

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)
6/10-5/11	0.827	0.819	0.688	0.524	0.519	0.682	0.675	1.043	0.837
6/11-5/12	0.870	0.860	0.733	0.558	0.552	0.729	0.720	1.163	0.898
6/12-5/13	0.938	0.916	0.802	0.610	0.596	0.798	0.780	1.330	0.976
6/13-5/14	1.027	0.963	0.925	0.777	0.729	0.922	0.865	1.469	1.016
6/14-5/15	1.319	1.072	1.265	1.261	1.024	1.261	1.024	1.634	1.030

* 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	0.075	0.107	0.128	0.152	0.192	0.219	0.276
(2) Excess Factors 1/(1-(1))	1.081	1.120	1.147	1.179	1.238	1.280	1.381

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

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*	1.016	0.967	0.992	0.998	1.015
(2) Final Differentials**	1.015	0.972	0.993	0.997	1.014
(3) Adjustment (2)/(1)	0.999	1.005	1.001	0.999	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 loss costs, 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)
6/10-5/11	1.010	1.074	1.056	1.017	1.027
6/11-5/12	1.035	1.075	1.066	1.008	1.043
6/12-5/13	1.034	1.074	1.088	0.987	1.021
6/13-5/14	1.085	1.075	1.111	0.968	1.050
6/14-5/15	1.140	1.075	1.126	0.955	1.089

3. Adjustment for Experience Change

A factor of 0.890 is applied to adjust for the experience change in the proposed loss cost level.

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

A factor of 1.197 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
6/10-5/11	1.093	1.100	1.095	1.093	1.093
6/11-5/12	1.110	1.117	1.112	1.110	1.110
6/12-5/13	1.087	1.093	1.089	1.087	1.087
6/13-5/14	1.117	1.124	1.120	1.117	1.117
6/14-5/15	1.159	1.166	1.161	1.159	1.159

TENNESSEE

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 loss costs, adjusted to the proposed level. The data sources for the above-captioned pure premiums are the partial pure premiums underlying the current loss costs.

1. Adjustment for Experience Change

A factor of 0.890 is applied to adjust for the experience change in the proposed loss cost level.

2. Factors to Adjust to the Proposed Trend Level

The pure premiums underlying the current loss costs contain the current trend. The change in trend factors, 0.981 and 0.981, for indemnity and medical, respectively, are applied to adjust to the proposed trend level.

3. Factors to Adjust to the July 1, 2017 Benefit Level

The pure premiums underlying the current loss costs are at the current August 28, 2016 level. The following factors are applied to adjust to the proposed benefit level.

Effective Date	Indemnity	Medical
January 1, 2017	1.000	1.006
May 18, 2017	1.000	1.000
July 1, 2017	1.003	1.000
Combined Benefit Adjustment	1.003	1.006

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

The pure premiums underlying the current loss costs 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	1.201	1.201	1.197	1.197
(2) Loss-based Assessment	1.000	1.000	1.000	1.000
(3) = (1) + (2) – 1.000	1.201	1.201	1.197	1.197
(4) Overall Change (3b)/(3a)			0.997	0.997

5. Adjustment to Obtain Expected Losses

The pure premiums underlying the current loss costs 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	1.124	1.152	0.976
Contracting	1.112	1.114	0.998
Office & Clerical	1.091	1.106	0.986
Goods & Services	1.018	1.033	0.985
Miscellaneous	1.063	1.068	0.995

6. Factors to Adjust for Proposed Industry Group Differentials

The pure premiums underlying the current loss costs 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	1.015	1.000	1.015
Contracting	0.972	1.000	0.972
Office & Clerical	0.993	1.000	0.993
Goods & Services	0.997	1.000	0.997
Miscellaneous	1.014	1.000	1.000***

*See Appendix A-IV, column (18).
**See Appendix A-IV, column (10).
***Set equal to 1.000 per the directive of the Tennessee Department of Commerce and Insurance.

7. Combined Conversion Factors

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

Industry Group	Indemnity	Medical
Manufacturing	0.865	0.868
Contracting	0.847	0.850
Office & Clerical	0.855	0.858
Goods & Services	0.857	0.860
Miscellaneous	0.869	0.872

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 Tennessee conditions in four steps. First, statewide indicated pure premiums are determined for Tennessee. Second, using Tennessee payrolls as weights, corresponding statewide-average pure premiums are computed for each remaining state. Third, the ratios of Tennessee 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 Tennessee 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 loss costs.

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: $12,563,779 for indemnity and $12,812,818 for medical.

The partial credibilities formula is:

$$z = [\text{ (expected losses) / (full credibility standard) }]^{0.4}$$

For the national pure premiums, credibility is determined from the number of lost-time claims. Full credibility standards are: 1,150 lost-time claims for indemnity and 1,000 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:

$$[\text{ (national cases)/(full credibility standard) }]^{0.4} \text{ and } [\text{ (1 – state credibility)/2 }]$$

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.

TENNESSEE

APPENDIX B-II

Adjustments to Obtain Loss Costs

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

1. Test Correction Factor

The payrolls are now extended by the loss costs presently in effect and by the indicated loss costs 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 loss costs 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	1.0058
Contracting	1.0017
Office & Clerical	1.0043
Goods & Services	0.9997
Miscellaneous	1.0109

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	1.152
Contracting	1.114
Office & Clerical	1.106
Goods & Services	1.033
Miscellaneous	1.068

3. Disease Loadings

The proposed manual loss costs 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.

4. Swing Limits

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

Manufacturing	from 14% above to 36% below
Contracting	from 10% above to 40% below
Office & Clerical	from 12% above to 38% below
Goods & Services	from 12% above to 38% below
Miscellaneous	from 14% above to 36% below

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

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

The product of the swing limits and the present loss cost sets bounds for the proposed loss cost. If the calculated loss cost falls outside of the bounds, the closest bound is chosen as the proposed loss cost. When a code is limited, the underlying pure premiums are adjusted to reflect the limited loss cost. 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.

An illustrative example showing the calculation of a proposed manual class loss cost 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 loss costs for other classifications are calculated in the same manner.

List of Classifications Limited by the Upper Swing								List of Classifications Limited by the Lower Swing	
1322	2002	3132	4240	4741	5604	5705	6005	4024	4420
7711	8235	8856	9186						

TENNESSEE

APPENDIX B-III

Derivation of Proposed Loss Cost - 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
06/01/10 - 05/31/11	0	660,807	0	1,653,980	3,459,781	786,736	1,592,772	2,670,470	8,321,841
06/01/11 - 05/31/12	0	452,866	0	1,807,337	3,070,995	770,064	1,690,299	2,692,672	8,303,195
06/01/12 - 05/31/13	0	124,152	0	1,146,472	2,933,247	1,009,333	1,582,964	2,961,716	7,536,595
06/01/13 - 05/31/14	0	334,000	0	982,790	2,424,886	583,383	1,837,628	2,175,660	8,314,934
06/01/14 - 05/31/15	0	0	16,534	662,356	1,393,084	470,848	1,474,628	2,342,145	7,191,999

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
06/01/10 - 05/31/11	0.827	0.819	0.688	0.524	0.519	0.682	0.675	1.043	0.837
06/01/11 - 05/31/12	0.870	0.860	0.733	0.558	0.552	0.729	0.720	1.163	0.898
06/01/12 - 05/31/13	0.938	0.916	0.802	0.610	0.596	0.798	0.780	1.330	0.976
06/01/13 - 05/31/14	1.027	0.963	0.925	0.777	0.729	0.922	0.865	1.469	1.016
06/01/14 - 05/31/15	1.319	1.072	1.265	1.261	1.024	1.261	1.024	1.634	1.030

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	1.147

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%

TENNESSEE

APPENDIX B-III

Derivation of Proposed Loss Cost - 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
06/01/10 - 05/31/11	0	588,866	0	943,018	1,953,773	583,810	1,169,811	3,276,543	8,188,156
06/01/11 - 05/31/12	0	423,766	0	1,097,316	1,844,490	610,819	1,324,201	3,683,435	8,744,626
06/01/12 - 05/31/13	0	123,739	0	760,942	1,902,186	876,387	1,343,457	4,605,651	8,617,277
06/01/13 - 05/31/14	0	349,970	0	830,883	1,923,433	585,252	1,729,545	3,741,608	9,904,053
06/01/14 - 05/31/15	0	0	22,758	908,793	1,552,156	646,031	1,643,011	4,473,967	8,667,556

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

Policy Period	INDUSTRY GROUP: Office and Clerical
06/01/10 - 05/31/11	1.095
06/01/11 - 05/31/12	1.112
06/01/12 - 05/31/13	1.089
06/01/13 - 05/31/14	1.120
06/01/14 - 05/31/15	1.161

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
06/01/10 - 05/31/11	21,484,178,517	1,671,877	4,065,133	3,587,815	8,966,031	5,737,010	12,553,846	18,290,856
06/01/11 - 05/31/12	22,631,976,175	1,899,446	3,994,812	4,095,980	9,724,024	5,894,258	13,820,004	19,714,262
06/01/12 - 05/31/13	20,811,669,042	1,783,051	3,669,257	5,015,554	9,384,215	5,452,308	14,399,769	19,852,077
06/01/13 - 05/31/14	21,347,716,813	1,586,071	4,483,302	4,190,601	11,092,539	6,069,373	15,283,140	21,352,513
06/01/14 - 05/31/15	22,688,375,176	1,831,573	3,709,589	5,194,276	10,063,033	5,541,162	15,257,309	20,798,471
Total	108,963,915,723	8,772,018	19,922,093	22,084,226	49,229,842	28,694,111	71,314,068	100,008,179
		INDICATED PURE PREMIUM				**0.026**	**0.065**	**0.09**

The present on rate level pure premiums are developed by adjusting the pure premiums underlying the current loss cost 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 Loss Cost	0.027	0.073	0.10
Conversion Factors (App. B-I, Section B)	0.855	0.858	xxx
PURE PREMIUMS PRESENT ON RATE LEVEL (Underlying Pure Premiums) x (Conversion Factor)	0.023	0.063	0.09

TENNESSEE

APPENDIX B-III

Derivation of Proposed Loss Cost - Code 8810
Industry Group - Office and Clerical, Hazard Group - C

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

		Indemnity	Medical	Total
1.	Indicated Pure Premium	0.026	0.065	0.09
2.	Pure Premium Indicated by National Relativity	0.023	0.060	0.08
3.	Pure Premium Present on Rate Level	0.023	0.063	0.09
4.	State Credibilities	100%	100%	xxx
5.	National Credibilities	0%	0%	xxx
6.	Residual Credibilities = 100% - (4) - (5)	0%	0%	xxx
7.	Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	0.026	0.065	0.09
8.	Test Correction Factor	1.0043	1.0043	xxx
9.	Underlying Pure Premiums = (7) x (8) *	0.025	0.065	0.09
10.	Ratio of Manual to Standard Premium			1.106
11.	Loss Cost = (9) x (10)			0.10
12.	Loss Cost Within Swing Limits			0.10
	Current Loss Cost x Swing Limits a) Lower bound = 0.11 x 0.620 = 0.07 b) Upper bound = 0.11 x 1.120 = 0.12			
13.	Pure Premiums Underlying Proposed Loss Cost* = ((13TOT) / (9TOT)) x (9) , (13TOT) = (12) / (10)	0.025	0.065	0.09
14.	Disease, Catastrophe and/or Miscellaneous Loadings			0.00
15.	Final Loaded Loss Cost			0.10

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

TENNESSEE

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 loss costs. The payrolls are extended by the loss costs presently in effect and by the indicated loss costs. The loss costs are limited to the swing limits based on 25% above and 25% below the current loss costs. This results in the indicated loss cost level change of -12.8%.

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 losses are adjusted to the July 1, 2017 state law level. The federal losses are adjusted to the October 1, 2016 federal law level.

STATE ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/10 - 12/10	1.263	1.045	0.796	1.036	0.920
1/11 - 12/11	1.238	1.036	0.789	1.030	0.909
1/12 - 12/12	1.215	1.031	0.785	1.024	0.959
1/13 - 12/13	1.174	1.022	0.795	1.017	0.973
1/14 - 12/14	1.079	1.016	0.963	1.013	0.972

FEDERAL ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/10 - 12/10	1.028	1.023	1.009	1.023	1.000
1/11 - 12/11	1.023	1.019	1.008	1.019	1.000
1/12 - 12/12	1.017	1.015	1.006	1.015	1.000
1/13 - 12/13	1.013	1.011	1.004	1.011	1.000
1/14 - 12/14	1.010	1.008	1.003	1.008	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 0.945 and 0.980 for indemnity and medical, respectively.

Policy Period	Indemnity	Medical
1/10 - 12/10	0.628	0.847
1/11 - 12/11	0.665	0.864
1/12 - 12/12	0.704	0.882
1/13 - 12/13	0.744	0.900
1/14 - 12/14	0.788	0.918

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
1/10 - 12/10	1.107	1.021	1.205	1.017
1/11 - 12/11	1.152	1.038	1.213	1.021
1/12 - 12/12	1.260	1.097	1.277	1.044
1/13 - 12/13	1.455	1.214	1.365	1.049
1/14 - 12/14	2.500	1.747	1.680	1.113

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)
1/10 - 12/10	0.878	0.810	0.726	0.553	0.510	0.720	0.664	0.939	0.792
1/11 - 12/11	0.948	0.855	0.794	0.604	0.545	0.789	0.711	0.953	0.802
1/12 - 12/12	1.078	0.938	0.915	0.696	0.606	0.908	0.791	1.080	0.883
1/13 - 12/13	1.271	1.060	1.106	0.861	0.718	1.101	0.919	1.195	0.919
1/14 - 12/14	2.126	1.485	2.002	1.897	1.326	1.996	1.395	1.499	0.993

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)
1/10 - 12/10	0.715	0.659	0.711	0.701	0.647	0.711	0.656	1.021	0.861
1/11 - 12/11	0.784	0.706	0.781	0.772	0.696	0.781	0.703	1.048	0.882
1/12 - 12/12	0.902	0.785	0.900	0.892	0.777	0.900	0.784	1.126	0.921
1/13 - 12/13	1.097	0.915	1.094	1.087	0.907	1.094	0.913	1.229	0.944
1/14 - 12/14	1.990	1.390	1.986	1.976	1.381	1.986	1.388	1.542	1.022

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

Section A-2 – Expected Excess Provision and Redistribution

To reduce distortions in individual class loss cost 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	0.075	0.107	0.128	0.152	0.192	0.219	0.276
(2) Excess Factors 1/(1-(1))	1.081	1.120	1.147	1.179	1.238	1.280	1.381

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
1/10 - 12/10	1.197	1.218
1/11 - 12/11	1.197	1.212
1/12 - 12/12	1.197	1.239
1/13 - 12/13	1.197	1.235
1/14 - 12/14	1.197	1.251

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

Section B – Present on Rate Level

1. Benefits

The current underlying pure premiums are at the current August 28, 2016 state and October 1, 2015 federal law levels. These pure premiums are adjusted to reflect the weighted effect of state and federal laws which bring losses to the proposed July 1, 2017 state and October 1, 2016 federal law levels. The distribution of state and federal losses in regard to total losses was used to determine the weighted effects.

State Weight (St%)	0.184
Federal Weight (Fed%)	0.816

	Indemnity	Medical	Total
(a) State Laws	1.003	1.006	1.005
(b) Federal Laws	1.002	1.000	1.001
(c) Weighted Laws = [(a)xSt%] + [(b)xFed%]	1.002	1.001	1.002

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
0.945	0.980

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	1.197	1.197	1.197
(b) Loss-Based Assessment	1.000	1.000	1.000
(c) Total = (a) + (b) - 1	1.197	1.197	1.197

FEDERAL ACT

	Indemnity	Medical	Total
(d) Loss Adjustment Expense	1.197	1.197	1.197
(e) Loss-Based Assessment	1.119	1.000	1.071
(f) Total = (d) + (e) - 1	1.316	1.197	1.268

	Indemnity	Medical	Total
(g) Weighted Proposed Expenses = [(c) x St%] + [(f) x Fed%]	1.294	1.197	1.255

Current:

STATE ACT

	Indemnity	Medical	Total
(h) Loss Adjustment Expense	1.201	1.201	1.201
(i) Loss-Based Assessment	1.000	1.000	1.000
(j) Total = (h) + (i) - 1	1.201	1.201	1.201

FEDERAL ACT

	Indemnity	Medical	Total
(k) Loss Adjustment Expense	1.201	1.201	1.201
(l) Loss-Based Assessment	1.116	1.000	1.064
(m) Total = (k) + (l) - 1	1.317	1.201	1.265

	Indemnity	Medical	Total
(n) Weighted Current Expenses = [(j) x St%] + [(m) x Fed%]	1.296	1.201	1.253

Change:

	Indemnity	Medical	Total
Weighted Expense Change in Loss-Based Expenses = [(g) / (n)]	0.998	0.997	1.002

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

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

Indemnity	Medical
0.945	0.978

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: $43,027,000 for indemnity and $22,797,200 for medical.

II. Calculation of Proposed Loss Costs

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

A. Test Correction Factor **1.0000**

B. Ratio of Manual Premium to Earned Premium **1.112**
(determined on a countrywide basis)

C. Swing Limits
No classifications were adjusted on account of swing limits.:

TENNESSEE

APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 7317

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
01/01/10 - 12/31/10	0	0	0	0	26,621	0	0	0	24,766
01/01/11 - 12/31/11	0	0	0	0	0	0	0	0	0
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

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
01/01/10 - 12/31/10	0	0	0	0	0	0	0	0	0
01/01/11 - 12/31/11	0	0	0	659	0	0	0	21,197	0
01/01/12 - 12/31/12	0	0	0	0	27,973	0	0	0	27,794
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	16,570	0	20,000

STATE ACT - PRIMARY PARTIAL 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
01/01/10 - 12/31/10	0.878	0.810	0.726	0.553	0.510	0.720	0.664	0.939	0.792
01/01/11 - 12/31/11	0.948	0.855	0.794	0.604	0.545	0.789	0.711	0.953	0.802
01/01/12 - 12/31/12	1.078	0.938	0.915	0.696	0.606	0.908	0.791	1.080	0.883
01/01/13 - 12/31/13	1.271	1.060	1.106	0.861	0.718	1.101	0.919	1.195	0.919
01/01/14 - 12/31/14	2.126	1.485	2.002	1.897	1.326	1.996	1.395	1.499	0.993

FEDERAL ACT - PRIMARY PARTIAL 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
01/01/10 - 12/31/10	0.715	0.659	0.711	0.701	0.647	0.711	0.656	1.021	0.861
01/01/11 - 12/31/11	0.784	0.706	0.781	0.772	0.696	0.781	0.703	1.048	0.882
01/01/12 - 12/31/12	0.902	0.785	0.900	0.892	0.777	0.900	0.784	1.126	0.921
01/01/13 - 12/31/13	1.097	0.915	1.094	1.087	0.907	1.094	0.913	1.229	0.944
01/01/14 - 12/31/14	1.990	1.390	1.986	1.976	1.381	1.986	1.388	1.542	1.022

TENNESSEE

APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 7317

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	1.381

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
01/01/10 - 12/31/10	0	0	0	0	16,683	0	0	0	29,163
01/01/11 - 12/31/11	0	0	0	0	0	0	0	0	0
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

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
01/01/10 - 12/31/10	0	0	0	0	0	0	0	0	0
01/01/11 - 12/31/11	0	0	0	625	0	0	0	30,760	0
01/01/12 - 12/31/12	0	0	0	0	26,707	0	0	0	38,670
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	28,260	0	31,739

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

Policy Period	INDUSTRY GROUP: F-Class
01/01/10 - 12/31/10	1.197
01/01/11 - 12/31/11	1.197
01/01/12 - 12/31/12	1.197
01/01/13 - 12/31/13	1.197
01/01/14 - 12/31/14	1.197

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

Policy Period	INDUSTRY GROUP: F-Class
01/01/10 - 12/31/10	1.218
01/01/11 - 12/31/11	1.212
01/01/12 - 12/31/12	1.239
01/01/13 - 12/31/13	1.235
01/01/14 - 12/31/14	1.251

TENNESSEE

APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 7317

TOTAL - PAYROLL, FINAL CONVERTED LOSSES

Policy Period	Payroll	Indemnity Likely	Indemnity Not-Likely	Medical Likely	Medical Not-Likely	Total Indemnity	Total Medical	Total
01/01/10 - 12/31/10	1,692,041	0	19,970	0	34,908	19,970	34,908	54,878
01/01/11 - 12/31/11	1,459,482	758	0	37,281	0	758	37,281	38,039
01/01/12 - 12/31/12	1,377,193	0	33,090	0	47,912	33,090	47,912	81,002
01/01/13 - 12/31/13	1,361,708	0	0	0	0	0	0	0
01/01/14 - 12/31/14	1,649,749	0	35,353	0	39,705	35,353	39,705	75,058
Total	7,540,173	758	88,413	37,281	122,525	89,171	159,806	248,977
		INDICATED PURE PREMIUM				**1.183**	**2.119**	**3.30**

The present on rate level pure premiums are developed by adjusting the pure premiums underlying the current loss cost 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 Loss Cost	3.438	3.102	6.54
Conversion Factors (Section B)	0.945	0.978	xxx
PURE PREMIUMS PRESENT ON RATE LEVEL (Underlying Pure Premiums) x (Conversion Factor)	3.249	3.034	6.28

TENNESSEE

APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 7317
Industry Group - F-Class, Hazard Group - G

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

		Indemnity	Medical	Total
1.	Indicated Pure Premium	1.183	2.119	3.30
2.	Pure Premium Indicated by National Relativity	3.575	3.193	6.77
3.	Pure Premium Present on Rate Level	3.249	3.034	6.28
4.	State Credibilities	13%	16%	xxx
5.	National Credibilities	36%	39%	xxx
6.	Residual Credibilities = 100% - (4) - (5)	51%	45%	xxx
7.	Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	3.098	2.950	6.05
8.	Test Correction Factor	1.0000	1.0000	xxx
9.	Underlying Pure Premiums = (7) x (8) *	3.100	2.950	6.05
10.	Ratio of Manual to Standard Premium			1.112
11.	Loss Cost = (9) x (10)			6.73
12.	Loss Cost Within Swing Limits			6.73
	Current Loss Cost x Swing Limits a) Lower bound = 7.08 x 0.750 = 5.31 b) Upper bound = 7.08 x 1.250 = 8.85			
13.	Pure Premiums Underlying Proposed Loss Cost* = ((13TOT) / (9TOT)) x (9) , (13TOT) = (12) / (10)	3.100	2.950	6.05
14.	Disease, Catastrophe and/or Miscellaneous Loadings			0.00
15.	Final Loaded Loss Cost			6.73

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

TENNESSEE

APPENDIX B-V

Derivation of Proposed Traumatic Loss Cost - 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
06/01/10 - 05/31/11	0	0	0	158,486	120,828	91,765	254	92,867	41,298
06/01/11 - 05/31/12	0	329,905	0	185,000	238,088	0	15,225	143	106,201
06/01/12 - 05/31/13	0	0	0	142,782	178,565	0	9,077	40,222	114,032
06/01/13 - 05/31/14	0	0	0	37,500	76,834	4,114	430	70,539	41,623
06/01/14 - 05/31/15	0	0	0	62,000	24,678	0	0	42,500	14,101

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
06/01/10 - 05/31/11	0.827	0.819	0.688	0.524	0.519	0.682	0.675	1.043	0.837
06/01/11 - 05/31/12	0.870	0.860	0.733	0.558	0.552	0.729	0.720	1.163	0.898
06/01/12 - 05/31/13	0.938	0.916	0.802	0.610	0.596	0.798	0.780	1.330	0.976
06/01/13 - 05/31/14	1.027	0.963	0.925	0.777	0.729	0.922	0.865	1.469	1.016
06/01/14 - 05/31/15	1.319	1.072	1.265	1.261	1.024	1.261	1.024	1.634	1.030

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	1.381

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%

TENNESSEE

APPENDIX B-V

Derivation of Proposed Traumatic Loss Cost - 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
06/01/10 - 05/31/11	0	0	0	102,042	77,054	76,899	210	155,992	57,331
06/01/11 - 05/31/12	0	348,613	0	126,842	161,486	0	13,469	15,970	196,699
06/01/12 - 05/31/13	0	0	0	107,019	130,768	0	8,699	87,169	171,030
06/01/13 - 05/31/14	0	0	0	35,803	68,824	4,661	457	148,146	67,008
06/01/14 - 05/31/15	0	0	0	96,064	31,050	0	0	107,841	23,914

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

	Indemnity	Medical
Loss Based Expense	1.197	1.197

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
06/01/10 - 05/31/11	6,703,550	214,192	92,485	186,722	68,625	306,677	255,348	562,025
06/01/11 - 05/31/12	7,880,820	151,830	626,711	19,116	235,449	778,541	254,565	1,033,106
06/01/12 - 05/31/13	8,082,988	128,102	166,942	104,341	204,723	295,044	309,064	604,108
06/01/13 - 05/31/14	7,004,952	48,435	82,929	177,331	80,209	131,365	257,539	388,904
06/01/14 - 05/31/15	6,375,963	114,989	37,167	129,086	28,625	152,155	157,711	309,866
Total	36,048,273	657,548	1,006,234	616,596	617,630	1,663,782	1,234,227	2,898,009
		INDICATED PURE PREMIUM				**4.615**	**3.424**	**8.04**

The present on rate level pure premiums are developed by adjusting the pure premiums underlying the current loss cost 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 Loss Cost	5.743	7.057	12.80
Conversion Factors *	0.981	0.984	xxx
PURE PREMIUMS PRESENT ON RATE LEVEL (Underlying Pure Premiums) x (Conversion Factor)	5.634	6.944	12.58

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

TENNESSEE

APPENDIX B-V

Derivation of Proposed Traumatic Loss Cost - Code 1016
COAL MINING—NOC, Hazard Group - G

The traumatic loss cost for classification 1016 is derived as follows:

		Indemnity	Medical	Total
1.	Indicated Pure Premium	4.615	3.424	8.04
2.	Pure Premium Indicated by National Relativity	2.512	3.253	5.77
3.	Pure Premium Present on Rate Level	5.634	6.944	12.58
4.	State Credibilities†	34%	45%	xxx
5.	National Credibilities	33%	27%	xxx
6.	Residual Credibilities = 100% - (4) - (5)	33%	28%	xxx
7.	Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	4.257	4.363	8.62
8.	Voluntary Offset	1.000	1.000	xxx
9.	Underlying Pure Premiums = (7) x (8) *	4.257	4.363	8.62
10.	Ratio of Manual to Standard Premium			1.068
11.	Loss Cost = (9) x (10)			9.21
12.	Loss Cost Within Swing Limits			10.21
	Current Loss Cost x Swing Limits a) Lower bound = 13.61 x 0.75 = 10.21 b) Upper bound = 13.61 x 1.25 = 17.01			
13.	Pure Premiums Underlying Proposed Loss Cost* = ((13TOT) / (9TOT)) x (9) , (13TOT) = (12) / (10)	4.721	4.839	9.56
14.	Proposed Traumatic Loss Cost			10.21

† To achieve full state credibility, the classification must have expected losses of at least: $30,516,264 for indemnity, and $18,526,296 for medical.

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

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

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 annual updates in the state average weekly wage, medical reimbursement levels, or other recurring 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 following changes affecting State benefit levels are detailed in this section of the filing:

- Analysis of Tennessee Medical Fee Schedule Update, Effective January 1, 2017
- Analysis of Enacted Tennessee Senate Bill (SB) 297
- Change in Tennessee's Minimum and Maximum Weekly Benefits, Effective July 1, 2017
- Longshore and Harbor Workers' Compensation Act
  - Change in the Minimum and Maximum Weekly Benefits, Effective October 1, 2016
  - Annual Assessment

TENNESSEE

Appendix C-I

Analysis of Tennessee Medical Fee Schedule Update Effective January 1, 2017

NCCI estimates that the changes to the Tennessee Medical Fee Schedule that became effective January 1, 2017, will result in a +0.4% impact on Tennessee workers compensation system costs.

Summary of Changes

Changes to the Tennessee Medical Fee Schedule (MFS) (Chapters 0800-2-17, 0800-2-18, 0800-2-19) that became effective January 1, 2017, are described below:

- Updated the physician fee schedule to be based on the 2017 Medicare Resource-Based Relative Value Scale (RBRVS) and Tennessee-specific conversion factors (CF) by physician service category. The previous physician fee schedule was based on the 2016 RBRVS and Tennessee-specific CFs.

- Updated the Hospital Outpatient and Ambulatory Surgical Center (ASC) fee schedule
  - Updated Ambulatory Payment Classification payment rates to be based on 2017 Medicare Addendum B. Previous reimbursement rates were based on 2016 Medicare Addendum B.

- Updated the Durable Medical Equipment (DME), Medical Supplies, and Orthotics and Prosthetics fee schedules
  - Updated the maximum allowable reimbursements (MARs) to be based on 2017 Medicare rates. Previous MARs were based on 2016 Medicare rates.

- Updated the Ambulance Services fee schedule
  - Updated the maximum reimbursements for ambulance services to be capped at the lesser of the submitted charges or 150% of the 2017 Medicare rate. The previous maximum reimbursements were capped at the lesser of the submitted charges or 150% of the 2016 Medicare rate.

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. Determine the price level change as a result of the revised fee schedule
    - NCCI research by Frank Schmid and Nathan Lord (2013), "The Impact of Physician Fee Schedule Changes in Workers Compensation: Evidence from 31 States", suggests that a portion of a change in maximum reimbursements is realized on payments impacted by the change.
        - o In response to a fee schedule decrease, NCCI research indicates that payments decline by approximately 50% of the fee schedule change.
        - o In response to a fee schedule increase, NCCI research indicates that payments increase by approximately 80% of the fee schedule change and the magnitude of the response depends on the relative difference between actual payments and fee schedule maximums (i.e. the price departure).
          The formula used to determine the percent realized for fee schedule increases is 80% x (1.10 + 1.20 x (price departure)).

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.

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 Tennessee for Service Year 2015.
- The share of benefit costs attributed to medical benefits is based on NCCI's Financial Call data for Tennessee from the latest two policy years projected to the effective date of the benefit changes.

Physician Fee Schedule

In Tennessee, payments for physician services represent 38.5% of total medical costs. To calculate the percentage change in maximums for physician services, we calculate the percentage change in maximum for each procedure code. The overall change in maximums for physician services is a weighted average of the percentage change in MAR (revised MAR / prior MAR) by procedure code weighted by the observed payments by procedure code as reported on NCCI's Medical Data Call, for Tennessee for Service Year 2015. The overall weighted-average percentage change in MAR is +0.4%.

The impact by category is shown in the following table.

Physician Practice Category	Share of Physician Costs	Percentage Change in MAR
Anesthesia	5.2%	0.0%
Surgery	21.4%	0.0%
Radiology	9.0%	+1.0%

Pathology & Laboratory	2.1%	+0.6%
Evaluation & Management	23.8%	+0.4%
Medicine	23.1%	+1.0%
Other HCPCS*	0.4%	+0.1%
Physician Payments with no specific MAR	15.0%	-
Total Physician Costs	**100.0%**	**+0.4%**

*Healthcare Common Procedure Coding System

Since the overall average maximum reimbursement for physician services increased, the percentage expected to be realized from the fee schedule increase is estimated according to the formula 80% x (1.10 + 1.20 x (price departure)). The observed price departure for physician payments is -12.0%[1]. The price realization factor is estimated to be 76% (= 80% x (1.10 + 1.20 x (-0.12))). The impact on physician payments due to the physician fee schedule change is +0.3% (= +0.4% x 0.76).

The above impact of +0.3% is then multiplied by the Tennessee percentage of medical costs attributed to physician payments (38.5%) to arrive at the impact on medical costs of +0.1%. This is then multiplied by the percentage of Tennessee benefit costs attributed to medical benefits (69.3%) to arrive at a +0.1% impact on overall workers compensation costs in Tennessee.

Hospital Outpatient

In Tennessee, payments for hospital outpatient services represent 10.7% of total medical costs. To calculate the percentage change in maximums for hospital outpatient services, we calculate the percentage change in maximum for each procedure code. The overall change in maximums for hospital outpatient services is a weighted average of the percentage change in MAR (revised MAR / prior MAR) by procedure code, weighted by the observed payments by procedure code as reported on NCCI's Medical Data Call, for Tennessee for Service Year 2015. The overall weighted-average percentage change in MAR is +3.5%.

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.

Since the overall average maximum reimbursement for hospital outpatient services increased, the percentage expected to be realized from the fee schedule increase is calculated according to the formula 80% x (1.10 + 1.20 x (price departure)). Since a reliable price departure could not be determined, a price realization factor of 80% was assumed. The impact on hospital outpatient payments due to the hospital outpatient fee schedule change is +2.8% (= +3.5% × 0.80.)

[1] A departure of -12.0% implies that the ratio of actual payments to the fee schedule maximums is 0.88.

The above impact of +2.8% is then multiplied by the Tennessee percentage of medical costs attributed to hospital outpatient payments (10.7%) to arrive at the impact on medical costs of +0.3%. This is then multiplied by the percentage of Tennessee benefit costs attributed to medical benefits (69.3%) to arrive at a +0.2% impact on overall workers compensation costs in Tennessee.

Ambulatory Surgical Center (ASC)

In Tennessee, payments for ASC services represent 7.0% of total medical costs. The impact on ASC services due to the adoption of the 2017 Medicare values is calculated in an analogous manner to the hospital outpatient fee schedule change. The overall weighted-average percentage change in MAR is +2.9%.

Since the overall average maximum reimbursement for ASC services increased, the percentage expected to be realized from the fee schedule increase is calculated according to the formula 80% x (1.10 + 1.20 x (price departure)). Since a reliable price departure could not be determined, a price realization factor of 80% was assumed. The impact on ASC payments due to the ASC fee schedule change is +2.3%
(= +2.9% x 0.80).

The above impact of +2.3% is then multiplied by the Tennessee percentage of medical costs attributed to ASC payments (7.0%) to arrive at the impact on medical costs of +0.2%. This is then multiplied by the percentage of Tennessee benefit costs attributed to medical benefits (69.3%) to arrive at a +0.1% impact on overall workers compensation costs in Tennessee.

DME, Medical Supplies, and Orthotics and Prosthetics

In Tennessee, payments for DME, Medical Supplies, and Orthotics and Prosthetics services represent 8.3% of total medical costs. To calculate the percentage change in maximums for these services, we calculate the percentage change in maximum for each code. The overall change in maximums is a weighted average of the percentage change in MAR (revised MAR / prior MAR) by code weighted by the observed payments by code as reported on NCCI's Medical Data Call, for Tennessee for Service Year 2015. The overall weighted-average percentage change in MAR is -0.7%.

Since the overall average maximum reimbursement for DME, Medical Supplies, and Orthotics and Prosthetics services decreased, NCCI expects that 50% of the decrease will be realized. The impact on DME, Medical Supplies, and Orthotics and Prosthetics payments due to the fee schedule change is -0.4% (= -0.7% x 0.50).

The above impact of -0.4% is then multiplied by the Tennessee percentage of medical costs attributed to DME, Medical Supplies, and Orthotics and Prosthetics payments (8.3%) to arrive at a negligible[2] decrease on medical costs and overall workers compensation costs in Tennessee.

Ambulance Services

In Tennessee, payments for ambulance services subject to the fee schedule represent 1.2% of total medical costs. To calculate the percentage change in maximums for ambulance services, we calculate the percentage change in maximum for each procedure code. The overall change in maximums for ambulance services is a weighted average of the percentage change in MAR (revised MAR / prior MAR) by code weighted by the observed payments by code as reported on NCCI's Medical Data Call, for Tennessee for Service Year 2015. The overall weighted-average percentage change in MAR is +0.8%.

Since the overall average maximum reimbursement for ambulance services increased, the percentage expected to be realized from the fee schedule increase is calculated according to the formula 80% x (1.10 + 1.20 x (price departure)). Since a reliable price departure could not be determined, a price realization factor of 80% was assumed. The impact on ambulance payments due to the ambulance fee schedule change is +0.6% (= +0.8% x 0.80).

The above impact of +0.6% is then multiplied by the Tennessee percentage of medical costs attributed to ambulance payments (1.2%) to arrive at a negligible increase on medical costs and overall workers compensation costs in Tennessee.

Summary of Impacts

The impacts from the changes to the Tennessee medical fee schedule are summarized below:

	(A) Impact on Type of Service	(B) Share of Medical Costs	(C) Impact on Medical Costs (A) x (B)	(D) Impact on Overall Costs (C) × (2)
Physician	+0.3%	38.5%	+0.1%	+0.1%
Hospital Outpatient	+2.8%	10.7%	+0.3%	+0.2%
ASC	+2.3%	7.0%	+0.2%	+0.1%

[2] Negligible is defined in this document to be an impact on overall system costs of less than 0.1%.

TENNESSEE

Appendix C-I

Analysis of Tennessee Medical Fee Schedule Update Effective January 1, 2017

DME, Medical Supplies, and Orthotics and Prosthetics	-0.4%	8.3%	Negligible Decrease	Negligible Decrease
Ambulance	+0.6%	1.2%	Negligible Increase	Negligible Increase
(1) Total Impact on Tennessee Medical Costs			**+0.6%**	
(2) Medical Costs as a Percentage of Overall Workers Compensation Benefit Costs in Tennessee				69.3%
(3) Total Impact on Overall Workers Compensation System Costs in Tennessee = (1) x (2)				**+0.4%**

TENNESSEE

Appendix C-II

Analysis of Enacted Tennessee Senate Bill 297

Tennessee Senate Bill (SB) 297 raises the maximum burial benefit from $7,500 to $10,000, effective May 18, 2017. NCCI estimates that SB 297 will result in a negligible[1] impact on overall workers compensation (WC) system costs in Tennessee.

Summary of SB 297

Prior to enacted SB 297, if an employee's death results from a compensable workplace accident, the employer was liable for burial expenses up to maximum of $7,500, in addition to other indemnity and medical benefits required by Tennessee WC statutes. Effective May 18, 2017, the maximum burial benefit in Tennessee increased to $10,000.

SB 297 also limits the system of utilization review to exclude diagnostic procedures and diagnostic studies under certain listed conditions, and specifies that recommended invasive procedures shall be subject to utilization review at any time. Additionally, SB 297 changes the mileage allowance for employers providing a physician to the employee from a 100-mile radius to a 125-mile radius of the employee's community of residence.

Actuarial Analysis

In analyzing the cost impact of raising the maximum burial benefit, NCCI compared total fatal indemnity costs payable under both the prior and revised maximum burial benefit provisions. To determine the fatal indemnity benefits payable under each, NCCI estimated fatal dependency benefits using a countrywide distribution for the number dependents and their corresponding average ages, and assuming that all fatal claims receive the maximum burial benefit before and after the enactment of SB 297.

The impact on overall WC system costs in Tennessee from increasing the maximum burial benefit to $10,000 is summarized in the table below:

Type of Injury	Percentage of Losses[2]	Overall Impact (%)
Fatal	1.3%	+0.9
Permanent Total	0.4%	0.0
Permanent Partial	16.3%	0.0
Temporary Total	12.3%	0.0
Total Indemnity	30.3%	+0.0[3]
Total Medical	69.7%	0.0
Total	100.0%	+0.0[3]

The provisions affecting utilization review and for the mileage allowance are expected to have a negligible impact on overall WC systems costs in Tennessee.

[1] Negligible in this context means an impact on overall system costs of less than 0.1%.
[2] Proportions within indemnity are based on losses for policies effective during the 24-month period ending 05/31/2014 on the 08/28/2016 law level and developed to an ultimate basis by type of injury. Indemnity/Medical split is based on Policy Years 2014 and 2015 from Financial Data, projected to 05/18/2017.
[3] Weighted average.

TENNESSEE

APPENDIX C-III

Change in the Minimum and Maximum Weekly Benefits, Effective July 1, 2017

In Tennessee, maximum and, for certain benefit types, minimum workers compensation indemnity benefit provisions are dependent upon the state average weekly wage (SAWW). The impacts summarized in the table below result from anticipated changes in workers compensation costs due to the change in the SAWW from $888.00 ("current") to $902.00 ("revised"), and apply to injuries occurring on or after July 1, 2017.

The approach used in calculating the effects of a change in the SAWW is as follows:

1. Obtain the latest available SAWW from the Tennessee Department of Labor and Workforce Development.
2. Calculate the minimum and maximum benefits by benefit payment type that are dependent upon and expressed as a percentage of the current and revised SAWW.
3. Using a countrywide distribution of workers and their wages[1], indexed to the Tennessee average weekly wage[2], determine expected current and revised average weekly benefits by benefit payment type (and dependency type, as appropriate)[3].
4. Use the above-calculated average weekly benefits to determine the indemnity benefit costs for each injury type (Fatal, Permanent Total, Permanent Partial, and Temporary Total)[4] prior to and subsequent to the change in the SAWW. Calculate the ratio of the revised indemnity benefit costs to current indemnity benefit costs for each injury type to determine the impact by injury type from the change in the SAWW.
5. Determine the indemnity cost distribution by injury type[5].
6. Using the indemnity cost distribution (Step 5) and the effects by injury type (Step 4), calculate the effect of the change in SAWW on total indemnity benefit costs.
7. Multiply the impact on total indemnity benefit costs (Step 6) by the percentage of losses attributed to indemnity benefits[6] to determine the impact of the change in the SAWW on overall benefit costs.

Type of Injury	Percentage of Losses	Effect (%)
Fatal	1.4%	+ 1.3
Permanent Total	0.4%	+ 0.3
Permanent Partial	16.2%	+ 0.3
Temporary Total	12.3%	+ 0.2
Total Indemnity	30.3%	+ 0.3
Medical	69.7%	0.0
Total	100.0%	+ 0.1

[1] Based on NCCI Detailed Claim Information data.

[2] Forecasted using the Bureau of Labor Statistics Quarterly Census of Employment and Wages, for all private sector employment, and adjusted to reflect injured workers.

[3] For states where the rate of compensation is based on spendable wages, state and federal tax withholding tables are used in conjunction with pertinent assumptions (e.g., number of dependents).

[4] Various distributions based on internal and external data are employed in determining the impact by type of injury. For example, for Fatal injuries, a countrywide distribution of average ages and dependents by type (e.g., spouse, spouse with one child, parent, etc.) is used in calculating mortality-adjusted annuity values under both the current and revised weekly maximum benefits, with the likelihood of remarriage incorporated as applicable.

[5] NCCI Unit Statistical Plan data for the 24-month policy period ending 05/31/2014 on the 05/18/2017 law level and developed to an ultimate basis by type of injury.

[6] NCCI Financial Call data for Tennessee for Policy Years 2014 and 2015 projected to 07/01/2017.

TENNESSEE

APPENDIX C-IV

Longshore and Harbor Workers' Compensation Act

Change in the Minimum and Maximum Weekly Benefits, Effective October 1, 2016

In the Longshore And Harbor Workers' Compensation Act , maximum and, for certain benefit types, minimum workers compensation indemnity benefit provisions are dependent upon the national average weekly wage (NAWW). The impacts summarized in the table below result from anticipated changes in workers compensation costs due to the change in the NAWW from $703.00 ("current") to $718.24 ("revised"), and apply to injuries occurring on or after October 1, 2016.

The approach used in calculating the effects of a change in the NAWW is as follows:

1. Obtain the latest available NAWW from the United States Department of Labor, Division of Longshore and Harbor Workers' Compensation (DLHWC).
2. Calculate the minimum and maximum benefits by benefit payment type that are dependent upon and expressed as a percentage of the current and revised NAWW.
3. Using a countrywide distribution of workers and their wages[1], indexed to the Longshore And Harbor Workers' Compensation Act average weekly wage[2], determine expected current and revised average weekly benefits by benefit payment type (and dependency type, as appropriate)[3].
4. Use the above-calculated average weekly benefits to determine the indemnity benefit costs for each injury type (Fatal, Permanent Total, Permanent Partial, and Temporary Total)[4] prior to and subsequent to the change in the NAWW. Calculate the ratio of the revised indemnity benefit costs to current indemnity benefit costs for each injury type to determine the impact by injury type from the change in the NAWW.
5. Determine the indemnity cost distribution by injury type[5].
6. Using the indemnity cost distribution (Step 5) and the effects by injury type (Step 4), calculate the effect of the change in NAWW on total indemnity benefit costs.
7. Multiply the impact on total indemnity benefit costs (Step 6) by the percentage of losses attributed to indemnity benefits to determine the impact of the change in the NAWW on overall benefit costs.

Type of Injury	Percentage of Losses	Effect (%)
Fatal	3.8%	+ 0.4
Permanent Total	2.2%	+ 0.3
Permanent Partial	45.7%	+ 0.1
Temporary Total	8.1%	+ 0.3
Total Indemnity	59.8%	+ 0.2
Medical	40.2%	0.0
Total	100.0%	+ 0.1

[1] Based on NCCI Detailed Claim Information data.

[2] Bureau of Labor Statistics Quarterly Census of Employment and Wages, for all private sector employment, and adjusted to reflect injured workers.

[3] For states where the rate of compensation is based on spendable wages, state and federal tax withholding tables are used in conjunction with pertinent assumptions (e.g., number of dependents).

[4] Various distributions based on internal and external data are employed in determining the impact by type of injury. For example, for Fatal injuries, a countrywide distribution of average ages and dependents by type (e.g., spouse, spouse with one child, parent, etc.) is used in calculating mortality-adjusted annuity values under both the current and revised weekly maximum benefits, with the likelihood of remarriage incorporated as applicable.

[5] NCCI Unit Statistical Plan data for the 36-month policy period ending 12/31/2013 on the 10/01/2015 law level and developed to an ultimate basis by type of injury.

TENNESSEE

APPENDIX C-V

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

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

1.)	Estimated Total Expense Needed for 2017 *	114,000,000
2.)	Compensation Payments Reported (on indemnity only) in 2016 *	959,394,551
3.)	Assessment Rate on Indemnity Losses (1) / (2)	11.9%

Breakdown of Losses Under the Longshore and Harbor Workers Act

4.)	Indemnity Losses (Combination of 1st through 3rd reports) #	44,796,736
5.)	Medical Losses (Combination of 1st through 3rd reports) #	30,153,455
6.)	Total Losses (4) + (5)	74,950,191
7.)	Assessment Rate on Total Losses { (3) x (4) } / (6)	7.1%

* Source: U.S. Department of Labor

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

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Appendix D – Determination of the Assigned Risk Rate Change

Overall Proposed Change to Assigned Risk Rate Level

NCCI applies an assigned risk loss cost multiplier to the voluntary market loss costs/rates to convert to assigned risk rates. This factor accounts for differences in the components included in the assigned risk rates versus the voluntary market loss costs/rates. The key components of the assigned risk loss cost multiplier are the assigned risk differential, assigned risk expenses, and uncollectible premium provision (UPP). Voluntary market loss-based expenses must also be removed in the calculation, since the servicing carrier allowance already contemplates these expenses for the assigned risk market. Thus, the assigned risk loss cost multiplier formula is as follows:

$$Assigned\ Risk\ Loss\ Cost\ Multiplier = (AR\ Differential) \div (Voluntary\ LAE) \div (PLR) \times UPP$$

This filing proposes a 0.5% increase in the assigned risk loss cost multiplier from 1.700 to 1.709. After applying the proposed change in the assigned risk loss cost multiplier to the proposed change in voluntary loss costs, NCCI is proposing an overall average decrease of 12.2% to the current assigned risk rate level. The detailed calculation can be found in Appendix D – Section A.

Assigned Risk Differential

The assigned risk loss cost differential reflects the fact that the collective experience for employers in the assigned risk market is typically worse than that of employers in the statewide market. Loss ratios are calculated for both the (i) assigned risk market and (ii) statewide market by individual year as follows:

$$\frac{(total\ on-leveled\ losses)}{(total\ on-leveled, developed\ standard\ premium\ at\ the\ voluntary\ level\ )}$$

Loss ratio relativities are reviewed for ten individual years so that changes in the actual differentials can be observed over a long period of time. When selecting the assigned risk differential, the impact of additional premium that is already expected to be generated due to other assigned risk programs (e.g., removal of premium discounts, Assigned Risk Adjustment Program) is also considered.

Based on this year's analysis, NCCI is proposing to change the currently-approved assigned risk differential of 1.250 to 1.350. The data underlying this selection is shown in Appendix D – Section B.

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Appendix D – Determination of the Assigned Risk Rate Change

Assigned Risk Expenses

The provision for assigned risk expenses is based on the following components:

- Servicing Carrier Allowance (SCA) – the market-based cost paid to the servicing carriers as a percentage of final collected net premium that is intended to compensate for expenses incurred in handling the assigned risk business. The average SCA is determined through a competitive bid process and reflects items such as general expense, production expense (excluding commission), loss adjustment expense and certain assessments.
- Premium Taxes not included in the Servicing Carrier Allowance
- Assigned Risk Administration Expense – reflects NCCI Plan Administration Expenses, NWCRA Pool Administration Expenses, and Servicing Carrier Other Expenses. It is selected based on a review of expenses as a percentage of premium over the past ten years.
- Average Commission – based on a weighted average of the most recently available two policy years
- Profit and Contingency Provision

Note that the expense components that are based on net premium are converted to a standard premium basis excluding the impact of expense constants. Then the total assigned risk expenses are used to determine the Permissible Loss Ratio (PLR):

$$PLR = 100\% - (provision\ for\ Assigned\ Risk\ Expenses)$$

Based on our analysis this year, a decrease of 7.2% to the current assigned risk expense level is being proposed.

Uncollectible Premium Provision

The purpose of the uncollectible premium provision is to make available sufficient funds in the rate structure to offset the policy premium ultimately determined to be uncollectible. NCCI recommends maintaining the uncollectible premium provision of 1.032.

TENNESSEE

APPENDIX D

Determination of Assigned Risk Rate Level Change

Section A - Derivation of the Assigned Risk Loss Cost Multiplier

This filing proposes a -12.2% overall average change to the current assigned risk rate level. For all classifications, an assigned risk multiplier is applied to the voluntary loss costs proposed effective March 1, 2018 in order to convert to assigned risk rates.

(1)	Current Assigned Risk Loss Cost Multiplier	1.700
(2)	Proposed Assigned Risk Loss Cost Differential (Section B)	1.350
(3)	Proposed Voluntary Loss-based Expense Provision (Exhibit II)	19.7%
(4)	Indicated Assigned Risk Permissible Loss Ratio (Section C)	68.1%
(5)	Proposed Uncollectible Premium Provision	1.032
(6)	Indicated Assigned Risk Loss Cost Multiplier = {[{(2) / [1.0 + (3)]} / (4)] * (5)}	1.709
(7)	Indicated Change in the Assigned Risk Loss Cost Multiplier = [(6) / (1)] - 1.0	0.5%
(8)	Proposed Voluntary Loss Cost Level Change (Exhibit I)	-12.6%
(9)	Indicated Assigned Risk Rate Level Change = {[1.0 + (7)] x [1.0 + (8)]} - 1.0	**-12.2%**

Determination of Assigned Risk Rates

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 (Std Basis)
I. Assigned Risk Experience Valued as of 12/31/2016				
2006	22,726,482	44,997,827	1.980	
2007	16,917,290	38,462,913	2.274	
2008	12,295,300	26,798,398	2.180	
2009	11,338,280	23,871,531	2.105	
2010	11,999,968	30,187,487	2.516	
2011	14,889,329	22,948,838	1.541	
2012	17,511,661	21,196,175	1.210	
2013	22,125,090	24,809,482	1.121	
2014	28,014,658	34,896,662	1.246	
2015	30,461,925	32,901,125	1.080	
II. Statewide Experience Valued as of 12/31/2016				
2006	301,166,547	416,271,579	1.382	1.433
2007	314,377,816	438,084,094	1.393	1.632
2008	305,957,573	371,697,904	1.215	1.794
2009	292,659,698	361,955,748	1.237	1.702
2010	310,793,680	364,576,845	1.173	2.145
2011	326,201,223	314,736,750	0.965	1.597
2012	327,343,851	315,612,635	0.964	1.255
2013	337,409,832	294,289,027	0.872	1.286
2014	356,766,320	284,941,862	0.799	1.559
2015	382,463,225	273,999,296	0.716	1.508

(a) Indicated Differential in Standard Premium Based on Experience	1.591
(b) Estimated Impact of Standard Premium Programs in Rate Effective Period	1.359
(c) Indicated Change in Assigned Risk Differential =(a)/(b)	1.171

TENNESSEE

APPENDIX D

Determination of Assigned Risk Rates

Section C - Expense Components of Assigned Risk Rate

The assigned risk expense provision including loss-based expenses is derived directly from the servicing carrier allowance, since this is the market-based cost to the assigned risk plan to have the plan serviced. The average commission rate, the profit and contingency provision, a provision for administrative expenses, and all taxes and assessments not included in the servicing carrier allowance must be added to the allowance to derive an average expense provision as a percentage of standard premium excluding the expense constants.

		Expense Provisions Underlying Proposed Rates
(1)	Expense Constant	$160
(2)	Weighted-Average of Servicing Carrier Allowance Bids	20.2%
(3)	Premium Tax	4.0%
(4)	Assigned Risk Administration Expense (Selected Based on a Review of Approved Provisions in Other States)	4.0%
(5)	Expense Constant Premium as a Percentage of Standard Premium Excluding the Expense Constant (See Section D)	2.9%
(6)	Servicing Carrier Allowance, Taxes and Administrative Expense Converted to a Standard Premium Excluding Expense Constant Basis =[(2) + (3) + (4)] x [1 + (5)] - (5)	26.1%
(7)	Average Commission (See Section D)	5.8%
(8)	Profit and Contingency Provision	0.0%
(9)	Total Expense Provision in Rate = (6) + (7) + (8)	31.9%
(10)	Permissible Loss Ratio in Rate = 100% - (9)	68.1%
(11)	Current Permissible Loss Ratio in Rate	63.2%
(12)	Impact on Rate due to Change in Expenses = (0.632 / 0.681) - 1	-7.2%

TENNESSEE

APPENDIX D

Determination of Assigned Risk Rates

Section D - Derivation of Premium Discount, Expense Constant and Commission as a Percentage of Premium

Premium Distribution by Layer for Assigned Risk Policies for Policy Years 2015 & 2016

Portion of Total Standard Premium	(1) Standard Premium Incl Exp Cnst	(2) Standard Premium Incl Exp Cnst Distribution	(3) [1] Commission Scale [2]
First $1000	18,518,110	15.7%	8.0%
Next $4,000	29,728,879	25.1%	6.0%
Next $95,000	62,287,068	52.7%	5.0%
Next $400,000	7,678,856	6.5%	3.0%
Over $500,000	105	0.0%	3.0%
Total	118,213,018	100.0%	5.6%

(4) Expense Constant Premium as % of Standard Premium Excluding Expense Constant [3] = 2.9%

(5) Average Commission as % of Standard Premium Excluding Expense Constant [4] = 5.8%

[1] Totals represent weighted averages based on column (2).

[2] Commissions paid in Tennessee are based on standard premium excluding expense constant premium. Source of the commission scale is NCCI's Basic Manual, Rule 4-H-6.

[3] Based on assigned risk policy and premium totals for policy years 2015 and 2016 using the dominant state method for the classification of multistate policies.

[4] (5) = (3)total * [1 + (4)]

Part 4 Additional Information

- Definitions
- NCCI Affiliate List
- Key Contacts

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.

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.

Definitions

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.

NCCI Affiliate List

A M C O INSURANCE COMPANY
ACADIA INSURANCE COMPANY
ACCIDENT FUND GENERAL INS CO
ACCIDENT FUND INS CO OF AMERICA
ACCIDENT FUND NATIONAL INS CO
ACCIDENT INSURANCE COMPANY INC
ACE AMERICAN INSURANCE COMPANY
ACE FIRE UNDERWRITERS INSURANCE COMPANY
ACE PROPERTY & CASUALTY INSURANCE COMPANY
ACIG INS CO
ACUITY A MUTUAL INS COMPANY
ADVANTAGE WC INSURANCE CO
AGRI GENERAL INS CO
AIG ASSURANCE COMPANY
AIG PROPERTY CASUALTY COMPANY
AIU INSURANCE CO (NATIONAL UNION FIRE OF PITTS PA)
ALL AMERICA INS CO
ALLIED EASTERN IND CO
ALLIED INSURANCE COMPANY OF AMERICA
ALLIED PROPERTY AND CASUALTY INS CO
ALLMERICA FINANCIAL ALLIANCE INS CO
ALLMERICA FINANCIAL BENEFIT INS CO
AMERICAN ALTERNATIVE INSURANCE CORPORATION
AMERICAN AUTOMOBILE INSURANCE CO
AMERICAN BUILDERS INSURANCE COMPANY
AMERICAN CASUALTY COMPANY OF READING P A
AMERICAN COMPENSATION INS CO
AMERICAN ECONOMY INS CO
AMERICAN FAMILY HOME INS CO
AMERICAN FIRE AND CASUALTY CO
AMERICAN GUARANTEE AND LIABILITY INS CO
AMERICAN HOME ASSUR CO-NATIONAL UNION FIRE OF PIT
AMERICAN INS CO
AMERICAN INTERSTATE INS CO
AMERICAN MINING INS CO
AMERICAN MODERN HOME INS CO
AMERICAN NATIONAL PROPERTY AND CASUALTY CO
AMERICAN RESOURCES INS CO
AMERICAN SELECT INS CO
AMERICAN STATES INS CO A SAFECO COMPANY
AMERICAN ZURICH INS CO
AMERISURE INS CO
AMERISURE MUTUAL INS CO
AMERISURE PARTNERS INS CO
AMFED CASUALTY INS CO
AMFED NATIONAL INSURANCE COMPANY
AMGUARD INS CO
AMTRUST INSURANCE CO OF KS INC
ANSUR AMERICA
ARCH INSURANCE COMPANY
ARGONAUT GREAT CENTRAL INS CO
ARGONAUT INS CO
ARGONAUT MIDWEST INS CO
ASHMERE INSURANCE COMPANY
ASSOCIATED INDEMNITY CORP
ASSOCIATION CASUALTY INS CO
ATLANTIC SPECIALTY INS CO (ONEBEACON)
ATLANTIC STATES INS CO
AUTO OWNERS INS CO
BANKERS STANDARD INS CO
BENCHMARK INSURANCE COMPANY
BERKLEY NATIONAL INSURANCE COMPANY
BERKLEY REGIONAL INS CO
BERKSHIRE HATHAWAY DIRECT INSURANCE COMPANY
BERKSHIRE HATHAWAY HOMESTATE INS CO
BITCO GENERAL INSURANCE CORPORATION
BITCO NATIONAL INSURANCE COMPANY
BLOOMINGTON COMPENSATION INS CO
BRICKSTREET MUTUAL INS CO
BRIDGEFIELD CASUALTY INS CO
BRIDGEFIELD EMPLOYERS INS CO
BRIERFIELD INS CO
BROOKWOOD INSURANCE COMPANY
BROTHERHOOD MUTUAL INS CO
BUILDERS MUTUAL INS CO
BUILDERS PREMIER INS CO
BUSINESSFIRST INS COMPANY
CALIFORNIA INSURANCE COMPANY
CAROLINA CASUALTY INS CO
CAROLINA MUTUAL INSURANCE INC
CENTRAL MUTUAL INS CO
CHARTER OAK FIRE INS CO
CHEROKEE INS CO
CHUBB INDEMNITY INS CO
CHUBB NATIONAL INS CO
CHURCH MUTUAL INS CO
CINCINNATI CASUALTY COMPANY
CINCINNATI INDEMNITY COMPANY
CINCINNATI INS CO
CITIZENS INS CO OF AMERICA
COLONIAL AMERICAN CASUALTY & SURETY CO
COLUMBIA NATIONAL INS CO
COMMERCE AND INDUSTRY INS CO
CONSOLIDATED INS CO
CONTINENTAL CASUALTY CO
CONTINENTAL INDEMNITY CO
CONTINENTAL INS CO
CONTINENTAL WESTERN INSURANCE COMPANY
CRUM AND FORSTER INDEMNITY CO
CYPRESS INSURANCE COMPANY
DAKOTA TRUCK UNDERWRITERS
DEPOSITORS INS CO
DISCOVER PROPERTY & CASUALTY INS CO
DONEGAL MUTUAL INS CO
EASTERN ADVANTAGE ASSURANCE COMPANY
EASTERN ALLIANCE INSURANCE COMPANY
EASTGUARD INS CO
ELECTRIC INS CO
EMC PROPERTY & CASUALTY COMPANY
EMCASCO INS CO
EMPLOYERS ASSURANCE COMPANY
EMPLOYERS COMPENSATION INS CO
EMPLOYERS INS CO OF WAUSAU
EMPLOYERS MUTUAL CASUALTY CO
EMPLOYERS PREFERRED INS CO
ENDURANCE AMERICAN INS CO
ENDURANCE ASSURANCE CORPORATION
ERIE INS CO
ERIE INS CO OF NY
ERIE INS EXCHANGE

NCCI Affiliate List

ERIE INS PROPERTY AND CASUALTY CO
EVEREST DENALI INSURANCE COMPANY
EVEREST NATIONAL INS CO
EVEREST PREMIER INSURANCE COMPANY
EVEREST REINSURANCE CO DIRECT
EXCELSIOR INSURANCE COMPANY
EXECUTIVE RISK INDEMNITY INC
EXPLORER INS CO
FALLS LAKE NATIONAL INSURANCE CO
FARMERS INSURANCE EXCHANGE
FARMINGTON CASUALTY COMPANY
FARMLAND MUTUAL INSURANCE COMPANY
FCCI INSURANCE COMPANY
FEDERAL INSURANCE COMPANY
FEDERATED MUTUAL INS CO
FEDERATED RESERVE INSURANCE CO
FEDERATED RURAL ELECTRIC INS EXCHANGE
FEDERATED SERVICE INS CO
FFVA MUTUAL INSURANCE COMPANY
FIDELITY & DEPOSIT COMPANY OF MARYLAND
FIDELITY & GUARANTY INS UNDERWRITERS
FIDELITY & GUARANTY INSURANCE CO
FIRE INS EXCHANGE
FIREMANS FUND INSURANCE CO
FIREMENS INS CO OF WASHINGTON DC
FIRST DAKOTA INDEMNITY CO
FIRST LIBERTY INS CORP
FIRST NATIONAL INS CO OF AMERICA
FIRST NONPROFIT INS CO
FIRSTCOMP INSURANCE CO
FIRSTLINE NATIONAL INSURANCE COMPANY
FLAGSHIP CITY INS CO
FLORISTS MUTUAL INSURANCE CO
FOREMOST INS CO GRAND RAPIDS MICHIGAN
FOREMOST PROPERTY & CAS INS
FOREMOST SIGNATURE INS CO
FORESTRY MUTUAL INS CO
FRANK WINSTON CRUM INSURANCE CO
FRANKENMUTH MUTUAL INS CO
GA CASUALTY AND SURETY CO
GENERAL CASUALTY COMPANY OF WISCONSIN
GENERAL INS CO OF AMERICA
GENESIS INS CO
GRAIN DEALERS MUTUAL INS CO
GRANGE MUTUAL CASUALTY CO
GRANITE STATE INSURANCE COMPANY
GRAPHIC ARTS MUTUAL INS CO
GRAY INS CO
GREAT AMERICAN ALLIANCE INS CO
GREAT AMERICAN ASSURANCE COMPANY
GREAT AMERICAN INS CO OF NY
GREAT AMERICAN INSURANCE COMPANY
GREAT AMERICAN SPIRIT INS CO
GREAT DIVIDE INSURANCE COMPANY
GREAT MIDWEST INS CO
GREAT NORTHERN INS CO
GREAT WEST CASUALTY COMPANY
GREENWICH INS CO
GUARANTEE INS CO
GUIDEONE ELITE INS CO
GUIDEONE MUTUAL INS CO
HANOVER AMERICAN INS CO
HANOVER INS CO
HARFORD MUTUAL INS CO
HARLEYSVILLE INSURANCE COMPANY
HARLEYSVILLE PREFERRED INSURANCE CO
HARLEYSVILLE WORCESTER INSURANCE CO
HARTFORD ACCIDENT AND INDEMNITY CO
HARTFORD CASUALTY INS CO
HARTFORD FIRE INSURANCE CO
HARTFORD INS CO OF IL
HARTFORD INS CO OF MIDWEST
HARTFORD INS CO OF THE SOUTHEAST
HARTFORD UNDERWRITERS INS CO
HDI GLOBAL INSURANCE COMPANY
ILLINOIS NATIONAL INSURANCE COMPANY
IMPERIUM INSURANCE COMPANY
INDEMNITY INS CO OF N AMERICA (INA INS) (CT GEN)
INDIANA INSURANCE COMPANY
INS CO OF NORTH AMERICA
INS CO OF THE STATE PA
INS CO OF THE WEST
INTREPID INSURANCE COMPANY
KEY RISK INS CO
LAFAYETTE INS CO
LIBERTY INS CORP
LIBERTY INSURANCE UNDERWRITERS INC
LIBERTY MUTUAL FIRE INS CO
LIBERTY MUTUAL INS CO
LION INSURANCE COMPANY
LM INS CORP
MA BAY INS CO
MAG MUTUAL INS CO
MAIN STREET AMERICA ASSURANCE CO
MANUFACTURERS ALLIANCE INS CO
MARKEL AMERICAN INSURANCE CO
MARKEL INSURANCE CO
MEMIC INDEMNITY CO
MERIDIAN SECURITY INSURANCE COMPANY
MID CENTURY INS CO
MIDDLESEX INS CO
MIDSOUTH MUTUAL INSURANCE COMPANY
MIDVALE INDEMNITY COMPANY
MIDWEST BUILDERS CASUALTY MUTUAL COMPANY
MIDWEST EMPLOYERS CASUALTY CO
MIDWEST INS CO
MILBANK INSURANCE COMPANY
MILWAUKEE CASUALTY INSURANCE CO (AMTRUST GROUP)
MITSUI SUMITOMO INS CO OF AMERICA
MITSUI SUMITOMO INS USA INC
MONROE GUARANTY INS CO
MONTGOMERY MUTUAL INSURANCE COMPANY
MOTORISTS COMMERCIAL MUTUAL INSURANCE COMPANY
NATIONAL AMERICAN INS CO
NATIONAL BUILDERS INSURANCE COMPANY
NATIONAL CASUALTY CO
NATIONAL FIRE INS CO OF HARTFORD
NATIONAL INTERSTATE INS CO
NATIONAL LIABILITY & FIRE INSURANCE CO
NATIONAL SURETY CORP

NCCI Affiliate List

NATIONAL TRUST INS CO
NATIONAL UNION FIRE INS CO OF PITTSBURGH PA
NATIONWIDE AGRIBUSINESS INS CO
NATIONWIDE GENERAL INSURANCE CO
NATIONWIDE MUTUAL FIRE INS CO
NATIONWIDE MUTUAL INS CO
NATIONWIDE PROPERTY AND CASUALTY INS CO
NETHERLANDS INSURANCE COMPANY
NEW HAMPSHIRE INSURANCE COMPANY
NEW YORK MARINE AND GENERAL INSURANCE CO
NGM INSURANCE COMPANY
NORGUARD INS CO
NORTH AMERICAN ELITE INSURANCE CO
NORTH AMERICAN SPECIALTY INS CO
NORTH POINTE INS CO
NORTH RIVER INS CO
NORTHSTONE INSURANCE COMPANY
NOVA CASUALTY COMPANY
OAK RIVER INSURANCE COMPANY
OBI AMERICA INSURANCE COMPANY
OBI NATIONAL INSURANCE COMPANY
OH CASUALTY INS CO
OH FARMERS INS CO
OHIO SECURITY INS CO
OLD DOMINION INS CO
OLD REPUBLIC GENERAL INSURANCE CORPORATION
OLD REPUBLIC INS CO
OWNERS INSURANCE COMPANY
PA MANUFACTURERS ASSN INS CO
PA MANUFACTURERS INDEMNITY CO
PA NATIONAL MUTUAL CAS INS CO
PACIFIC EMPLOYERS INS CO
PACIFIC INDEMNITY CO
PATRONS MUTUAL INS CO OF CT
PEERLESS INDEMNITY INS CO
PEERLESS INSURANCE COMPANY
PENINSULA INS CO
PENN MILLERS INS CO
PENN NATIONAL SECURITY INS CO
PENNSYLVANIA INSURANCE COMPANY
PETROLEUM CASUALTY CO
PHARMACISTS MUTUAL INS CO
PHOENIX INS CO
PINNACLEPOINT INSURANCE COMPANY
PLAZA INSURANCE CO
PRAETORIAN INSURANCE COMPANY
PREFERRED PROFESSIONAL INSURANCE COMPANY
PREMIER GROUP INS CO
PREVISOR INSURANCE COMPANY
PROPERTY AND CASUALTY INS CO OF HARTFORD
PROTECTIVE INS CO
QBE INSURANCE CORPORATION
REDWOOD FIRE & CASUALTY INS CO
REGENT INSURANCE COMPANY
REPUBLIC FRANKLIN INS CO
REPUBLIC INDEMNITY CO OF CA
REPUBLIC INDEMNITY COMPANY OF AMERICA
RIVERPORT INSURANCE COMPANY
RLI INSURANCE COMPANY
RURAL TRUST INSURANCE COMPANY
SAFECO INS CO OF AMERICA
SAFETY FIRST INS CO
SAFETY NATIONAL CASUALTY CORP
SAGAMORE INSURANCE CO
SAMSUNG FIRE AND MARINE INS CO LTD USB
SEABRIGHT INSURANCE CO
SECURITY NATIONAL INS CO (AMTRUST GROUP)
SELECT INS CO
SELECTIVE INS CO OF SC
SELECTIVE INS CO OF THE SOUTHEAST
SELECTIVE INSURANCE COMPANY OF AMERICA
SELECTIVE WAY INS CO
SENECA INSURANCE CO
SENTINEL INS CO
SENTRY CASUALTY CO
SENTRY INSURANCE A MUTUAL CO
SENTRY SELECT INSURANCE COMPANY
SEQUOIA INSURANCE CO
SFM MUTUAL INS CO
SILVER OAK CASUALTY INC
SOCIETY INSURANCE A MUTUAL COMPANY
SOMPO AMERICA FIRE & MARINE INSURANCE COMPANY
SOMPO AMERICA INSURANCE COMPANY
SOUTHERN FIRE & CASUALTY CO
SOUTHERN GUARANTY INSURANCE CO
SOUTHERN INS CO
SOUTHERN INS CO OF VA
SOUTHERN MUTUAL CHURCH INSURANCE CO
SOUTHERN PILOT INSURANCE COMPANY
SOUTHERN STATES INS EXCHANGE
SOUTHERN TRUST INS CO
ST PAUL FIRE AND MARINE INS CO
ST PAUL GUARDIAN INS CO
ST PAUL MERCURY INS CO
ST PAUL PROTECTIVE INS CO
STANDARD FIRE INSURANCE COMPANY
STAR INS CO
STARNET INSURANCE COMPANY
STARR INDEMNITY AND LIABILITY CO
STARSTONE NATIONAL INSURANCE COMPANY
STATE AUTO PROPERTY AND CASUALTY INS CO
STATE AUTOMOBILE MUTUAL INS CO
STATE FARM FIRE AND CASUALTY CO
STATE NATIONAL INSURANCE COMPANY
STEADPOINT INSURANCE COMPANY
STONEWOOD INSURANCE CO
STONINGTON INS CO
SUMMITPOINT INSURANCE COMPANY
SUNZ INSURANCE COMPANY
SYNERGY INS CO
T H E INSURANCE COMPANY
TECHNOLOGY INSURANCE CO
THE TRAVELERS CASUALTY COMPANY
TNUS INSURANCE CO
TOKIO MARINE AMERICA INSURANCE CO
TRANS PACIFIC INS CO
TRANSGUARD INS CO OF AMERICA INC
TRANSPORTATION INS CO
TRAVELERS CASUALTY & SURETY CO OF AMERICA
TRAVELERS CASUALTY AND SURETY CO

TRAVELERS CASUALTY INS CO OF AMERICA
TRAVELERS COMMERCIAL CASUALTY CO
TRAVELERS INDEMNITY CO
TRAVELERS INDEMNITY CO OF AMERICA
TRAVELERS INDEMNITY CO OF CT
TRAVELERS INSURANCE CO
TRAVELERS PROPERTY CASUALTY CO OF AMERICA
TRI STATE INSURANCE COMPANY OF MINNESOTA
TRIANGLE INSURANCE COMPANY INC
TRIUMPHE CASUALTY COMPANY
TRUCK INSURANCE EXCHANGE
TRUMBULL INS CO
TRUSTGARD INSURANCE COMPANY
TWIN CITY FIRE INS CO
UNIGARD INDEMNITY CO
UNIGARD INS CO
UNION INS CO OF PROVIDENCE
UNION INSURANCE COMPANY
UNITED FIRE AND CASUALTY CO
UNITED STATES FIDELITY AND GUARANTY CO
UNITED WI INS CO
US FIRE INS CO
UTICA MUTUAL INS CO
UTICA NATIONAL ASSURANCE CO
VALLEY FORGE INS CO
VANLINER INS CO
VANTAPRO SPECIALTY INS CO
VIGILANT INS CO
WASHINGTON INTERNATIONAL INSURANCE COMPANY
WAUSAU UNDERWRITERS INSURANCE COMPANY
WESCO INSURANCE COMPANY (AMTRUST GROUP)
WEST AMERICAN INS CO
WEST BEND MUTUAL INS CO
WESTFIELD INS CO
WESTFIELD NATIONAL INS CO
WESTPORT INSURANCE CORPORATION
WILLIAMSBURG NATIONAL INS CO
WORK FIRST CASUALTY CO
XL INS CO OF NY INC
XL INSURANCE AMERICA INC
XL SPECIALTY INS CO
ZENITH INS CO
ZNAT INS CO
ZURICH AMERICAN INS CO
ZURICH AMERICAN INS CO OF IL

Tennessee

Voluntary Loss Cost and Assigned Risk Rate Filing – March 1, 2018

Key Contacts

Amy Quinn, State Relations Executive
Regulatory Division
National Council on Compensation Insurance, Inc. (NCCI)
204 Caughman Farm Lane, Suite 303
Lexington, South Carolina 29072
Phone: (803) 356-0851 • Fax: (561) 893-5825

Ann Marie Smith, FCAS, MAAA
Director & Actuary
Actuarial and Economic Services Division
National Council on Compensation Insurance, Inc. (NCCI)
901 Peninsula Corporate Circle
Boca Raton, Florida 33487-1362
Phone (561) 893-3781 • Fax: (561) 893-5204

All NCCI employees can be contacted via e-mail using the following format:

First Name_Last Name@NCCI.com