

RHODE ISLAND



TECHNICAL SUPPLEMENT

PROPOSED EFFECTIVE JUNE 1, 2010



Laura Backus Hall, CPCU
State Relations Executive
Regulatory Services Division

November 17, 2009

Honorable A. Michael Marques
Director
State of Rhode Island and Providence Plantations
Department of Business Regulation
Insurance Division
1511 Pontiac Ave
Cranston, RI 02920

Attention: Paula Pallozzi, Chief Property & Casualty Insurance Rate Analyst

**Re: Technical Supplement for Rhode Island Workers Compensation Advisory
Loss Costs and Rating Values Filing – Effective June 1, 2010**

Dear Director Marques:

We are enclosing for your review, supporting actuarial and statistical data used to produce the results of the proposed June 1, 2010 advisory loss costs and rating values filing.

As always, if you should have any questions or need additional information, please do not hesitate to contact me at (802) 454-1800 or Karen Ayres at (201) 386-2636.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Laura Backus Hall", is positioned above the typed name. The signature is fluid and cursive.

Laura Backus Hall, CPCU
State Relations Executive



Actuarial Certification

The information contained in this filing has been prepared under the direction of the undersigned actuary 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.

Filing prepared by:

A handwritten signature in black ink that reads "Karen J. Ayres". The signature is written in a cursive, flowing style.

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EXPLANATORY MEMORANDUM

Revisions to Class Ratemaking- Loss Costs and Rates

Objective

The goals of the new class ratemaking methodology are to improve class equity, improve loss cost and rate stability at a class code level from filing to filing, and to produce adequate loss costs and rates over time.

Overview

NCCI is making three changes to its class ratemaking methods. The changes relate to:

- How losses are developed
- How losses are limited
- How losses above the limit are spread to other classes

Note that the new class ratemaking changes will be reflected within the indicated pure premiums in this filing. The national pure premiums and present-on-rate level pure premiums are based upon values computed under the prior methodology, and will be updated for the new methodology for use in the next loss cost/rate filing in this state.

Background

NCCI's class ratemaking utilizes data collected under the Workers Compensation Statistical Plan (WCSP). The WCSP data forms the basis of the loss costs / rates that are calculated and filed by class in each state. WCSP data contains the following information for each claim by class:

- Payroll
- Injury Type
- Paid losses (indemnity and medical)
- Case reserves (indemnity and medical)

Additional information is collected, but these are the key data elements that are currently used in class ratemaking. The Injury Type categories are as follows:

- Fatal
- Permanent Total
- Permanent Partial
- Temporary Total
- Medical Only

Permanent Partial claims account for the vast majority of claim payments. These types of injuries can have an extremely large variation. For this reason, the current method divides the permanent partial claims into two categories: major and minor. Permanent partial claims are split into major and minor categories by comparing the incurred indemnity amount for each claim to a dollar threshold known as the critical value. All claims with indemnity losses greater than the critical value are classified as major permanent partial. This injury type assignment is

made in order to ensure that losses are classified in homogeneous groups before loss development is applied.

Losses are classified into three major categories before they are developed: serious, non-serious and medical. Serious claims are made up of Fatals, Permanent Totals, and Major Permanent Partials. Non-serious claims are made up of Minor Permanent Partials and Temporary Totals. Medical Only claims are those claims where there is no lost time, i.e. no indemnity losses. Based on historical loss development, there are four sets of loss development factors applied to the WCSP data for each policy period:

- Indemnity – Serious
- Indemnity – Non-Serious
- Medical – Serious
- Medical – Non-Serious

Change to Loss Development

NCCI is making the following change to its loss development methodology. Permanent Partial claims will no longer be split into major and minor categories. Instead, other data elements captured in the WCSP data will be used to group claims into homogenous categories. NCCI research has shown that, in addition to the injury type, the injured part of body and whether the claim is open at a first report both affect how a claim will develop in the future. Therefore, these three claim characteristics will be used to group claims into the following categories:

- Likely-to-Develop
- Not-Likely-to-Develop

Claims with the following injury types will be classified as Not-Likely-to-Develop:

- Fatal (at first report)
- Medical Only

Claims with the following injury types will be classified as Likely-to-Develop:

- Fatal (at second and subsequent reports, but not at a first report)
- Permanent Total
- For Permanent Partial and Temporary Total claims, the classification depends on the part of body affected by the injury and whether the claim is open at a first report. If the claim is closed at a first report, it is classified as Not-Likely-to-Develop. If the claim is open at a first report, the classification depends on the part of body affected by the injury. If the part of body has been shown to result in higher loss development, the claim is classified as Likely-to-Develop. Otherwise, it is classified as Not-Likely-to-Develop.

Examples of body parts that have been shown to result in markedly higher loss development are:

- Head, skull, brain
- Neck, vertebrae, disc, spinal cord, lumbar
- Internal organs, heart, lungs
- Upper and lower back, other soft tissues
- Multiple body parts at one time

Once claims have been classified as either Likely-to-Develop or Not-Likely-to-Develop, four loss development triangles are compiled, and there are again four sets of loss development factors applied to the WCSP data for each policy period:

- Indemnity – Likely-to-Develop
- Indemnity – Not-Likely-to-Develop
- Medical – Likely-to-Develop
- Medical – Not-Likely-to-Develop

Change to Loss Limitations

Currently, claims are limited according to specific amounts that vary by state, based upon a state's serious average cost per case. For example, single accident claims are limited, on average, to about \$750,000 and multiple claim accidents are limited to about \$1,500,000. NCCI's research has shown that these loss limitations may result in large fluctuations in class loss costs from year to year. NCCI proposes that all claims be limited to \$500,000. This is the same limit used for NCCI's Large Loss Call (Call #31) reporting.

Change to Excess Loss Spreading

When losses are limited, the excess is retained and spread across many classes. Currently, all excess losses are spread back to the appropriate Industry Group. For example, if the ratio of unlimited losses to limited losses for the Manufacturing industry group is equal to 1.010, then all losses for classes in the Manufacturing industry group are multiplied by 1.010 to build back the cost of all claims that were limited.

NCCI's revised method for spreading the excess losses involves the use of Excess Ratios which vary by Hazard Group. Excess Ratios are calculated as part of the Excess Loss Factors used for Retrospective Rating:

- $\text{Excess Loss Factor} = \text{Excess Ratio} * \text{Permissible Loss Ratio}$

Under the new methodology, each class would be multiplied by the following factor in order to include excess losses above \$500,000:

- $1 / (1 - \text{Excess Ratio} @ \$500,000 \text{ Limit for Hazard Group } X)$; whereby X is one of the hazard groups A through G.

Class Ratemaking Balances to Overall Aggregate Indication

These class ratemaking methodology changes will impact individual class loss costs / rates. However, because the overall change across all classes must balance to the overall aggregate indication, they will not impact the overall indication that is filed for each state. The changes should result in increased class equity and stability. Any impacts to specific class codes will be subject to the current ratemaking formulas (swing limits, credibility-weighted average of indicated, national, and present-on-rate level, etc.).

Credibility will now apply to Indemnity and Medical pure premiums in lieu of Serious, Non-Serious and Medical since these categories will no longer exist.

Revisions to Experience Rating Values

NCCI is making changes to the calculation of the Experience Rating ELRs and D-ratios as a result of the changes to class ratemaking.

Background

ELRs and D-ratios vary by class and are used in Experience Rating.

ELRs are Expected Loss Rates and they represent the expected losses per \$100 payroll during the Experience Rating period. An employer's payroll by class (in units of 100) is multiplied by the ELR to determine the expected loss amount used in their Experience Rating Modification (Mod).

D-ratios are used to split the total expected loss amounts between primary losses and excess losses. Primary losses represent the first \$5,000 of a claim. Excess losses are the portion of losses that exceed \$5,000. This split is needed because primary and excess losses are treated differently in the Experience Rating formula.

Changes to Calculation of ELRs

There are two changes to the way ELRs are being calculated:

- 1) In the past, the calculation of ELRs varied by serious and non-serious categories. These categories are no longer used in the new class ratemaking methodology and will no longer be available. Beginning with this filing, ELRs have been calculated by indemnity and medical categories.
- 2) The claims used in an employer's experience rating are capped by an amount that varies by state. The ELRs reflect this cap through the application of an excess loss adjustment factor. The calculation of this factor has been updated as a result of the changes to class ratemaking.

Changes to Calculation of D-ratios

In the past, the calculation of D-ratios varied by serious and non-serious categories. These categories are no longer used in the new class ratemaking methodology and will no longer be available. Beginning with this filing, D-ratios have been calculated by Hazard Group, separately for indemnity and medical.

Overall Impact to Experience Rating

While these methodology changes will impact individual class ELRs and D-ratios, the overall average change to Experience Rating Modifiers in this state is expected to be minimal.

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EXHIBIT I

Section A - Policy Year 2007 Experience

Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$146,210,620
(2) Premium On-level Factor (Appendix A-I)	0.908
(3) Premium Available for Benefits Costs = (1)x(2)	\$132,759,243

Indemnity Benefit Cost:

(4) Limited Indemnity Paid Losses Developed to Ultimate (Appendix A-II)	\$73,783,282
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.002
(6) Factor to Include Loss-based Expenses (Exhibit II)	1.179
(7) Composite Adjustment Factor = (5)x(6)	1.181
(8) Adjusted Limited Indemnity Losses = (4)x(7)	\$87,138,056
(9) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (8)/(3)	0.656
(10) Factor to Reflect Indemnity Trend (Appendix A-III)	0.933
(11) Projected Limited Indemnity Cost Ratio = (9)x(10)	0.612
(12) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.037
(13) Projected Indemnity Cost Ratio = (11)x(12)	0.635
(14) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.002
(15) Projected Indemnity Cost Ratio including Benefit Changes = (13)x(14)	0.636

Medical Benefit Cost:

(16) Limited Medical Paid Losses Developed to Ultimate (Appendix A-II)	\$38,220,668
(17) Medical Loss On-level Factor (Appendix A-I)	1.000
(18) Factor to Include Loss-based Expenses (Exhibit II)	1.179
(19) Composite Adjustment Factor = (17)x(18)	1.179
(20) Adjusted Limited Medical Losses = (16)x(19)	\$45,062,168
(21) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (20)/(3)	0.339
(22) Factor to Reflect Medical Trend (Appendix A-III)	1.000
(23) Projected Limited Medical Cost Ratio = (21)x(22)	0.339
(24) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.037
(25) Projected Medical Cost Ratio = (23)x(24)	0.352
(26) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.000
(27) Projected Medical Cost Ratio including Benefit Changes = (25)x(26)	0.352

Total Benefit Cost:

(28) Indicated Change Based on Experience, Trend and Benefits = (15)+(27)	0.988
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EXHIBIT I

Section B - Policy Year 2006 Experience

Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$154,589,861
(2) Premium On-level Factor (Appendix A-I)	0.861
(3) Premium Available for Benefits Costs = (1)x(2)	\$133,101,870

Indemnity Benefit Cost:

(4) Limited Indemnity Paid Losses Developed to Ultimate (Appendix A-II)	\$73,907,151
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.005
(6) Factor to Include Loss-based Expenses (Exhibit II)	1.179
(7) Composite Adjustment Factor = (5)x(6)	1.185
(8) Adjusted Limited Indemnity Losses = (4)x(7)	\$87,579,974
(9) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (8)/(3)	0.658
(10) Factor to Reflect Indemnity Trend (Appendix A-III)	0.914
(11) Projected Limited Indemnity Cost Ratio = (9)x(10)	0.601
(12) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.037
(13) Projected Indemnity Cost Ratio = (11)x(12)	0.623
(14) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.002
(15) Projected Indemnity Cost Ratio including Benefit Changes = (13)x(14)	0.624

Medical Benefit Cost:

(16) Limited Medical Paid Losses Developed to Ultimate (Appendix A-II)	\$40,408,482
(17) Medical Loss On-level Factor (Appendix A-I)	1.000
(18) Factor to Include Loss-based Expenses (Exhibit II)	1.179
(19) Composite Adjustment Factor = (17)x(18)	1.179
(20) Adjusted Limited Medical Losses = (16)x(19)	\$47,641,600
(21) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (20)/(3)	0.358
(22) Factor to Reflect Medical Trend (Appendix A-III)	1.000
(23) Projected Limited Medical Cost Ratio = (21)x(22)	0.358
(24) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.037
(25) Projected Medical Cost Ratio = (23)x(24)	0.371
(26) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.000
(27) Projected Medical Cost Ratio including Benefit Changes = (25)x(26)	0.371

Total Benefit Cost:

(28) Indicated Change Based on Experience, Trend and Benefits = (15)+(27)	0.995
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EXHIBIT I

Section C - Policy Year 2005 Experience

Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$160,557,381
(2) Premium On-level Factor (Appendix A-I)	0.814
(3) Premium Available for Benefits Costs = (1)x(2)	\$130,693,708

Indemnity Benefit Cost:

(4) Limited Indemnity Paid Losses Developed to Ultimate (Appendix A-II)	\$74,924,062
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.007
(6) Factor to Include Loss-based Expenses (Exhibit II)	1.179
(7) Composite Adjustment Factor = (5)x(6)	1.187
(8) Adjusted Limited Indemnity Losses = (4)x(7)	\$88,934,862
(9) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (8)/(3)	0.680
(10) Factor to Reflect Indemnity Trend (Appendix A-III)	0.896
(11) Projected Limited Indemnity Cost Ratio = (9)x(10)	0.609
(12) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.037
(13) Projected Indemnity Cost Ratio = (11)x(12)	0.632
(14) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.002
(15) Projected Indemnity Cost Ratio including Benefit Changes = (13)x(14)	0.633

Medical Benefit Cost:

(16) Limited Medical Paid Losses Developed to Ultimate (Appendix A-II)	\$40,464,847
(17) Medical Loss On-level Factor (Appendix A-I)	1.000
(18) Factor to Include Loss-based Expenses (Exhibit II)	1.179
(19) Composite Adjustment Factor = (17)x(18)	1.179
(20) Adjusted Limited Medical Losses = (16)x(19)	\$47,708,055
(21) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (20)/(3)	0.365
(22) Factor to Reflect Medical Trend (Appendix A-III)	1.000
(23) Projected Limited Medical Cost Ratio = (21)x(22)	0.365
(24) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.037
(25) Projected Medical Cost Ratio = (23)x(24)	0.379
(26) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.000
(27) Projected Medical Cost Ratio including Benefit Changes = (25)x(26)	0.379

Total Benefit Cost:

(28) Indicated Change Based on Experience, Trend and Benefits = (15)+(27)	1.012
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EXHIBIT I

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

(1) Policy Year 2007 Combined Projected Loss Ratio	0.988
(2) Policy Year 2006 Combined Projected Loss Ratio	0.995
(3) Policy Year 2005 Combined Projected Loss Ratio	1.012
(4) Indicated Change Based on Experience, Trend and Benefits = $[(1)+(2)+(3)]/3$	0.998

Section E - Impact of Change in Loss-based Expenses

(1) Indicated Premium Level Change	0.998
(2) Effect of Change in Loss-based Expenses	1.008
(3) Indicated Loss Cost Level Change = $(1) \times (2)$	1.006



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EXHIBIT I

Section F - Distribution of Final Loss Cost Level Change to Industry Groups

Industry Group Differentials (Appendix A-V):

Manufacturing	1.027
Contracting	1.013
Office & Clerical	0.972
Goods & Services	0.990
Miscellaneous	0.998

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	1.006	1.027	1.033	(3.3%)
Contracting	1.006	1.013	1.019	(1.9%)
Office & Clerical	1.006	0.972	0.978	(-2.2%)
Goods & Services	1.006	0.990	0.996	(-0.4%)
Miscellaneous	1.006	0.998	1.004	(0.4%)
Overall	1.006	1.000	1.006	(0.6%)

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EXHIBIT II

Section A - Derivation of Expense Provisions - Loss Adjustment Expense

NCCI has computed the Loss Adjustment Expense allowance on a Calendar Year Direct basis using data obtained from the Countrywide Insurance Expense Exhibit. NCCI has also calculated the allowance on an Accident Year Direct basis using data obtained from the NCCI Call for Loss Adjustment Expense. For this filing, NCCI proposes a 18.8% Loss Adjustment Expense allowance as a percentage of incurred losses.

<u>Year</u>	<u>IEE Results (Direct Basis) Ratio</u>	<u>Accident Year Developed LAE Ratio</u>	<u>Accident Year Developed DCCE Ratio</u>	<u>Accident Year Developed AOE Ratio</u>
1999	18.2%	15.4%	9.2%	6.2%
2000	15.0%	15.8%	9.6%	6.1%
2001	13.7%	16.4%	10.0%	6.4%
2002	14.2%	17.1%	10.6%	6.6%
2003	15.5%	18.1%	10.7%	7.4%
2004	16.6%	17.7%	10.7%	7.0%
2005	17.6%	18.7%	10.9%	7.8%
2006	19.7%	19.2%	11.1%	8.1%
2007	17.3%	19.9%	11.8%	8.1%
2008	19.0%	20.1%	12.5%	7.6%
Countrywide selected:		20.0%	12.2%	7.8%
Rhode Island Selected:		18.8%	11.0%	7.8%
(11.0% = 12.2% x 0.900)				

Section B - Derivation of Rhode Island DCCE Relativity--(Latest 3-years of calendar year data)

(1a) Rhode Island paid losses in (000's)	110,218
(1b) Rhode Island paid DCCE in (000's)	10,942
(1c) Ratio (1b)/(1a)	9.9%
(2a) Countrywide paid losses in (000's)	61,359,858
(2b) Countrywide paid DCCE in (000's)	6,767,811
(2c) Ratio (2b)/(2a)	11.0%
(3) Rhode Island DCCE relativity	0.900

Section C - Derivation of Rhode Island Loss Adjustment Expense Provision

(1) Indicated Rhode Island DCCE Ratio (based on countrywide data) (Section A)	11.0%
(2) Selected Countrywide AOE Ratio (Section A)	7.8%
(3) Selected Rhode Island Loss Adjustment Expense Allowance = (1)+(2)	18.8%
(4) Currently Approved Rhode Island Loss Adjustment Expense Allowance	17.9%
(5) Impact Due to Change in LAE Allowance = [1 + (3)] / [1 + (4)]	1.008

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

RHODE ISLAND – ADVISORY LOSS COST LEVEL

PART II

A Factors Underlying Loss Cost Revision

A-I Factors Adjusting Policy Year Pure Premium and Losses to Current Levels

Section A	Factor Adjusting 2007 Policy Year Premium to Present Pure Premium Level
Section B	Factor Adjusting 2007 Policy Year Indemnity Losses to Present Benefit Level
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Section F	Factor Adjusting 2006 Policy Year Medical Losses to Present Benefit Level
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Section H	Factor Adjusting 2005 Policy Year Indemnity Losses to Present Benefit Level
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A-II Calculation of Policy Year Development Factors

Summary	Derivation of Premium & Losses Developed to an Ultimate Report
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Section B	1 st to 19 th Report Limited Paid Loss Development Factors
Section C	19 th to Ultimate Report Loss Development Factors
Section D	Accident Year Conversion Ratios
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Section F	Summary of Limited Paid Loss Development Factors
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A-V Derivation of Industry Group Differentials

B Computation of Advisory Loss Costs

B-I	Distribution of Pure Premium Level Change to Occupational Classification
B-II	Adjustments to Pure Premiums to Obtain Advisory Loss Costs
B-III	Sample Derivation of Proposed Advisory Loss Cost
B-IV	Determination and Distribution of Premium Level Change to “F” Classifications

C Memoranda for Laws and Assessments

C-I	Increase in State Average Weekly Wage – Effective September 1, 2008
C-II	Increase in State Average Weekly Wage – Effective September 1, 2009

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APPENDIX A-I

Derivation of Policy Year On-level Factors

Section A - Factor Adjusting 2007 Policy Year Premium to Present Pure Premium Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Date	Rate Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Off-balance Adjustment Factor	Premium Adjustment Factor (5)x(6)
NR 01/01/06	Base	1.000	0.207	0.207	0.913	0.994	0.908
NR 02/01/07	0.927	0.927	0.793	0.735			
NR 06/01/08	0.928	0.860					
				0.942			

Section B - Factor Adjusting 2007 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)
09/01/06	Base	1.000	0.283	0.283	1.002
09/01/07	1.0040	1.004	0.668	0.671	
09/01/08	1.0010	1.005	0.049	0.049	
				1.003	

Section C - Factor Adjusting 2007 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)
09/01/06	Base	1.000	0.283	0.283	1.000
09/01/07	1.0000	1.000	0.668	0.668	
09/01/08	1.0000	1.000	0.049	0.049	
				1.000	

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APPENDIX A-I

Derivation of Policy Year On-level Factors

Section D - Factor Adjusting 2006 Policy Year Premium to Present Pure Premium Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Date	Rate Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Off-balance Adjustment Factor	Premium Adjustment Factor (5)x(6)
NR 01/01/06	Base	1.000	1.000	1.000	0.860	1.001	0.861
NR 02/01/07	0.927	0.927					
NR 06/01/08	0.928	0.860					
				1.000			

Section E - Factor Adjusting 2006 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)
09/01/05	Base	1.000	0.283	0.283	1.005
09/01/06	1.0010	1.001	0.668	0.669	
09/01/07	1.0040	1.005	0.049	0.049	
09/01/08	1.0010	1.006			
				1.001	

Section F - Factor Adjusting 2006 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)
09/01/05	Base	1.000	0.283	0.283	1.000
09/01/06	1.0000	1.000	0.668	0.668	
09/01/07	1.0000	1.000	0.049	0.049	
09/01/08	1.0000	1.000			
				1.000	

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APPENDIX A-I

Derivation of Policy Year On-level Factors

Section G - Factor Adjusting 2005 Policy Year Premium to Present Pure Premium Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Date	Rate Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Off-balance Adjustment Factor	Premium Adjustment Factor (5)x(6)
NR 01/01/05	Base	1.000	1.000	1.000	0.824	0.988	0.814
NR 01/01/06	0.958	0.958					
NR 02/01/07	0.927	0.888					
NR 06/01/08	0.928	0.824					
				1.000			

Section H - Factor Adjusting 2005 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)
09/01/04	Base	1.000	0.283	0.283	1.007
09/01/05	1.0020	1.002	0.668	0.669	
09/01/06	1.0010	1.003	0.049	0.049	
09/01/07	1.0040	1.007			
09/01/08	1.0010	1.008			
				1.001	

Section I - Factor Adjusting 2005 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)
09/01/04	Base	1.000	0.283	0.283	1.000
09/01/05	1.0000	1.000	0.668	0.668	
09/01/06	1.0000	1.000	0.049	0.049	
09/01/07	1.0000	1.000			
09/01/08	1.0000	1.000			
				1.000	

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APPENDIX A-I

Section J - Premium Adjustment to Average Expected Mod

Rating Year	(1) Average Intrastate Mod	(2) Average Interstate Mod	(3) Average Mod Combined Rated Risk	(4) Weighted Average Off-Balance	(5) Average Mod Expected	(6)= (5)/(4) Policy Year Adjustment Factor
1993	1.053	1.039	1.047	1.045	0.969	0.927
1994	0.996	0.964	0.981	0.982	0.969	0.987
1995	0.932	0.934	0.933	0.935	0.969	1.036
1996	0.914	0.833	0.870	0.874	0.969	1.109
1997	0.934	0.901	0.919	0.921	0.969	1.052
1998	0.955	0.905	0.933	0.935	0.969	1.036
1999	1.041	0.955	1.000	1.000	0.969	0.969
2000	1.006	0.946	0.979	0.980	0.969	0.989
2001	1.010	0.975	0.993	0.993	0.969	0.976
2002	1.010	1.006	1.008	1.008	0.969	0.961
2003	1.019	0.992	1.007	1.007	0.969	0.962
2004	0.993	0.967	0.980	0.981	0.969	0.988
2005	0.977	0.982	0.980	0.981	0.969	0.988
2006	0.976	0.956	0.966	0.968	0.969	1.001
2007	0.991	0.953	0.973	0.975	0.969	0.994
2008	0.993	0.953	0.973	0.975	0.969	0.994



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APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Premium and Loss Summary Valued as of 12/31/2008

Policy Year 2007

(1)	Standard Earned Premium	\$144,762,990
(2)	Factor to Develop Premium to Ultimate	1.010
(3)	Standard Earned Premium Developed to Ultimate = (1)x(2)	\$146,210,620
(4)	Limited Indemnity Paid Losses	\$26,016,672
(5)	Limited Indemnity Paid Development Factor to Ultimate	2.836
(6)	Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$73,783,282
(7)	Limited Medical Paid Losses	\$23,333,741
(8)	Limited Medical Paid Development Factor to Ultimate	1.638
(9)	Limited Medical Paid Losses Developed to Ultimate = (7)x(8)	\$38,220,668

Policy Year 2006

(1)	Standard Earned Premium	\$154,899,660
(2)	Factor to Develop Premium to Ultimate	0.998
(3)	Standard Earned Premium Developed to Ultimate = (1)x(2)	\$154,589,861
(4)	Limited Indemnity Paid Losses	\$43,757,934
(5)	Limited Indemnity Paid Development Factor to Ultimate	1.689
(6)	Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$73,907,151
(7)	Limited Medical Paid Losses	\$31,059,556
(8)	Limited Medical Paid Development Factor to Ultimate	1.301
(9)	Limited Medical Paid Losses Developed to Ultimate = (7)x(8)	\$40,408,482

Policy Year 2005

(1)	Standard Earned Premium	\$160,718,099
(2)	Factor to Develop Premium to Ultimate	0.999
(3)	Standard Earned Premium Developed to Ultimate = (1)x(2)	\$160,557,381
(4)	Limited Indemnity Paid Losses	\$55,172,358
(5)	Limited Indemnity Paid Development Factor to Ultimate	1.358
(6)	Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$74,924,062
(7)	Limited Medical Paid Losses	\$33,720,706
(8)	Limited Medical Paid Development Factor to Ultimate	1.200
(9)	Limited Medical Paid Losses Developed to Ultimate = (7)x(8)	\$40,464,847



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APPENDIX A-II

Determination of Policy Year Development Factors

Section A - Premium Development Factors

<u>Policy Year</u>	<u>Standard Premium For Matching Companies</u>		<u>Development Factor</u>
	<u>1st Report</u>	<u>2nd Report</u>	
2004	256,871,696	259,413,911	1.010
2005	158,721,029	161,025,721	1.015
2006	153,043,365	154,899,660	1.012
Average			1.012
	<u>2nd Report</u>	<u>3rd Report</u>	
2003	248,842,159	248,576,350	0.999
2004	259,551,080	259,873,012	1.001
2005	161,022,470	160,715,331	0.998
Average			0.999
	<u>3rd Report</u>	<u>4th Report</u>	
2002	229,803,130	229,421,187	0.998
2003	248,703,075	248,716,713	1.000
2004	259,862,994	259,681,573	0.999
Average			0.999
	<u>4th Report</u>	<u>5th Report</u>	
2001	220,044,022	219,998,642	1.000
2002	229,565,669	229,670,790	1.000
2003	248,506,834	248,452,884	1.000
Average			1.000

Summary of Premium Development Factors

<u>1st/5th</u>	<u>2nd/5th</u>	<u>3rd/5th</u>	<u>4th/5th</u>
1.010	0.998	0.999	1.000

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APPENDIX A-II

Determination of Policy Year Development Factors

Section B - Limited Paid Loss Development Factors

Policy Year	Limited Paid Indemnity Losses For Matching Companies		Development Factor	Adjusted Development Factor **	Policy Year	Limited Paid Medical Losses For Matching Companies		Development Factor
	13th Report	14th Report				13th Report	14th Report	
					1990	34,524,877	34,586,548	1.002
					1991	31,762,826	31,791,597	1.001
1992	50,054,354	50,171,991	1.002	1.001	1992	21,858,867	22,006,254	1.007
1993	31,464,644	31,347,960	0.996	0.996	1993	15,896,143	15,947,655	1.003
1994	33,955,392	34,087,923	1.004	1.004	1994	15,562,025	15,612,380	1.003
Average				1.000	Average*			1.003
						<u>14th Report</u>	<u>15th Report</u>	
					1989	43,621,855	43,720,566	1.002
					1990	34,478,407	34,619,956	1.004
1991	84,867,644	85,067,275	1.002	1.001	1991	31,791,597	31,801,608	1.000
1992	50,171,991	50,475,239	1.006	1.003	1992	22,006,254	22,050,490	1.002
1993	31,143,340	31,312,506	1.005	1.005	1993	15,841,790	15,920,668	1.005
Average				1.003	Average*			1.003
						<u>15th Report</u>	<u>16th Report</u>	
					1988	37,441,153	37,585,523	1.004
					1989	43,467,949	43,595,965	1.003
1990	112,369,065	112,921,997	1.005	1.002	1990	34,619,956	34,683,835	1.002
1991	85,067,275	85,413,339	1.004	1.002	1991	31,801,608	31,847,420	1.001
1992	50,467,754	50,640,064	1.003	1.002	1992	22,041,763	22,075,707	1.002
Average				1.002	Average*			1.002
						<u>16th Report</u>	<u>17th Report</u>	
					1987	35,456,118	35,570,551	1.003
					1988	37,451,148	37,570,253	1.003
1989	162,900,487	163,987,971	1.007	1.003	1989	43,595,965	43,688,573	1.002
1990	112,921,997	113,344,983	1.004	1.002	1990	34,683,835	34,760,095	1.002
1991	85,318,691	85,628,249	1.004	1.002	1991	31,837,875	31,866,313	1.001
Average				1.002	Average*			1.002
						<u>17th Report</u>	<u>18th Report</u>	
					1986	31,035,935	31,102,505	1.002
					1987	35,452,639	35,520,189	1.002
1988	146,868,881	147,472,552	1.004	1.002	1988	37,529,517	37,719,691	1.005
1989	163,987,971	164,898,340	1.006	1.003	1989	43,688,573	43,598,247	0.998
1990	113,344,983	113,648,613	1.003	1.001	1990	34,761,033	34,805,438	1.001
Average				1.002	Average*			1.002
						<u>18th Report</u>	<u>19th Report</u>	
					1985	23,255,027	23,348,003	1.004
					1986	31,051,196	31,095,589	1.001
1987	138,333,222	139,471,838	1.008	1.004	1987	35,516,354	35,574,511	1.002
1988	147,472,552	148,218,743	1.005	1.003	1988	37,719,691	37,826,764	1.003
1989	164,898,340	165,966,875	1.006	1.003	1989	43,598,050	43,725,422	1.003
Average†				1.002	Average†*			1.002

* Based on five years of data; a three-year average after the highest and lowest factors are excluded.

** For policy years 1992 and prior, the development portion of the link ratio was adjusted by a factor of 0.5.

No adjustment was made for policy years 1993 and after.

† The 18th/19th link ratio is raised to the two-thirds power to remove the overlap with the AY 19th/Ult development factor.

APPENDIX A-II

Determination of Loss Development Factors to Ultimate Report

Section C - Determination of Accident Year Loss Development Factors (19th-to-Ultimate Report)

	<u>Indemnity</u>	<u>Medical</u>
(1) Losses for accident year 1980 valued as of 12-31-1987	44,126,232	10,421,687
(2) Losses for accident year 1981 valued as of 12-31-1988	43,654,704	11,564,110
(3) Losses for accident year 1982 valued as of 12-31-1989	44,988,516	12,803,967
(4) Losses for accident year 1983 valued as of 12-31-1990	53,682,570	13,615,672
(5) Losses for accident year 1984 valued as of 12-31-1991	67,280,504	17,561,393
(6) Average = ((1)+(2)+(3)+(4)+(5))/5	50,746,505	13,193,366
(7) Losses for accident year 1985 valued as of 12-31-1992	72,318,809	17,842,123
(8) Ratio = (6)/(7)	0.702	0.739
(9) Losses for accident year 1985 valued as of 12-31-2003	85,158,463	14,812,613
(10) Losses for accident year 1985 valued as of 12-31-2004	85,492,252	14,957,476
(11) Losses for accident years prior to 1985 valued as of 12-31-2003	621,376,873	123,389,941
(12) Losses for accident years prior to 1985 valued as of 12-31-2004	622,029,701	123,497,569
(13) 19th-to-ultimate development factor	1.015	1.020
= 1+[(10)-(9)+((12)-(11))/(8)]/(9)		
(14) Losses for accident year 1981 valued as of 12-31-1988	44,227,601	11,776,485
(15) Losses for accident year 1982 valued as of 12-31-1989	45,785,025	13,033,842
(16) Losses for accident year 1983 valued as of 12-31-1990	55,217,416	13,992,512
(17) Losses for accident year 1984 valued as of 12-31-1991	69,528,647	18,086,444
(18) Losses for accident year 1985 valued as of 12-31-1992	73,595,546	18,279,808
(19) Average = ((14)+(15)+(16)+(17)+(18))/5	57,670,847	15,033,818
(20) Losses for accident year 1986 valued as of 12-31-1993	99,245,100	27,690,018
(21) Ratio = (19)/(20)	0.581	0.543
(22) Losses for accident year 1986 valued as of 12-31-2004	118,123,542	32,846,245
(23) Losses for accident year 1986 valued as of 12-31-2005	118,067,362	33,116,949
(24) Losses for accident years prior to 1986 valued as of 12-31-2004	683,184,291	206,866,549
(25) Losses for accident years prior to 1986 valued as of 12-31-2005	682,526,429	207,099,063
(26) 19th-to-ultimate development factor	0.990	1.021
= 1+[(23)-(22)+((25)-(24))/(21)]/(22)		
(27) Losses for accident year 1982 valued as of 12-31-1989	41,579,735	12,185,765
(28) Losses for accident year 1983 valued as of 12-31-1990	48,207,932	12,491,967
(29) Losses for accident year 1984 valued as of 12-31-1991	60,815,286	16,007,784
(30) Losses for accident year 1985 valued as of 12-31-1992	62,687,270	16,038,245
(31) Losses for accident year 1986 valued as of 12-31-1993	87,142,610	23,613,214
(32) Average = ((27)+(28)+(29)+(30)+(31))/5	60,086,567	16,067,395
(33) Losses for accident year 1987 valued as of 12-31-1994	94,213,387	24,999,754
(34) Ratio = (32)/(33)	0.638	0.643
(35) Losses for accident year 1987 valued as of 12-31-2005	125,005,357	31,467,731
(36) Losses for accident year 1987 valued as of 12-31-2006	125,618,737	31,320,949
(37) Losses for accident years prior to 1987 valued as of 12-31-2005	761,895,840	227,420,226
(38) Losses for accident years prior to 1987 valued as of 12-31-2006	762,659,607	226,907,055
(39) 19th-to-ultimate development factor	1.014	0.970
= 1+[(36)-(35)+((38)-(37))/(34)]/(35)		

APPENDIX A-II

Determination of Loss Development Factors to Ultimate Report

Section C - Determination of Accident Year Loss Development Factors (19th-to-Ultimate Report)

	<u>Indemnity</u>	<u>Medical</u>
(40) Losses for accident year 1983 valued as of 12-31-1990	70,360,447	17,983,483
(41) Losses for accident year 1984 valued as of 12-31-1991	84,410,491	21,837,066
(42) Losses for accident year 1985 valued as of 12-31-1992	91,746,740	22,341,056
(43) Losses for accident year 1986 valued as of 12-31-1993	124,008,588	32,762,128
(44) Losses for accident year 1987 valued as of 12-31-1994	142,469,344	37,561,443
(45) Average = ((40)+(41)+(42)+(43)+(44))/5	102,599,122	26,497,035
(46) Losses for accident year 1988 valued as of 12-31-1995	166,661,568	42,694,640
(47) Ratio = (45)/(46)	0.616	0.621
(48) Losses for accident year 1988 valued as of 12-31-2006	157,213,503	39,536,559
(49) Losses for accident year 1988 valued as of 12-31-2007	157,949,418	39,455,266
(50) Losses for accident years prior to 1988 valued as of 12-31-2006	968,750,071	274,338,432
(51) Losses for accident years prior to 1988 valued as of 12-31-2007	970,903,115	275,808,796
(52) 19th-to-ultimate development factor	1.027	1.058
= 1+[(49)-(48)+((51)-(50))/(47)]/(48)		
(53) Losses for accident year 1984 valued as of 12-31-2002	68,198,335	17,361,281
(54) Losses for accident year 1985 valued as of 12-31-2003	73,099,153	17,360,517
(55) Losses for accident year 1986 valued as of 12-31-2004	103,760,161	26,138,648
(56) Losses for accident year 1987 valued as of 12-31-2005	117,291,188	30,385,898
(57) Losses for accident year 1988 valued as of 12-31-2006	135,320,427	34,596,999
(58) Average = ((53)+(54)+(55)+(56)+(57))/5	99,533,853	25,168,669
(59) Losses for accident year 1989 valued as of 12-31-2007	153,303,907	41,940,624
(60) Ratio = (58)/(59)	0.649	0.600
(61) Losses for accident year 1989 valued as of 12-31-2007	172,804,869	46,437,425
(62) Losses for accident year 1989 valued as of 12-31-2008	174,696,543	47,050,106
(63) Losses for accident years prior to 1989 valued as of 12-31-2007	1,121,406,503	313,209,791
(64) Losses for accident years prior to 1989 valued as of 12-31-2008	1,118,815,436	312,919,194
(65) 19th-to-ultimate development factor	0.988	1.003
= 1+[(62)-(61)+((64)-(63))/(60)]/(61)		
(66) Five Year Average	1.007	1.014
(67) Selected *	1.004	1.014

* For indemnity, the development portion of the tail factor was adjusted by the factor of 0.5.

(1) through (5) and (7) include only information for matching companies for the 1987 through 1992 valuations.
 (9) through (12) include only information for matching companies for the 2003 and 2004 valuations.
 (14) through (18) and (20) include only information for matching companies for the 1988 through 1993 valuations.
 (22) through (25) include only information for matching companies for the 2004 and 2005 valuations.
 (27) through (31) and (33) include only information for matching companies for the 1989 through 1994 valuations.
 (35) through (38) include only information for matching companies for the 2005 and 2006 valuations.
 (40) through (44) and (46) include only information for matching companies for the 1990 through 1995 valuations.
 (48) through (51) include only information for matching companies for the 2006 and 2007 valuations.
 (53) through (57) and (59) include only information for matching companies for the 2002 through 2007 valuations.
 (61) through (64) include only information for matching companies for the 2007 and 2008 valuations.

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APPENDIX A-II

Derivation of Loss Development Factors

Section D - Accident Year Conversion Ratios

Accident Year Unlimited Paid+Case-to-Incurred Including IBNR Ratios

<u>Indemnity Losses at a 19th Report</u>				<u>Medical Losses at a 19th Report</u>			
Accident Year	Paid+Case	Incl. IBNR	Ratio	Accident Year	Paid+Case	Incl. IBNR	Ratio
1986	117,094,801	118,385,656	0.989	1986	30,817,333	31,654,229	0.974
1987	137,542,846	138,544,183	0.993	1987	34,022,008	34,677,006	0.981
1988	155,275,894	157,213,503	0.988	1988	38,432,257	39,536,559	0.972
1989	170,794,474	172,804,869	0.988	1989	45,131,574	46,437,572	0.972
1990	148,530,688	150,085,504	0.990	1990	41,250,470	42,753,191	0.965
Average			0.990	Average			0.973

Accident Year Limited Paid-to-Paid+Case Ratios

<u>Indemnity Losses at a 19th Report</u>				<u>Medical Losses at a 19th Report</u>			
Accident Year	Paid	Paid+Case	Ratio	Accident Year	Paid	Paid+Case	Ratio
1986	108,690,379	116,160,815	0.936	1986	27,454,621	28,739,383	0.955
1987	129,320,957	137,422,817	0.941	1987	32,887,994	33,677,520	0.977
1988	148,809,702	155,275,894	0.958	1988	36,842,589	38,432,257	0.959
1989	160,800,472	170,334,719	0.944	1989	42,144,402	44,849,536	0.940
1990	141,557,911	148,530,688	0.953	1990	39,621,912	41,250,470	0.961
Selected			0.973	Average			0.958

Section E - Derivation of Limited Paid+Case 19th-to-Ultimate Loss Development Factor

	<u>Indemnity</u>	<u>Medical</u>
(1) Selected Unlimited Incurred 19th-to-Ultimate Loss Development Factor (Section C)	1.004	1.014
(2) Unlimited Paid+Case-to-Incurred Including IBNR Ratio (Section D)	0.990	0.973
(3) Unlimited Paid+Case 19th-to-Ultimate Loss Development Factor = (1)/(2)	1.014	1.042
(4) Factor to Adjust 19th-to-Ultimate Development Factor to a Limited Basis	0.572	0.572
(5) Limited Paid+Case 19th-to-Ultimate Loss Development Factor = [(3) - 1]x(4)+1	1.008	1.024

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APPENDIX A-II

Derivation of Policy Year Loss Development Factors

Section F - Summary of Limited Paid Loss Development Factors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	1st/2nd	2nd/3rd	3rd/4th	4th/5th	5th/6th	6th/7th	7th/8th	8th/9th
Indemnity	1.679	1.244	1.104	1.054	1.036	1.021	1.017	1.009
Medical	1.259	1.084	1.034	1.020	1.011	1.007	1.011	1.007
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	9th/10th	10th/11th	11th/12th	12th/13th	13th/14th	14th/15th	15th/16th	16th/17th
Indemnity	1.006	1.006	1.008	1.008	1.000	1.003	1.002	1.002
Medical	1.002	1.006	1.003	1.003	1.003	1.003	1.002	1.002
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	17th/18th	18th/19th†	Ltd. P+C 19th/Ult Factor	Ltd. Paid to P+C Factor	18th/Ult ((19)/(20)) x(18)	17th/Ult (21)x(17)	16th/Ult (22)x(16)	15th/Ult (23)x(15)
Indemnity	1.002	1.002	1.008	0.973	1.038	1.040	1.042	1.044
Medical	1.002	1.002	1.024	0.958	1.071	1.073	1.075	1.077
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
	14th/Ult (24)x(14)	13th/Ult (25)x(13)	12th/Ult (26)x(12)	11th/Ult (27)x(11)	10th/Ult (28)x(10)	9th/Ult (29)x(9)	8th/Ult (30)x(8)	7th/Ult (31)x(7)
Indemnity	1.047	1.047	1.055	1.063	1.069	1.075	1.085	1.103
Medical	1.080	1.083	1.086	1.089	1.096	1.098	1.106	1.118
	(33)	(34)	(35)	(36)	(37)	(38)		
	6th/Ult (32)x(6)	5th/Ult (33)x(5)	4th/Ult (34)x(4)	3rd/Ult (35)x(3)	2nd/Ult (36)x(2)	1st/Ult (37)x(1)		
Indemnity	1.126	1.167	1.230	1.358	1.689	2.836		
Medical	1.126	1.138	1.161	1.200	1.301	1.638		

† The 18th/19th link ratio is raised to the two-thirds power to remove the overlap with the AY 19th/Ult development factor.

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APPENDIX A-II

Thresholds

Section G - Factor to Adjust Limited Losses to an Unlimited Basis

(1) Threshold at the Midpoint of the Loss Cost Effective Period*	3,405,474
(2) Statewide Excess Ratio for (1)	0.036
(3) Market Share for Carriers Missing from Large Loss and Catastrophe Call	0.000
(4) Factor to Adjust Limited Losses to an Unlimited Basis = $1/\{1-[(2)\times(1-(3))]\}$	1.037

Section H - Policy Year and Accident Year Thresholds

<u>Experience Year</u>	<u>Policy Year Detrended Threshold</u>	<u>Accident Year Detrended Threshold</u>
2008	3,191,982	3,191,982
2007	3,124,047	3,072,167
2006	3,024,722	2,988,489
2005	2,915,521	2,859,798
2004	2,812,570	2,776,503
2003	2,726,211	2,687,805
2002	2,616,618	2,562,255
2001	2,517,207	2,482,805
2000	2,439,154	2,405,819
1999	2,349,581	2,306,634
1998	2,266,080	2,235,110
1997	2,169,042	2,118,588
1996	2,059,211	2,013,867
1995	1,977,389	1,949,532
1994	1,913,184	1,885,427
1993	1,860,371	1,841,237
1992	1,820,767	1,805,134
1991	1,755,468	1,717,539
1990	1,685,517	1,661,063
1989	1,608,591	1,568,520
1988	1,530,223	1,500,976

* May 20, 2011 is the midpoint of the effective period for which the revised pure premiums are being proposed.

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APPENDIX A-III

Policy Year Trend Factors

Section A - Summary of Annual Trend Factors

Rhode Island Underlying Data*

(1) Policy Year	(2) Claim Freq per Million of On-Level Premium	(3) Indemnity Average Claim Severity	(4) Medical Average Claim Severity	(5) Indemnity Loss Ratio	(6) Medical Loss Ratio
1998	45.436	14,300	6,473	0.650	0.294
1999	46.320	13,459	6,791	0.623	0.315
2000	44.542	14,299	6,493	0.637	0.289
2001	42.679	14,960	7,103	0.638	0.303
2002	43.076	13,643	7,068	0.588	0.304
2003	41.655	14,334	7,618	0.597	0.317
2004	39.119	14,418	7,961	0.564	0.311
2005	38.483	15,001	8,042	0.577	0.309
2006	36.622	15,243	8,294	0.558	0.304
2007	35.056	15,885	8,212	0.557	0.288

* All developed to ultimate, and placed on current loss and premium levels

	Indemnity	Medical
- Current Approved Trend Factor for Rhode Island	0.980	1.010
- Countrywide Average Trend Factor	0.960	1.000
- Countrywide Medical CPI Trend Factor		1.037
- PY 8-point Trend Factors Based on Frequency/Severity Analysis		
(1) Frequency Trend	0.967	0.967
(2) Severity Trend	1.013	1.035
(3) Loss Ratio Trend = (1)x(2)	0.980	1.001
- Annual Trend Factors Based on Statistical Trend Analysis		
(1) Frequency Trend	0.971	0.971
(2) Severity Trend	1.008	1.011
(3) Loss Ratio Trend = (1)x(2)	0.979	0.982
Selected Annual Trend Factor	0.980	1.000

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APPENDIX A-III

Policy Year Trend Factors

Section B - Derivation of Trend Factors

Policy Year 2007 with an average accident date of December 6, 2007, policy year 2006 with an average accident date of December 6, 2006, and policy year 2005 with an average accident date of December 6, 2005 are used in the determination of the indicated change based on experience, trend and benefits. The midpoint of the effective period for which the revised premiums are being proposed is May 20, 2011. The premium level must therefore reflect experience levels which will exist 3.452 years later than the policy year 2007 experience, 4.452 years later than the policy year 2006 experience and 5.452 years later than the policy year 2005 experience on which the current current indication has been derived. The derivation of trend factors is outlined below:

I. Indemnity		II. Medical	
(1) Selected annual trend factor	0.980	(1) Selected annual trend factor	1.000
(2) Length of trend period from the midpoint of policy year 2007 to the midpoint of the effective period	3.452	(2) Length of trend period from the midpoint of policy year 2007 to the midpoint of the effective period	3.452
(3) Length of trend period from the midpoint of policy year 2006 to the midpoint of the effective period	4.452	(3) Length of trend period from the midpoint of policy year 2006 to the midpoint of the effective period	4.452
(4) Length of trend period from the midpoint of policy year 2005 to the midpoint of the effective period	5.452	(4) Length of trend period from the midpoint of policy year 2005 to the midpoint of the effective period	5.452
(5) Effect on Policy Year 2007 = (1) ^ (2)	0.933	(5) Effect on Policy Year 2007 = (1) ^ (2)	1.000
(6) Effect on Policy Year 2006 = (1) ^ (3)	0.914	(6) Effect on Policy Year 2006 = (1) ^ (3)	1.000
(7) Effect on Policy Year 2005 = (1) ^ (4)	0.896	(7) Effect on Policy Year 2005 = (1) ^ (4)	1.000



RHODE ISLAND

APPENDIX A-IV

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 particular carrier's data submission is not available for use in an NCCI filing either because the data was not reported prior to the filing, had quality issues, or NCCI determined that the data that was reported should not be included in the filing based on NCCI's actuarial judgment. All carriers writing at least one-tenth of one percent of the Rhode Island workers compensation written premium volume and whose data is not included in this filing are listed below. The listing is separated between policy years 2005 and 2006 and 2007.

Carriers not included in experience valued as of 12/31/2008

Name of Carrier	Annual Statement Premium Written	Annual Statement Losses Incurred	% of State Premium	% of State Losses
	<u>Policy Year 2005</u>			
NONE				
	<u>Policy Year 2006</u>			
NONE				
	<u>Policy Year 2007</u>			
NONE				

Derivation of Industry Group Differentials

Industry group differentials are used to more equitably distribute the overall premium level change based on the individual experience of each industry group.

Wage trend adjustments are calculated to account for the change in industry group wages relative to the change in medical losses. The converted indicated losses used to calculate these adjustments are the losses from the Workers Compensation Statistical Plan. These losses are limited to \$500,000 for single claim occurrence and \$1,500,000 for each multiple claim occurrence. These limited losses are then adjusted to an ultimate unlimited basis through the application of limited development and an expected excess provision, and brought to the proposed experience, law and loss-based expense levels.

The indicated losses, column (8), are the converted indicated losses further adjusted for trend and the change in overall off balance for experience rating; the adjustments are shown in Appendix B-I, Sections A-1 through A-3. The expected losses (13) are at the same proposed level as the indicated losses and contain a change in industry group off balance. An adjustment to convert the proposed expected losses to reflect current relativities (15) is used to calculate the indicated to expected ratio (16). The indicated differential (17) reflects the indicated losses at a proposed level to expected losses with relativities of the current level to correctly distribute the proposed changes on an industry group basis.

In the calculation of the credibility weighted differentials, the ratios of indicated losses to expected losses by industry group (modified by the wage trend adjustments), column (18), are credibility weighted with the statewide ratio. The credibility is based on lost-time claim counts, column (19). The full credibility standard, column (20), is 12,000 lost-time claims for each industry group. Partial credibility is calculated using the square root of the ratio of the actual lost-time claim counts and the number of lost-time claim counts required for full credibility. The statewide credibility weighted ratio (22) is rebalanced using the latest year expected losses to ensure that the overall premium level change is achieved.

I. INDUSTRY GROUP WAGE TREND ADJUSTMENT

Industry Group	(1) Converted Indicated Indemnity Losses*	(2) Converted Indicated Medical Losses*	(3) Converted Indicated Total Losses* (1)+(2)	(4) QCEW Average Weekly Wage Trend	(5) Wage Trend Differential (4)SW/(4)IG	(6) Medical Loss Wage Trend Adjustment [(1)+(2)x(5)]/(3)	(7) Normalized Medical Loss Wage Trend Adjustment
Manufacturing	103,856,224	60,426,010	164,282,234	1.083	1.003	1.001	1.001
Contracting	115,635,170	65,401,962	181,037,132	1.071	1.014	1.005	1.005
Off. & Cler.	70,383,951	44,433,789	114,817,740	1.102	0.985	0.994	0.994
Goods and Srv.	187,179,239	125,428,552	312,607,791	1.082	1.004	1.002	1.002
Miscellaneous	80,794,220	45,389,299	126,183,519	1.108	0.980	0.993	0.993
Statewide	557,848,803	341,079,613	898,928,416	1.086		1.000	

*These converted indicated losses are prior to the application of trend.



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APPENDIX A-V

II. INDICATED AND EXPECTED LOSSES

Industry Group	(8) Converted Indicated Balanced Losses	(9) Current Ratio of Manual to Standard Premium	(10) Proposed Ratio of Manual to Standard Premium	(11) Latest Year Current Expected Losses	(12) Five Year Current Expected Losses	(13) Five Year Proposed Expected Losses	(14) Current/ Proposed (12)/(13)	(15) Adjustment to Proposed for Current Relativity (14)IG/(14)SW
Manufacturing	142,248,432	1.031	1.044	27,667,321	136,823,769	137,546,310	0.995	1.000
Contracting	156,107,280	1.086	1.084	35,249,596	153,562,884	154,893,284	0.991	0.996
Off. & Cler.	99,687,668	1.033	1.029	20,119,513	104,199,518	104,784,124	0.994	0.999
Goods and Srv.	272,287,663	0.983	0.978	59,479,963	275,287,868	276,127,028	0.997	1.002
Miscellaneous	109,028,927	0.995	1.001	22,515,922	108,582,284	109,392,305	0.993	0.998
Statewide	779,359,970			165,032,315	778,456,323	782,743,051	0.995	

III. INDUSTRY GROUP DIFFERENTIALS

Industry Group	(16) Indicated/Expected Ratio (8)/[(13)x(15)]	(17) Indicated Differential (w/o Wage Trend) (16)IG/(16)SW	(18) Indicated/ Expected Ratio (w/ Wage Trend) (7)x(17)	(19) Lost-Time Claim Counts	(20) Full Credibility Standard for Lost- Time Claim Counts	(21) Credibility Minimum of 1.000 and ((19)/(20))^0.5	(22) Credibility Weighted Indicated/ Expected Ratio	(23) Normalized Credibility Weighted Indicated/ Expected Ratio (22)IG/(22)SW*	(24) Final Industry Group Differential
Manufacturing	1.034	1.038	1.035	5,960	12,000	0.700	1.023	1.027	1.027
Contracting	1.012	1.016	1.017	4,261	12,000	0.600	1.009	1.013	1.013
Off. & Cler.	0.952	0.956	0.946	3,936	12,000	0.570	0.968	0.972	0.972
Goods and Srv.	0.984	0.988	0.986	13,983	12,000	1.000	0.986	0.990	0.990
Miscellaneous	0.999	1.003	0.992	4,298	12,000	0.600	0.994	0.998	0.998
Statewide	0.996		0.996				0.996		1.000

*Statewide ratio (column 22) = $\sum_{IG}((11)x(22)) \div \sum_{IG}(11)$

Distribution of Pure Premium Level Change to Occupational Classification

After determining the required changes in pure premium level overall 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
1/02-12/02	1.085	1.011	1.067	1.007
1/03-12/03	1.102	1.036	1.080	1.005
1/04-12/04	1.142	1.057	1.109	1.010
1/05-12/05	1.256	1.125	1.133	1.017
1/06-12/06	1.894	1.400	1.261	1.015

2. Factors to Adjust to the Proposed Trend Level

The proposed trend factors are applied to adjust the indicated pure premiums to the proposed level.

Policy Period	Indemnity	Medical
1/02-12/02	0.843	1.000
1/03-12/03	0.860	1.000
1/04-12/04	0.878	1.000
1/05-12/05	0.896	1.000
1/06-12/06	0.914	1.000

3. Factors to Adjust to the September 1, 2009 Benefit Level

The factors in the following table are applied to adjust the statistical plan losses to the proposed benefit level.

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/02-12/02	1.048	1.022	1.006	1.025	1.000
1/03-12/03	1.036	1.019	1.006	1.022	1.000
1/04-12/04	1.020	1.016	1.004	1.019	1.000
1/05-12/05	1.016	1.013	1.003	1.016	1.000
1/06-12/06	1.014	1.011	1.003	1.014	1.000

4. Primary Conversion Factors: Indicated Pure Premiums

The factors above, contained within Section A-1, are combined multiplicatively, resulting in the following factors for 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)
1/02-12/02	0.959	0.893	0.935	0.920	0.857	0.938	0.874	1.067	1.007
1/03-12/03	0.982	0.923	0.966	0.953	0.896	0.969	0.911	1.080	1.005
1/04-12/04	1.023	0.947	1.019	1.007	0.932	1.022	0.946	1.109	1.010
1/05-12/05	1.143	1.024	1.140	1.129	1.011	1.143	1.024	1.133	1.017
1/06-12/06	1.755	1.298	1.750	1.736	1.283	1.755	1.298	1.261	1.015

* 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	0.076	0.098	0.115	0.133	0.159	0.196	0.253
(2) Excess Factors 1/(1-(1))	1.083	1.108	1.130	1.153	1.189	1.244	1.338

As the excess loss factors are on a combined (indemnity and medical) basis, a portion (0.400) 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 normalized wage trend, the effect of credibility weighting of 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*	1.038	1.016	0.956	0.988	1.003
(2) Final Differentials**	1.027	1.013	0.972	0.990	0.998
(3) Adjustment (2)/(1)	0.989	0.997	1.017	1.002	0.995

*See Appendix A-V, column (17).

**See Appendix A-V, column (24).

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)
1/02-12/02	0.978	1.019	1.012	1.007	0.985
1/03-12/03	0.964	1.020	1.008	1.012	0.976
1/04-12/04	0.956	1.020	1.025	0.995	0.951
1/05-12/05	0.908	1.020	1.032	0.988	0.897
1/06-12/06	0.934	1.021	1.045	0.977	0.913

3. Adjustment for Experience Change

A factor of 1.021 is applied to adjust for the experience change in the proposed loss cost level.

4. Factor to Reflect the Proposed Loss-Based Expenses

A factor of 1.188 is applied to include the proposed loss adjustment expense.

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
1/02-12/02	1.182	1.191	1.215	1.197	1.189
1/03-12/03	1.171	1.180	1.204	1.186	1.178
1/04-12/04	1.141	1.150	1.173	1.156	1.148
1/05-12/05	1.076	1.085	1.107	1.090	1.083
1/06-12/06	1.095	1.104	1.126	1.110	1.102

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 1.021 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 current loss costs contain the current trend. The change in trend is applied to adjust to the proposed trend level.

	Indemnity	Medical
(1) Current Trend	0.913	1.069
(2) Proposed Trend	0.914	1.000
(3) Change in Trend (2)/(1)	1.001	0.935

3. Factors to Adjust to the September 1, 2009 Benefit Level

The pure premiums underlying current loss costs are at the current September 1, 2007 level. The following factors are applied to adjust to the proposed benefit level.

Effective Date	Indemnity	Medical
September 1, 2008	1.001	1.000
September 1, 2009	1.002	1.000
Combined Benefit Adjustment	1.003	1.000

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

The pure premiums underlying current loss costs include the current loss adjustment expense and must be adjusted to the proposed level.

	(a) Current		(b) Proposed	
	Indemnity	Medical	Indemnity	Medical
(1) Loss Adjustment Expense	1.179	1.179	1.188	1.188
(2) Overall Change (1b)/(1a)			1.008	1.008

5. Adjustment to Obtain Expected Losses

The pure premiums underlying current loss costs reflect the current off-balance for the Experience Rating Plan. 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	1.031	1.044	0.988
Contracting	1.086	1.084	1.002
Office & Clerical	1.033	1.029	1.004
Goods & Services	0.983	0.978	1.005
Miscellaneous	0.995	1.001	0.994

6. Factors to Adjust for Proposed Industry Group Differentials

The pure premiums underlying 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	1.027	1.000	1.027
Contracting	1.013	0.996	1.009
Office & Clerical	0.972	0.999	0.971
Goods & Services	0.990	1.002	0.992
Miscellaneous	0.998	0.998	0.996

*See Appendix A-V, column (24).

**See Appendix A-V, column (15).

7. Combined Conversion Factors

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

Industry Group	Indemnity	Medical
Manufacturing	1.048	0.976
Contracting	1.044	0.973
Office & Clerical	1.007	0.938
Goods & Services	1.030	0.959
Miscellaneous	1.023	0.952

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 Rhode Island conditions in four steps. First, statewide indicated pure premiums are determined for Rhode Island. Second, using Rhode Island payrolls as weights, corresponding statewide average pure premiums are computed for each remaining state. Third, the ratios of Rhode Island 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 Rhode Island 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: \$12,161,208 for indemnity, and \$3,933,090 for medical.

The partial credibilities formula is:

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

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 = the smaller of
[(national cases)/(full credibility standard)]^{0.4} and [(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.

Adjustments to Pure Premiums to Obtain Advisory Loss Costs

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

(1) Test Correction Factor

The payrolls are now extended by the advisory loss costs presently in effect and by the indicated advisory 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 advisory 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	1.0218
Contracting	1.0249
Office & Clerical	0.9958
Goods & Services	1.0144
Miscellaneous	1.0251

(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	1.044
Contracting	1.084
Office & Clerical	1.029
Goods & Services	0.978
Miscellaneous	1.001

(3) Disease Loadings

The proposed manual advisory 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 footnote page.

(4) Swing Limits

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

Manufacturing	from 18% above to 12% below
Contracting	from 17% above to 13% below
Office & Clerical	from 13% above to 17% below
Goods & Services	from 15% above to 15% below
Miscellaneous	from 15% above to 15% below

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

Max. Deviation = Effect of the final change in premium level by industry group plus or minus 15% rounded to the nearest 1%.

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

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

List of Classifications Limited by Upper Swing

List of Classifications Limited by Lower Swing

0079 0771 0908 0913 1699 1925 2041 2065
 2172 2220 2380 2402 2417 2586 2587 2688
 2735 2835 2881 2883 2913 3042 3064 3069
 3113 3119 3179 3227 3300 3334 3336 3365
 3400 3620 3634 3635 3822 4034 4038 4112
 4113 4114 4304 4351 4686 4720 4741 4771
 4828 4829 5037 5040 5057 5059 5069 5160
 5437 5472 5508 5535 5610 5705 6251 6854
 7231 7370 7382 7539 7580 7600 7605 7705
 8001 8008 8039 8046 8227 8292 8293 8381
 8385 8393 8500 8719 8748 8799 8800 8842
 8864 8869 9016 9156 9410 9516

0083 0106 0170 1005 1322 1472 2114 2501
 2714 2802 2923 2960 3018 3027 3030 3114
 3131 3132 3146 3169 3373 3383 3515 3830
 4207 4240 4493 4557 4717 5022 5348 5445
 5462 5479 5606 5951 6003 6005 6206 6213
 6233 6400 7016 7024 7232 7394 7395 7538
 7613 8006 8015 8018 8044 8072 8265 8279
 8350 8754 9059 9178 9180 9505 9586



RHODE ISLAND

APPENDIX B-II

Determination of Rating Values on Miscellaneous Values Page

A. Miscellaneous Values are calculated based on formulas, dependent on C.P.S. wages, which were fixed with the original item filing. Therefore, the indicated rate change is equivalent to the C.P.S. rate of change.

	Current		Proposed		Change
1) Average Weekly Wage (basis for determination of rating values listed below)	\$715.75	*	\$758.40	**	6.0%
2) Basis of premium applicable in accordance with the Basic Manual footnote instructions for Code 7370 -- "Taxicab Co.":					
Employee operated vehicle	\$55,829		\$59,156		6.0%
Leased or rented vehicle	\$37,219		\$39,437		6.0%
3) Maximum Payroll applicable in accordance with the Basic Manual Rule 2-E-1 -- "Executive Officers" and the footnote instructions for Code 9178 -- "Athletic Sports or Park: Non-Contact Sports," Code 9179 -- "Athletic Sports or Park: Contact Sports," and Code 9186 -- "Carnival--Traveling"	\$2,900	#	\$3,000	#	3.4%
4) Minimum Payroll applicable in accordance with Basic Manual Rule 2-E-1 -- "Executive Officers"	\$358		\$379		5.9%
5) Per Passenger Seat Surcharge - In accordance with the Basic Manual footnote instructions for classification Code 7421, the surcharge is					
Maximum surcharge per aircraft	\$1,000	+	\$1,000	+	0.0%
Per passenger seat	\$100	++	\$100	++	0.0%

- * Estimate for calendar year 2006 from Current Population Survey (C.P.S.) statistics. Reflects wages capped at \$150,000.
- ** Estimate for calendar year 2008 from Current Population Survey (C.P.S.) statistics. Reflects wages capped at \$150,000.
- # Underlying formula is: Latest C.P.S. x 4 (Rounded to nearest \$100).
- + Amount is capped at \$1000.
- ++ Amount is capped at \$100.

B. Loss Elimination Ratios (LERs) and Percent Premium Reductions for deductibles continue to be determined using the standard methodology described in the literature (e.g. Gillam W R ; and Snader R H "Fundamentals of Individual Risk Rating," 1992, and Rollins, J.; and Washburn, M.J., "A Quantification of Snader's Deductible Safety Factor," 1994). The updated values reflect the experience, trend and development consistent with the ELPPFs filed in Item R-1400.



RHODE ISLAND
APPENDIX B-III

DERIVATION OF PROPOSED ADVISORY 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
01/01/02 - 12/31/02	0	0	471,337	1,069,293	1,411,231	98,962	574,568	551,796	1,375,281
01/01/03 - 12/31/03	0	0	98,685	1,368,905	1,347,293	162,035	570,291	642,021	1,416,415
01/01/04 - 12/31/04	0	0	0	1,167,266	1,677,004	120,700	917,407	556,256	1,778,107
01/01/05 - 12/31/05	68,836	0	177,200	963,001	1,782,579	84,597	1,041,864	653,090	2,012,282
01/01/06 - 12/31/06	0	0	0	806,946	366,457	191,109	804,935	538,920	1,276,400

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
01/01/02 - 12/31/02	0.959	0.893	0.935	0.920	0.857	0.938	0.874	1.067	1.007
01/01/03 - 12/31/03	0.982	0.923	0.966	0.953	0.896	0.969	0.911	1.080	1.005
01/01/04 - 12/31/04	1.023	0.947	1.019	1.007	0.932	1.022	0.946	1.109	1.010
01/01/05 - 12/31/05	1.143	1.024	1.140	1.129	1.011	1.143	1.024	1.133	1.017
01/01/06 - 12/31/06	1.755	1.298	1.750	1.736	1.283	1.755	1.298	1.261	1.015

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 excess loss factors by hazard group. These factors are shown below.

	HAZARD GROUP: C
Excess Factor	1.130

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

Redistribution %	40%
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RHODE ISLAND
APPENDIX B-III

DERIVATION OF PROPOSED ADVISORY LOSS COST - CODE 8810

EXPECTED UNLIMITED LOSSES (Limited Losses x Primary Conversion Factors, then adjusted for 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
01/01/02 - 12/31/02	0	0	475,022	1,060,366	1,303,618	100,055	541,282	743,969	1,653,543
01/01/03 - 12/31/03	0	0	102,754	1,406,168	1,301,193	169,241	559,998	864,224	1,697,926
01/01/04 - 12/31/04	0	0	0	1,266,983	1,684,695	132,962	935,458	764,397	2,155,213
01/01/05 - 12/31/05	84,808	0	217,741	1,171,904	1,942,545	104,225	1,149,959	912,043	2,461,098
01/01/06 - 12/31/06	0	0	0	1,509,960	506,781	361,518	1,126,178	857,939	1,542,373

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

Policy Period	INDUSTRY GROUP: Office and Clerical
01/01/02 - 12/31/02	1.215
01/01/03 - 12/31/03	1.204
01/01/04 - 12/31/04	1.173
01/01/05 - 12/31/05	1.107
01/01/06 - 12/31/06	1.126

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
01/01/02 - 12/31/02	3,369,148,029	1,987,063	2,241,554	903,922	2,009,055	4,228,617	2,912,977	7,141,594
01/01/03 - 12/31/03	3,523,050,365	2,020,508	2,240,874	1,040,526	2,044,303	4,261,382	3,084,829	7,346,211
01/01/04 - 12/31/04	3,683,045,366	1,642,135	3,073,439	896,638	2,528,065	4,715,574	3,424,703	8,140,277
01/01/05 - 12/31/05	3,949,011,995	1,747,597	3,423,402	1,009,632	2,724,435	5,170,999	3,734,067	8,905,066
01/01/06 - 12/31/06	4,147,462,008	2,107,284	1,838,712	966,039	1,736,712	3,945,996	2,702,751	6,648,747
Total	18,671,717,763	9,504,587	12,817,981	4,816,757	11,042,570	22,322,568	15,859,327	38,181,895
INDICATED PURE PREMIUM						0.120	0.085	0.21

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	0.126	0.084	0.21
Conversion Factors (App. B-I, section B)	1.007	0.938	
PURE PREMIUMS PRESENT ON RATE LEVEL (Underlying Pure Premiums) x (Conversion Factor)	0.127	0.079	0.21

RHODE ISLAND
APPENDIX B-III

DERIVATION OF PROPOSED ADVISORY LOSS COST - CODE 8810
Industry Group - Office and Clerical. Hazard Group - C.

The loss cost for the above captioned classification is then derived as shown in the following exhibit:

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Indicated Pure Premium	0.120	0.085	0.21
2. Pure Premium Indicated by National Relativity	0.105	0.082	0.19
3. Pure Premium Present on Rate Level	0.127	0.079	0.21
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)	0.120	0.085	0.21
8. Test Correction Factor	0.9958	0.9958	xxx
9. Underlying Pure Premiums = (7) x (8) *	0.115	0.085	0.20
10. Ratio of Manual to Standard Premium			1.029
11. Loss Cost = (9) x (10)			0.21
12. Loss Cost Within Swing Limits			0.21
Current Loss Cost x Swing Limits			
a) Lower bound = 0.22 x 0.830 = 0.19			
b) Upper bound = 0.22 x 1.130 = 0.24			
13. Pure Premiums Underlying Proposed Loss Cost* = ((13TOT) / (9TOT)) x (9) , (13TOT) = (12) / (10)	0.115	0.085	0.20
14. Disease, PAP, Catastrophe and/or Miscellaneous Loadings			0.00
15. Final Loaded Loss Cost			0.21

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

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 the indicated loss costs. The loss costs are then limited to the swing limits based on 15% above and 15% below the current loss costs, which results in the indicated loss cost level change of +5.3%.

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.

A-1 Calculation of Primary Conversion Factor

1 Benefits

The state losses are adjusted to the September 1, 2009 state law level. The federal losses are adjusted to the October 1, 2009 federal law level.

STATE ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/02 - 12/02	1.048	1.022	1.006	1.025	1.000
1/03 - 12/03	1.036	1.019	1.006	1.022	1.000
1/04 - 12/04	1.020	1.016	1.004	1.019	1.000
1/05 - 12/05	1.016	1.013	1.003	1.016	1.000
1/06 - 12/06	1.014	1.011	1.003	1.014	1.000

FEDERAL ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/02 - 12/02	1.061	1.031	1.006	1.031	1.000
1/03 - 12/03	1.050	1.027	1.005	1.027	1.000
1/04 - 12/04	1.041	1.022	1.004	1.022	1.000
1/05 - 12/05	1.036	1.019	1.004	1.019	1.000
1/06 - 12/06	1.031	1.017	1.003	1.017	1.000

2 Trend

The following factors are applied to trend the losses in each policy year to the proposed rating year. The selected annual trends utilized were 0.980 and 1.000 for indemnity and medical, respectively.

Policy Period	Indemnity	Medical
1/02 - 12/02	0.843	1.000
1/03 - 12/03	0.860	1.000
1/04 - 12/04	0.878	1.000
1/05 - 12/05	0.896	1.000
1/06 - 12/06	0.914	1.000

A-1 Calculation of Primary Conversion Factor (continued)

3 Development

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
1/02 - 12/02	1.133	1.043	1.747	1.193
1/03 - 12/03	1.142	1.053	1.808	1.148
1/04 - 12/04	1.221	1.095	1.954	1.138
1/05 - 12/05	1.543	1.236	2.194	1.178
1/06 - 12/06	2.143	1.436	2.398	1.237

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 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)
1/02 - 12/02	1.001	0.921	0.976	0.961	0.885	0.979	0.901	1.747	1.193
1/03 - 12/03	1.017	0.938	1.001	0.988	0.911	1.004	0.926	1.808	1.148
1/04 - 12/04	1.093	0.981	1.089	1.076	0.965	1.092	0.980	1.954	1.138
1/05 - 12/05	1.405	1.125	1.401	1.387	1.111	1.405	1.125	2.194	1.178
1/06 - 12/06	1.986	1.331	1.980	1.965	1.316	1.986	1.331	2.398	1.237

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)
1/02 - 12/02	1.013	0.933	0.985	0.961	0.885	0.985	0.907	1.747	1.193
1/03 - 12/03	1.031	0.951	1.009	0.987	0.910	1.009	0.930	1.808	1.148
1/04 - 12/04	1.116	1.001	1.096	1.076	0.965	1.096	0.983	1.954	1.138
1/05 - 12/05	1.432	1.147	1.409	1.388	1.112	1.409	1.128	2.194	1.178
1/06 - 12/06	2.019	1.353	1.992	1.965	1.316	1.992	1.335	2.398	1.237

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

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 claims 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	0.076	0.098	0.115	0.133	0.159	0.196	0.253
(2) Excess Factors 1/(1-(1))	1.083	1.108	1.130	1.153	1.189	1.244	1.338

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.

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 state assessment and loss adjustment expense. 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-base expenses by policy period.

Policy Period	State Act	Federal Act
1/02 - 12/02	1.188	1.243
1/03 - 12/03	1.188	1.259
1/04 - 12/04	1.188	1.188
1/05 - 12/05	1.188	1.269
1/06 - 12/06	1.188	1.188

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

B – Present On Rate Level

1 Benefits

The current underlying pure premiums are at the current September 1, 2007 state and October 1, 2007 federal law levels. These pure premiums are adjusted to reflect the weighted effect of state and federal laws which bring losses to the proposed September 1, 2009 state and October 1, 2009 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%)	0.139
Federal Weight (Fed%)	0.861

	Indemnity	Medical	Total
(a) State Laws	1.003	1.000	1.002
(b) Federal Laws	1.005	1.000	1.002
(c) Weighted Laws = [(a)xSt%] + [(b)xFed%]	1.005	1.000	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
0.961	1.000

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	1.188	1.188	1.188
(b) Loss-based Assessment	1.000	1.000	1.000
(c) Total = (a) + (b) - 1	1.188	1.188	1.188

FEDERAL ACT

	Indemnity	Medical	Total
(d) Loss Adjustment Expense	1.188	1.188	1.188
(e) Loss-based Assessment	1.221	1.000	1.079
(f) Total = (d) + (e) - 1	1.409	1.188	1.267

	Indemnity	Medical	Total
(g) Weighted Proposed Expenses = [(c) x St%] + [(f) x Fed%]	1.378	1.188	1.256

Current:

STATE

	Indemnity	Medical	Total
(h) Loss Adjustment Expense	1.179	1.179	1.179
(i) Loss-based Assessment	1.000	1.000	1.000
(j) Total = (h) + (i) - 1	1.179	1.179	1.179

FEDERAL

	Indemnity	Medical	Total
(k) Loss Adjustment Expense	1.179	1.179	1.179
(l) Loss-based Assessment	1.266	1.000	1.138
(m) Total = (k) + (l) - 1	1.445	1.179	1.317

	Indemnity	Medical	Total
(n) Weighted Current Expenses = [(j) x St%] + [(m) x Fed%]	1.408	1.179	1.298

Change:

	Indemnity	Medical	Total
Weighted Expense Change in Loss Base Expenses = [(g) / (n)]	0.979	1.008	0.968

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

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

Indemnity	Medical
0.946	1.008

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 A, B and C but using the non-appropriated benefit changes and the federal loss-based expenses.

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: \$39,687,350 for indemnity, and \$24,574,000 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 **1.032**
(Selected based on Rhode Island off-balance analysis)

C. Swing Limits

The classifications which were adjusted by swing limits are as follows:

List of Classifications Limited by Upper Swing:
7327

List of Classifications Limited by Lower Swing:
7350 8726



RHODE ISLAND
APPENDIX B-IV

DERIVATION OF PROPOSED ADVISORY LOSS COST - CODE 8709

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
01/01/02 - 12/31/02	0	0	0	0	0	0	0	0	0
01/01/03 - 12/31/03	0	0	0	0	0	0	0	0	0
01/01/04 - 12/31/04	0	0	0	0	0	0	0	0	0
01/01/05 - 12/31/05	0	0	0	0	0	0	0	0	0
01/01/06 - 12/31/06	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
01/01/02 - 12/31/02	0	0	0	0	0	0	0	0	0
01/01/03 - 12/31/03	0	0	0	0	0	0	0	0	0
01/01/04 - 12/31/04	0	0	0	0	0	0	0	0	0
01/01/05 - 12/31/05	0	0	0	0	0	0	0	0	0
01/01/06 - 12/31/06	0	0	0	0	0	0	0	0	0

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
01/01/02 - 12/31/02	1.001	0.921	0.976	0.961	0.885	0.979	0.901	1.747	1.193
01/01/03 - 12/31/03	1.017	0.938	1.001	0.988	0.911	1.004	0.926	1.808	1.148
01/01/04 - 12/31/04	1.093	0.981	1.089	1.076	0.965	1.092	0.980	1.954	1.138
01/01/05 - 12/31/05	1.405	1.125	1.401	1.387	1.111	1.405	1.125	2.194	1.178
01/01/06 - 12/31/06	1.986	1.331	1.980	1.965	1.316	1.986	1.331	2.398	1.237

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
01/01/02 - 12/31/02	1.013	0.933	0.985	0.961	0.885	0.985	0.907	1.747	1.193
01/01/03 - 12/31/03	1.031	0.951	1.009	0.987	0.910	1.009	0.930	1.808	1.148
01/01/04 - 12/31/04	1.116	1.001	1.096	1.076	0.965	1.096	0.983	1.954	1.138
01/01/05 - 12/31/05	1.432	1.147	1.409	1.388	1.112	1.409	1.128	2.194	1.178
01/01/06 - 12/31/06	2.019	1.353	1.992	1.965	1.316	1.992	1.335	2.398	1.237



**RHODE ISLAND
APPENDIX B-IV**

DERIVATION OF PROPOSED ADVISORY LOSS COST - CODE 8709

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 excess loss factors by hazard group. These factors are shown below.

	HAZARD GROUP: G
Excess Factor	1.338

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

Redistribution %	40%
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STATE ACT - EXPECTED UNLIM LOSSES (Lim Losses x Primary Conv Factors, then adjusted for 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
01/01/02 - 12/31/02	0	0	0	0	0	0	0	0	0
01/01/03 - 12/31/03	0	0	0	0	0	0	0	0	0
01/01/04 - 12/31/04	0	0	0	0	0	0	0	0	0
01/01/05 - 12/31/05	0	0	0	0	0	0	0	0	0
01/01/06 - 12/31/06	0	0	0	0	0	0	0	0	0

FEDERAL ACT - EXPECTED UNLIM LOSSES (Lim Losses x Primary Conv Factors, then adjusted for 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
01/01/02 - 12/31/02	0	0	0	0	0	0	0	0	0
01/01/03 - 12/31/03	0	0	0	0	0	0	0	0	0
01/01/04 - 12/31/04	0	0	0	0	0	0	0	0	0
01/01/05 - 12/31/05	0	0	0	0	0	0	0	0	0
01/01/06 - 12/31/06	0	0	0	0	0	0	0	0	0

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

	INDUSTRY GROUP: F-Class
Policy Period	
01/01/02 - 12/31/02	1.188
01/01/03 - 12/31/03	1.188
01/01/04 - 12/31/04	1.188
01/01/05 - 12/31/05	1.188
01/01/06 - 12/31/06	1.188

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

	INDUSTRY GROUP: F-Class
Policy Period	
01/01/02 - 12/31/02	1.243
01/01/03 - 12/31/03	1.259
01/01/04 - 12/31/04	1.188
01/01/05 - 12/31/05	1.269
01/01/06 - 12/31/06	1.188



RHODE ISLAND
APPENDIX B-IV

DERIVATION OF PROPOSED ADVISORY LOSS COST - CODE 8709

TOTAL - PAYROLL, FINAL CONVERTED LOSSES

Policy Period	Payroll	Indemnity Likely	Indemnity Not-Likely	Medical Likely	Medical Not-Likely	Total Indemnity	Total Medical	Total
01/01/02 - 12/31/02	206,910	0	0	0	0	0	0	0
01/01/03 - 12/31/03	328,864	0	0	0	0	0	0	0
01/01/04 - 12/31/04	462,569	0	0	0	0	0	0	0
01/01/05 - 12/31/05	599,768	0	0	0	0	0	0	0
01/01/06 - 12/31/06	659,927	0	0	0	0	0	0	0
Total	2,258,038	0	0	0	0	0	0	0
INDICATED PURE PREMIUM						0.000	0.000	0.00

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	2.056	1.834	3.89
Conversion Factors (Section B)	0.946	1.008	
PURE PREMIUMS PRESENT ON RATE LEVEL (Underlying Pure Premiums) x (Conversion Factor)	1.945	1.849	3.79



RHODE ISLAND
APPENDIX B-IV

DERIVATION OF PROPOSED ADVISORY LOSS COST - CODE 8709
Industry Group - F-Class. Hazard Group - G.

The loss cost for the above captioned classification is then derived as shown in the following exhibit:

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Indicated Pure Premium	0.000	0.000	0.00
2. Pure Premium Indicated by National Relativity	1.116	2.199	3.32
3. Pure Premium Present on Rate Level	1.945	1.849	3.79
4. State Credibilities	7%	8%	xxx
5. National Credibilities	20%	21%	xxx
6. Residual Credibilities = 100% - (4) - (5)	73%	71%	xxx
7. Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	1.643	1.775	3.42
8. Test Correction Factor	1.0000	1.0000	xxx
9. Underlying Pure Premiums = (7) x (8) *	1.645	1.775	3.42
10. Ratio of Manual to Standard Premium			1.032
11. Loss Cost = (9) x (10)			3.53
12. Loss Cost Within Swing Limits			3.53
Current Loss Cost x Swing Limits			
a) Lower bound = 4.00 x 0.850 = 3.40			
b) Upper bound = 4.00 x 1.150 = 4.60			
13. Pure Premiums Underlying Proposed Loss Cost* = ((13TOT) / (9TOT)) x (9) , (13TOT) = (12) / (10)	1.645	1.775	3.42
14. Disease, PAP, Catastrophe and/or Miscellaneous Loadings			0.00
15. Final Loaded Loss Cost			3.53

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



RHODE ISLAND

APPENDIX C-I

Increase in the Maximum Weekly Benefit

Effective 09/01/2008

Increase in the Maximum Weekly Benefit for:

Fatal, Total and Primary Permanent Partial Disability
(115% of SAWW)

From: \$882.00

To: \$908.00

Total Effect: 0.1%

SAWW effective 09/01/2007 = 766.94 (Actual).

SAWW effective 09/01/2008 = 789.01 (Actual).

RHODE ISLAND

APPENDIX C-I

**Impact by Type of Injury and Overall Effect Due to the Increase in the
Maximum Weekly Benefit
Effective 09/01/2008**

<u>Type of Injury</u>	<u>Percentage of Losses (a)</u>	<u>Effect(%)</u>	
Fatal	1.6%	0.2	
Permanent Total	1.9%	0.2	
<u>Major Permanent Partial</u>	<u>39.7%</u>	<u>0.04</u>	
Serious - Total	43.2%	0.1	(b)
Minor Permanent Partial	3.6%	0.04	
<u>Temporary Total</u>	<u>15.8%</u>	<u>0.2</u>	
Non-Serious - Total	19.4%	0.2	(b)
Indemnity	62.6%	0.1	(b)
<u>Medical</u>	<u>37.4%</u>	<u>0.0</u>	
Total	100.0%	0.1	(b)

(a) Indemnity/Medical split based on policy year financial data projected to 9/1/2008. Proportions within indemnity based on the 24 month period ending 12/31/2004 on the 09/01/2007 law level and developed to an ultimate basis by type of injury.

(b) Weighted average



RHODE ISLAND

APPENDIX C-II

Increase in the Maximum Weekly Benefit

Effective 09/01/2009

Increase in the Maximum Weekly Benefit for:

Fatal, Total and Primary Permanent Partial Disability
(115% of SAWW)

From: \$908.00

To: \$939.00

Total Effect: 0.1%

SAWW effective 09/01/2008 = 789.01 (Actual).

SAWW effective 09/01/2009 = 815.98 (Actual).

RHODE ISLAND

APPENDIX C-II

**Impact by Type of Injury and Overall Effect Due to the Increase in the
Maximum Weekly Benefit
Effective 09/01/2009**

<u>Type of Injury</u>	<u>Percentage of Losses (a)</u>	<u>Effect(%)</u>	
Fatal	1.6%	0.3	
Permanent Total	2.0%	0.2	
<u>Major Permanent Partial</u>	<u>40.7%</u>	<u>0.1</u>	
Serious - Total	44.3%	0.1	(b)
Minor Permanent Partial	3.7%	0.1	
<u>Temporary Total</u>	<u>16.2%</u>	<u>0.3</u>	
Non-Serious - Total	19.9%	0.3	(b)
Indemnity	64.2%	0.2	(b)
<u>Medical</u>	<u>35.8%</u>	<u>0.0</u>	
Total	100.0%	0.1	(b)

(a) Indemnity/Medical split based on policy year financial data projected to 9/1/2009. Proportions within indemnity based on the 24 month period ending 12/31/2004 on the 09/01/2008 law level and developed to an ultimate basis by type of injury.

(b) Weighted average