



Pennsylvania Compensation Rating Bureau

Experience Rating Plan Update

APRIL 1, 2024



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Peter Gunn

- 37 years experience in Workers Compensation product management at Travelers
- Vice-Chair PCRБ Governing Board
- PCRБ Class and Rate Committee Member



Travelers

We have been consistently writing workers compensation insurance for over a century.

\$553B

Travelers writes the largest percentage of the eligible U.S. payroll¹

**A++
rating**

A.M. Best for financial strength²

#1

Workers Compensation and Commercial Multi-peril.³

Flexible coverages

that evolve and flex with the needs of our customers.



¹ Travelers Internal Data, 2022

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³ 2022 U.S. Statutory, DWP.



PCRB Experience Rating Background

Current State:

- Last major Experience Rating Plan change was in 2004
- Current eligibility for Experience Rating - \$10,000
- Split point of \$42,500 for all risks
 - All losses under \$42,500 are considered “primary losses” and are used in the calculation
- Capping rule restricting mod changes to a maximum swing of +/-25% from the prior year’s Experience Rating factor
- Secondary Capping: If indicated modification is less than 1.00 and the capped modification is greater than 1.00, final modification will be 1.00

Prior Mod	Indicated Mod	Capped Mod	Mod Used
1.40	.95	1.05	1.00



Why Change?

- Performance testing of existing methodology indicated declines in predictive accuracy
- Variable Split Point plan outperforms Single Split Point plan
- Make the formula more responsive to the specific loss experience of the insured
- Increase Workplace Safety Incentive
- Current plan assigns too little credibility to most risks
- Transition between Merit Rating and Experience Rating Plans for small risks can be significant



NEW Plan Features

PCRB EXPERIENCE RATING

The new plan will...

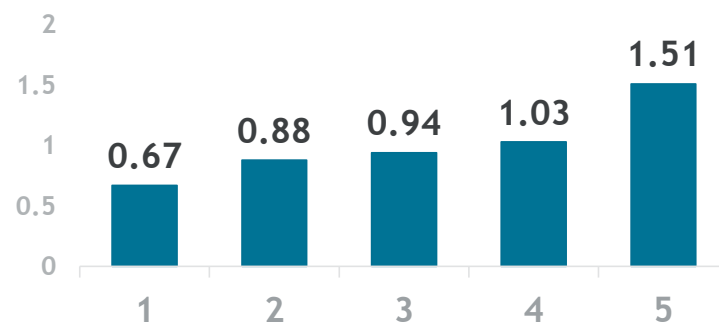
- Enhance plan performance through improved predictive accuracy and promote greater equity among similarly classified insureds
- Tailor split points to achieve better balance based on risk size and actual claim experience
- Increase incentive to improve workplace safety
- Balance Mod responsiveness with year-to-year stability via revised capping rules
- Perform closer to an ideal plan with identical loss ratios across Experience Mod quintiles
- Target deviation in each loss ratio quintile is +/- 5% after application of experience rating factor



OLD Plan Performance

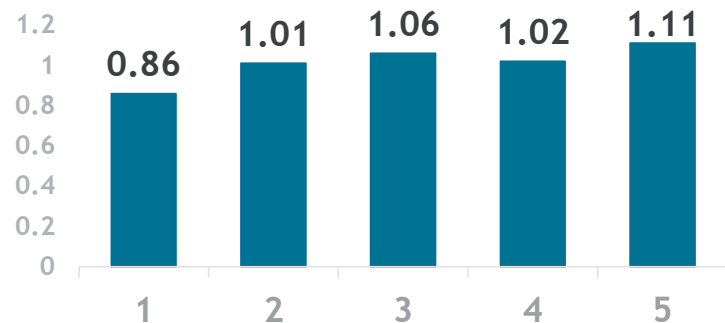
PCRB EXPERIENCE RATING

2015-2018 Eligibility **\$10,000**



MANUAL
LOSS RATIOS

Deviation within +/-5% = Ideal



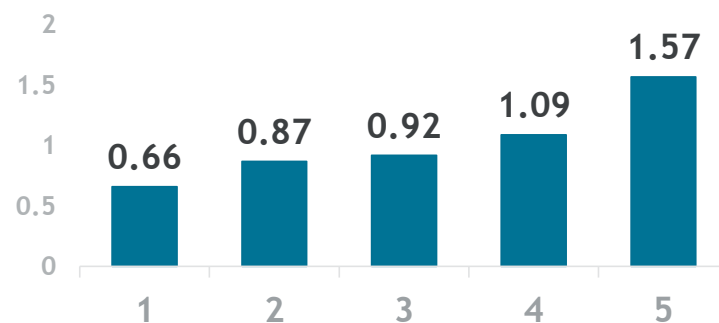
MODIFIED
LOSS RATIOS



NEW Plan Performance

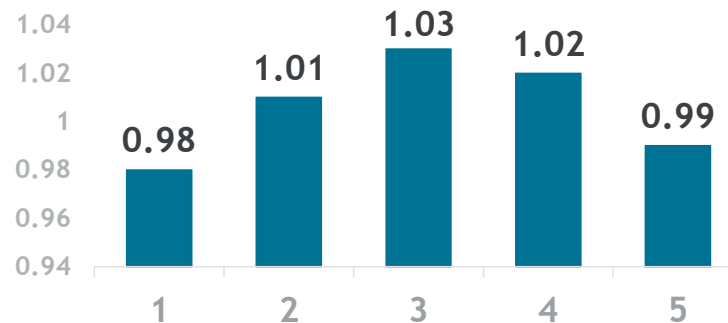
PCRB EXPERIENCE RATING

2015-2018 Eligibility **\$5,000**



MANUAL
LOSS RATIOS

Deviation within +/-3%



MODIFIED
LOSS RATIOS



Filed Changes



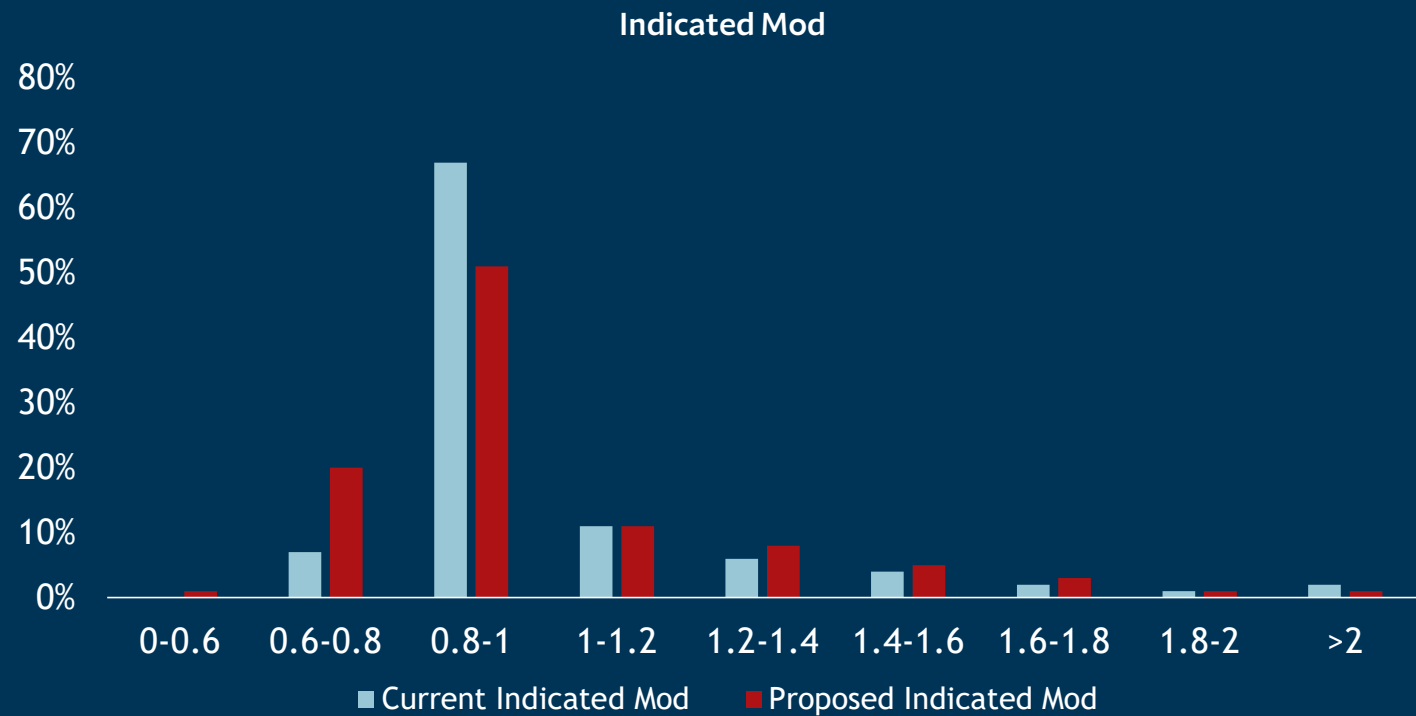
PCRB EXPERIENCE RATING

	Current	New
Plan	Single Split Point	Variable Split Point
Formula	$\frac{A_p \times C + E \times C \times L + E(1.000 - C)}{E}$ <p>Ap=Actual Primary Loss, E= Expected Loss, C=Credibility, and L= Limitation Charge</p>	
Eligibility	\$10,000	\$5,000
Credibility	0.283 – 0.938	0.690 – 0.974
Expected Loss Range	10,706 – 5,806,852	5,000 – 4,338,871
Split Points	Single (1): \$42,500	Variable (88): \$10,000 – \$300,000
Med-Only Claims	100%	100%
Capping %	+/-25%	Max Mod and 40% swing limit (2-year Transition Period*)
Secondary Capping	Yes (Rule #2)	Eliminate (After Transition Period)*

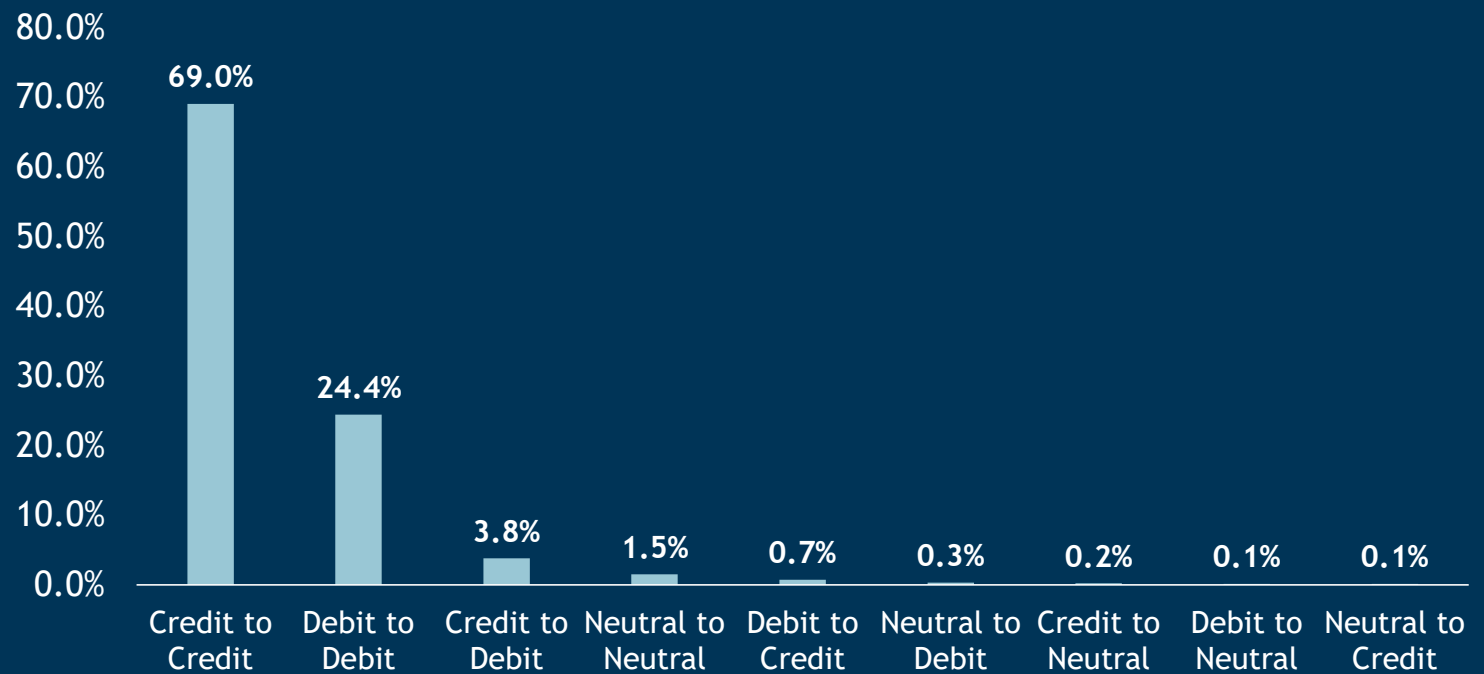
*Transition Period: The new Max Mod will apply, however the current capping rules (+/-25% swing limits and secondary capping will also apply for a 2-year period to ensure mod stability during the transition to the new plan.



Distribution of Current and Proposed Mods



Change in Mod Type



PCRB

PENNSYLVANIA

Compensation Rating Bureau

PENNSYLVANIA COMPENSATION RATING BUREAU

EXPERIENCE RATING CALCULATION

AU

PCRB

PENNSYLVANIA

Compensation Rating Bureau

PENNSYLVANIA COMPENSATION RATING BUREAU

EXPERIENCE RATING CALCULATION

Any Company LLC

PAGE 01

Q12345678

1234567

Mail: 123 Main Street, Philadelphia PA 19111
Oper: 456 Maple Street, Harrisburg PA 17101

POLICY NUMBER

FILE NO.

12345

09/23/23

CARR.

EFF DT OF RATING

Any Company

File Number
Policy Number
Rating Effective Date
Issue Date
Carrier Number
Split Point
Final Modification

1234567
Q12345678
9/23/2023
10/11/2023
23456
15,000
0.867
* Rounding or transition rules apply

Mailing Address
123 Main Street
Philadelphia, PA 19111

Primary Address
456 Maple Street
Harrisburg, PA 17101

PART I EXHIBIT OF ACTUAL LOSSES	POLICY YEAR	LOSSES AS REPORTED		TOTAL	LOSSES AS USED (A)
		INDEMNITY	MEDICAL		
	2020	0	626		
	2021	0	1,059	1,059	1,059
TOTAL		0	1,685	1,685	1,685

PART II EXHIBIT OF LOSSES SUBJECT TO LIMITING VALUES	POLICY YEAR	CLASS CODE	DEATH P	LOSSES AS REPORTED			LOSSES AS USED
				AIM REBER	MULT. ACC.	TYPE INJ	
	2020						
	2021						
TOTAL							

PART III EXHIBIT OF PAYROLLS, EXPECTED LOSSES, AUTHORIZED CLASSES AND RATING VALUES	POLICY YEAR	CLASS CODE	DEATH P	LOSSES AS REPORTED				LOSSES AS USED
				2 - PERM ROLLS	3 - MAJOR EXPOSED	4 - MINOR LOSSES (E)	5 - TEMPORARY CLASSES	
	2020	0652		35,158	4.55	1,600		
	2021	0822		207,216	4.20	8,703		
	2020	0951		327,786	3.48	11,407		
	2021	0953		570,160		21,710		
TOTAL								

Any Company

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Policy Number
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Carrier Number
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Final Modification

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FILE NO.

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PART I EXHIBIT OF ACTUAL LOSSES	POLICY YEAR	LOSSES AS REPORTED		TOTAL	LOSSES AS USED (A)
		INDEMNITY	MEDICAL		
	2020	0	626		
	2021	0	1,059	1,059	1,059
TOTAL		0	1,685	1,685	1,685

PART II EXHIBIT OF LOSSES SUBJECT TO LIMITING VALUES	POLICY YEAR	CLASS CODE	DEATH P	LOSSES AS REPORTED			LOSSES AS USED
				AIM REBER			

Reading the New Worksheet

PCRB EXPERIENCE RATING


 Compensation Rating Bureau
Experience Rating Calculation

Any Company

Mailing Address
123 Main Street
Philadelphia, PA 19111

Primary Address
456 Maple Street
Harrisburg, PA 17101

File Number 1234567
Policy Number Q12345678
Rating Effective Date 9/23/2023
Issue Date 10/11/2023
Carrier Number 23456
Split Point 15,000
Final Modification 0.867
* Capping or transition rules applied

Experience Rating Calculation

Any Company

Mailing Address
123 Main Street
Philadelphia, PA 19111

Primary Address
456 Maple Street
Harrisburg, PA 17101

File Number 1234567
Policy Number Q12345678
Rating Effective Date 9/23/2023
Issue Date 10/11/2023
Carrier Number 23456
Split Point 15,000
Final Modification 0.867
* Capping or transition rules applied

Message

Ap: Actual Primary Losses

1,685

C: Credibility

0.697

+

E: Expected Losses

21,713

L: Limit Charge

0.7314

C: Credibility

0.697

)

+

E: Expected Losses

21,713

(1 -

C: Credibility

0.697

)

Indicated Mod

0.867

all divided by **E: Expected Losses** 21,713

* If the final mod differs from the indicated mod, capping has been applied.

Policy Period 3/23/2021 - 3/22/2022 Policy: A00001234567				Policy Period 3/23/2021 - 3/22/2022 Actual Losses			
Claim Nbr	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Loss	Actual Primary Loss
A00001234568		6	CLOSED	0	671	671	671
A00001234569		6	CLOSED	0	388	388	388
2 TOTAL				0	1,059	1,059	1,059

* If the final mod differs from the indicated mod, capping has been applied.

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Philadelphia PA 19103 | www.pcrb.com



Reading the New Worksheet

PCRB EXPERIENCE RATING

Experience Period Totals

Number of Claims
3

Actual Losses
1,685

Loss Free Mod
0.813

Maximum Mod
1.969

Authorized Classes	Description	Loss Cost
0652	Carpentry - Residential	5.13
0822	Telecommuting Clerical Employees	0.06
0951	Salesperson - Outside	0.15
0953	Office	0.06



Experience Rating Calculation

Any Company
Mailing Address
123 Main Street
Philadelphia, PA 19111

File Number 1234567
Policy Number Q12345678
Rating Effective Date 9/23/2023
Issue Date 10/11/2023
Carrier Number 23456
Split Point 15,000
Modification 0.867
* Capping or transition rules applied

Expected Losses 1,713
C: Credibility 0.697
Indicated Mod 0.867
Formula: $1,713 * (1 - 0.697) = 0.867$

Maximum Mod 1.969

Loss Cost
5.13
0.06
0.15
0.06

Claims and Actual Losses

3/23/2020 - 3/22/2021 Actual Losses

Open/Closed	Indemnity	Medical	Actual Loss	Actual Primary Loss
0	0	0	0	0
0	0	0	0	0

Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0652	01	35,158	4.55	1,600
TOTAL		35,158		1,600

Policy Period 3/23/2020 - 3/22/2021 Policy: Q23456789 Carrier: 23456				
Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0652	01	207,216	4.20	8,703
0953	01	901	0.06	1
TOTAL		208,117		8,704

Policy Period 3/23/2020 - 3/22/2021 Actual Losses						
Claim Nbr	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Loss
A00001234567		6	CLOSED	0	626	626
1	TOTAL			0	626	626

* 1=Death, 2=Permanent Total, 3=Major, 4=Minor, 5=Temporary, 6=Medical Only

Policy Period 3/23/2021 - 3/22/2022 Policy: Q23456789 Carrier: 23456				
Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0652	01	327,786	3.48	11,407
0953	01	4,252	0.05	2
TOTAL		332,038		11,409

Policy Period 3/23/2021 - 3/22/2022 Actual Losses						
Claim Nbr	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Loss
A00001234568		6	CLOSED	0	671	671
A00001234569		6	CLOSED	0	388	388
2	TOTAL			0	1,059	1,059

* If the final mod differs from the indicated mod, capping has been applied.

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Reading the New Worksheet

PCRB EXPERIENCE RATING

Exhibit of Exposure and Expected Losses

Policy Period 3/23/2019 - 3/22/2020 Policy: Q23456789 Carrier: 23456				
Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0652	01	35,158	4.55	1,600
TOTAL		35,158		1,600

Policy Period 3/23/2020 - 3/22/2021 Policy: Q23456789 Carrier: 23456				
Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0652	01	207,216	4.20	8,703
0953	01	901	0.06	1
TOTAL		208,117		8,704

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Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0652	01	327,786	3.48	11,407
0953	01	4,252	0.05	2
TOTAL		332,038		11,409

Exhibit of Claims and Actual Losses

Policy Period 3/23/2019 - 3/22/2020 Actual Losses							
Claim Nbr	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Loss	Actual Primary Loss
0 TOTAL				0	0	0	0

Policy Period 3/23/2020 - 3/22/2021 Actual Losses							
Claim Nbr	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Loss	Actual Primary Loss
A00001234567		6	CLOSED	0	626	626	626
1 TOTAL				0	626	626	626

* 1=Death, 2=Permanent Total, 3=Major, 4=Minor, 5=Temporary, 6=Medical Only

Policy Period 3/23/2021 - 3/22/2022 Actual Losses							
Claim Nbr	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Loss	Actual Primary Loss
A00001234568		6	CLOSED	0	671	671	671
A00001234569		6	CLOSED	0	388	388	388
2 TOTAL				0	1,059	1,059	1,059

PCRB
PENNSYLVANIA
Compensation Rating Bureau

Calculation

Number 1234567
Policy Number Q12345678
Effective Date 9/23/2023
Carrier 23456
Exposure 15,000
Expected Loss Rate 0.867
* Capping or transition rules applied

Expected Losses 13,713 * (1 - 0.697) Indicated Mod = 0.867

Maximum Mod 1.969

Loss Cost
5.13
0.06
0.15
0.06

Claims and Actual Losses			
3/22/2020	Actual Losses	Actual Loss	Actual Primary Loss
0	0	0	0

Policy Period 3/23/2021 - 3/22/2022 Actual Losses							
Claim Nbr	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Loss	Actual Primary Loss
A00001234567		6	CLOSED	0	626	626	626
1 TOTAL				0	626	626	626

* 1=Death, 2=Permanent Total, 3=Major, 4=Minor, 5=Temporary, 6=Medical Only

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Claim Nbr	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Loss	Actual Primary Loss
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A00001234569		6	CLOSED	0	388	388	388
2 TOTAL				0	1,059	1,059	1,059

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New vs. Old

PCRB EXPERIENCE RATING

$$\begin{aligned}
 & \text{Ap: Actual Primary Losses} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \\
 & 1,685 * 0.697 + 21,713 * (0.7314 * 0.697) + 21,713 * (1 - 0.697) = \text{Indicated Mod} \\
 & \text{all divided by E: Expected Losses } 21,713 = 0.867
 \end{aligned}$$



ACTUAL LOSSES		EXPECTED LOSSES		CREDIBILITY		LIMIT CHARGE		1.000-C	IND. MOD	FINAL MOD
A	1,685	E	21,713	C	0.319	L*C	0.172	0.681	0.878	0.878

$((A * C + E * (L * C)) + E (1.000 - C)) / E = \text{IND. MOD}$, FINAL MOD = IND. MOD CAPPED TO +/- 25 % OF PRIOR MOD



Glossary

		Current	Revised
Actual Losses (A)	Total reported losses from all claims (indemnity and medical) as of the valuation date	Losses As Reported	Actual Losses
Actual Primary Losses (Ap)	Total reported losses from all claims limited by the split point for individual claims that exceed this amount	Losses As Used	Actual Primary Losses
Authorized Classes	Only the classifications issued by the PCRB shall be used in auditing the payroll for that employer	Authorized Classes	Authorized Classes
Class Code	Pennsylvania's class codes are numerical codes that insurers use to classify employer's exposure to risk	Class Code	Class Code
Credibility (C)	Credibility refers to the statistical weight or level of confidence assigned to an employer's own loss experience	Credibility	Credibility
Expected Loss Rate	Expected Loss Rate reflects the anticipated average cost of benefits, per \$100 of payroll, for a classification during the experience period	Expected Loss Factor	Expected Loss Rate
Expected Losses (E)	Expected losses are determined by multiplying total payroll (per 100) for each classification by the Expected Loss Rate factors	Expected Losses	Expected Losses
Final Modification	Final modification refers to the modification after the application of capping rules	Final Mod	Final Modification
Indicated Modification	Indicated modification refers to the calculated modification derived from the formula before the application of any capping rules	Ind Mod	Indicated Modification
Limitation Charge (L)	Limitation charge is used to divide Expected Loss into primary and excess loss portions	L*C	L
Loss Free Mod	Modification factor assigned to an employer with no losses during the experience rating period	N/A	Loss Free Mod
Max Mod	Highest modification factor that can be assigned to an employer based on a formula specified in the ERP: $1.10 + 0.0004 (E/G)$	N/A	Max Mod
Number of Claims	Total number of claims reported as of the valuation date for the experience period	N/A	Number of Claims
Payrolls	Payroll amounts are shown by classification for the reported policies within the experience period	Payrolls	Payrolls
Premium Adjustment Factors	Premium for the policy may be adjusted by a Pennsylvania Construction Classification Premium Adjustment factor or Certified Safety Committee Credit	N/A	Premium Adjustment Class
Split Point	Split point is a specific dollar threshold used to separate the primary losses from the excess losses when calculating an employer's experience modification factor	Maximum Value	Split Point



New vs. Old – \$15,000 Split Point – 1 x \$1,000 Loss

NEW

$$\begin{array}{l}
 \text{Ap: Actual Primary Losses} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \\
 \boxed{1,000} * \boxed{0.697} + \boxed{21,713} * \left(\boxed{0.7314} * \boxed{0.697} \right) + \boxed{21,713} * \left(1 - \boxed{0.697} \right) \\
 \hline
 \text{all divided by E: Expected Losses} \quad \boxed{21,713} \\
 \text{697} \quad \text{17,648} \\
 \text{Indicated Mod} = \boxed{0.845}
 \end{array}$$

Percent Change	-2.6%
Change	-0.023

OLD

$$\begin{array}{l}
 \text{Ap: Actual Primary Losses} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \\
 \boxed{1,000} * \boxed{0.319} + \boxed{21,713} * \left(\boxed{0.538} * \boxed{0.319} \right) + \boxed{21,713} * \left(1 - \boxed{0.319} \right) \\
 \hline
 \text{all divided by E: Expected Losses} \quad \boxed{21,713} \\
 \text{319} \quad \text{18,516} \\
 \text{Indicated Mod} = \boxed{0.867}
 \end{array}$$

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New vs. Old – \$15,000 Split Point with 10 x \$1,000 Losses

NEW

$$\begin{aligned}
 & \text{Ap: Actual Primary Losses} \quad \text{C: Credibility} \\
 & \boxed{10,000} * \boxed{0.697} = \boxed{6,970} \\
 & + \left(\text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \right) \\
 & \boxed{21,713} * \left(\boxed{0.7314} * \boxed{0.697} \right) + \boxed{21,713} * \left(\boxed{1 - 0.697} \right) = \boxed{17,648} \\
 & \text{all divided by E: Expected Losses} \quad \boxed{21,713} \\
 & \text{Indicated Mod} = \boxed{1.134}
 \end{aligned}$$

Percent Change	13.4%
Change	0.134

OLD

$$\begin{aligned}
 & \text{Ap: Actual Primary Losses} \quad \text{C: Credibility} \\
 & \boxed{10,000} * \boxed{0.319} = \boxed{3,190} \\
 & + \left(\text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \right) \\
 & \boxed{21,713} * \left(\boxed{0.538} * \boxed{0.319} \right) + \boxed{21,713} * \left(\boxed{1 - 0.319} \right) = \boxed{18,513} \\
 & \text{all divided by E: Expected Losses} \quad \boxed{21,713} \\
 & \text{Indicated Mod} = \boxed{1.000}
 \end{aligned}$$

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New vs. Old – \$15,000 Split Point Add a \$100,000 Loss

NEW

$$\begin{aligned}
 & \left(\frac{\text{Ap: Actual Primary Losses}}{\text{C: Credibility}} \right) + \left(\frac{\text{E: Expected Losses} \times \left(\frac{\text{L: Limit Charge}}{\text{C: Credibility}} \right) + \text{E: Expected Losses} \times \left(1 - \frac{\text{C: Credibility}}{\text{C: Credibility}} \right)}{\text{E: Expected Losses}} \right) = \text{Indicated Mod} \\
 & \left(\frac{25,000}{0.697} \right) + \left(\frac{21,713 \times \left(\frac{0.7314}{0.697} \right) + 21,713 \times \left(1 - \frac{0.697}{0.697} \right)}{21,713} \right) = 1.615
 \end{aligned}$$

all divided by E: Expected Losses

Percent Change	-0.5%
Change	-0.009

OLD

$$\begin{aligned}
 & \left(\frac{\text{Ap: Actual Primary Losses}}{\text{C: Credibility}} \right) + \left(\frac{\text{E: Expected Losses} \times \left(\frac{\text{L: Limit Charge}}{\text{C: Credibility}} \right) + \text{E: Expected Losses} \times \left(1 - \frac{\text{C: Credibility}}{\text{C: Credibility}} \right)}{\text{E: Expected Losses}} \right) = \text{Indicated Mod} \\
 & \left(\frac{52,500}{0.319} \right) + \left(\frac{21,713 \times \left(\frac{0.538}{0.319} \right) + 21,713 \times \left(1 - \frac{0.319}{0.319} \right)}{21,713} \right) = 1.624
 \end{aligned}$$

all divided by E: Expected Losses

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New vs. Old – \$43,000 Split Point – 5 x \$5,000 Losses

NEW

$$\begin{array}{l}
 \text{Ap: Actual Primary Losses} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \\
 \boxed{25,000} \quad * \quad \boxed{0.740} \quad + \quad \boxed{152,940} \quad * \quad \left(\boxed{0.5355} \quad * \quad \boxed{0.74} \right) \quad + \quad \boxed{152,940} \quad * \quad \left(1 - \boxed{0.74} \right) \\
 \hline
 \text{all divided by E: Expected Losses} \quad \boxed{152,940} \\
 \text{18,500} \quad \text{100,370} \\
 \hline
 = \text{Indicated Mod} \quad \boxed{0.777}
 \end{array}$$

Percent Change	-3.4%
Change	-0.028

OLD

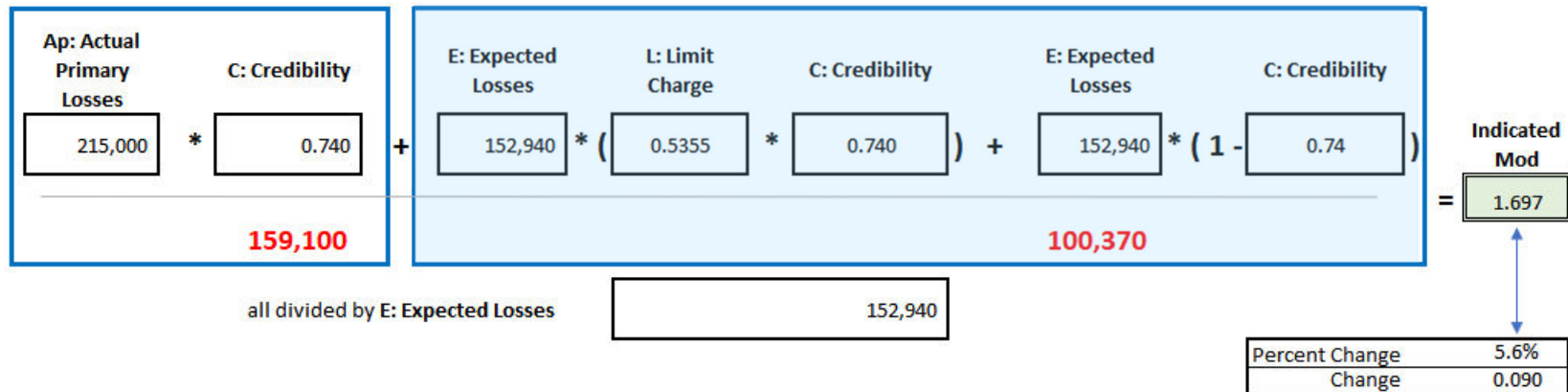
$$\begin{array}{l}
 \text{Ap: Actual Primary Losses} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \\
 \boxed{25,000} \quad * \quad \boxed{0.654} \quad + \quad \boxed{152,940} \quad * \quad \left(\boxed{0.538} \quad * \quad \boxed{0.654} \right) \quad + \quad \boxed{152,940} \quad * \quad \left(1 - \boxed{0.654} \right) \\
 \hline
 \text{all divided by E: Expected Losses} \quad \boxed{152,940} \\
 \text{16,350} \quad \text{106,739} \\
 \hline
 = \text{Indicated Mod} \quad \boxed{0.805}
 \end{array}$$

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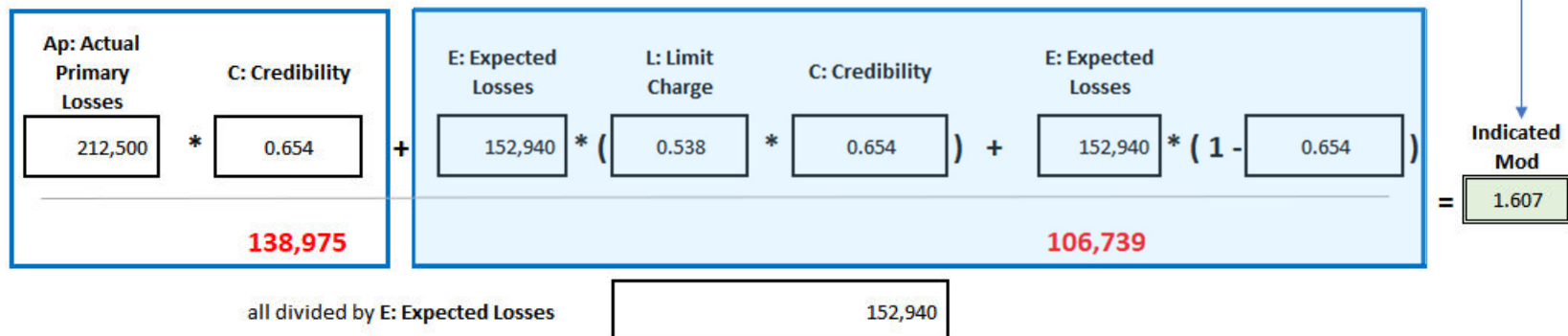


New vs. Old – \$43,000 Split Point with 5 x \$50,000 Losses

NEW



OLD



IA&B



New vs. Old – \$75,000 Split Point (10 x 25K Losses)

NEW

$$\begin{array}{l}
 \text{Ap: Actual Primary Losses} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \\
 \boxed{250,000} * \boxed{0.788} + \boxed{427,017} * \left(\boxed{0.4068} * \boxed{0.788} \right) + \boxed{427,017} * \left(1 - \boxed{0.788} \right) = \boxed{0.994} \\
 \hline
 \text{all divided by E: Expected Losses} \quad \boxed{427,017} \\
 \text{197,000} \quad \text{227,411}
 \end{array}$$

Percent Change	-9.1%
Change	-0.100

OLD

$$\begin{array}{l}
 \text{Ap: Actual Primary Losses} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \\
 \boxed{250,000} * \boxed{0.759} + \boxed{427,017} * \left(\boxed{0.538} * \boxed{0.759} \right) + \boxed{427,017} * \left(1 - \boxed{0.759} \right) = \boxed{1.094} \\
 \hline
 \text{all divided by E: Expected Losses} \quad \boxed{427,017} \\
 \text{189,750} \quad \text{277,280}
 \end{array}$$

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New vs. Old – \$75,000 Split Point (5 x 50K Losses)

NEW

$$\begin{aligned}
 & \text{Ap: Actual Primary Losses} \times \text{C: Credibility} + \frac{\text{E: Expected Losses} \times \left(\text{L: Limit Charge} \times \text{C: Credibility} \right) + \text{E: Expected Losses} \times \left(1 - \text{C: Credibility} \right)}{\text{all divided by E: Expected Losses}} = \text{Indicated Mod} \\
 & 250,000 \times 0.788 + \frac{427,017 \times (0.4068 \times 0.788) + 427,017 \times (1 - 0.788)}{427,017} = 0.994
 \end{aligned}$$

197,000 227,411

Percent Change	-3.2%
Change	0.033

OLD

$$\begin{aligned}
 & \text{Ap: Actual Primary Losses} \times \text{C: Credibility} + \frac{\text{E: Expected Losses} \times \left(\text{L: Limit Charge} \times \text{C: Credibility} \right) + \text{E: Expected Losses} \times \left(1 - \text{C: Credibility} \right)}{\text{all divided by E: Expected Losses}} = \text{Indicated Mod} \\
 & 212,500 \times 0.759 + \frac{427,017 \times (0.538 \times 0.759) + 427,017 \times (1 - 0.759)}{427,017} = 1.027
 \end{aligned}$$

161,288 277,280

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New vs. Old – \$75,000 Split Point (5 x 100K Losses)

NEW

Diagram illustrating the calculation of the Indicated Mod:

Left Box (Yellow):

- Ap: Actual Primary Losses: 375,000
- C: Credibility: 0.788
- Calculation: $375,000 \times 0.788 = 295,500$

Right Box (Blue):

- E: Expected Losses: 427,017
- L: Limit Charge: 0.4068
- C: Credibility: 0.788
- Calculation: $427,017 \times (0.4068 \times 0.788) + 427,017 \times (1 - 0.788) = 227,411$

Final Calculation:

all divided by E: Expected Losses: 427,017

Indicated Mod: 1.225

OLD

Diagram illustrating the calculation of the Indicated Mod:

$$\frac{212,500 \times 0.759 + 427,017 \times (0.538 \times 0.759) + 427,017 \times (1 - 0.759)}{427,017} = 1.027$$

The diagram shows the following components:

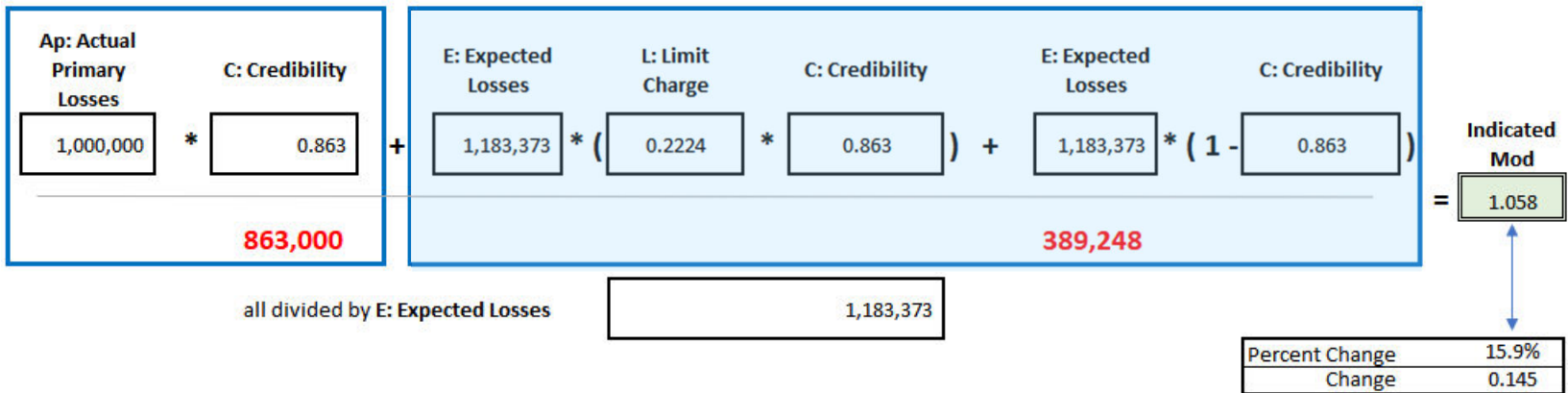
- Left Box (Blue):**
 - Ap: Actual Primary Losses: 212,500
 - C: Credibility: 0.759
 - Result: 161,288
- Right Box (Light Blue):**
 - E: Expected Losses: 427,017
 - L: Limit Charge: 0.538
 - C: Credibility: 0.759
 - Result: 277,280
- Final Calculation:**
 - all divided by E: Expected Losses: 427,017
 - Indicated Mod: 1.027

NEW

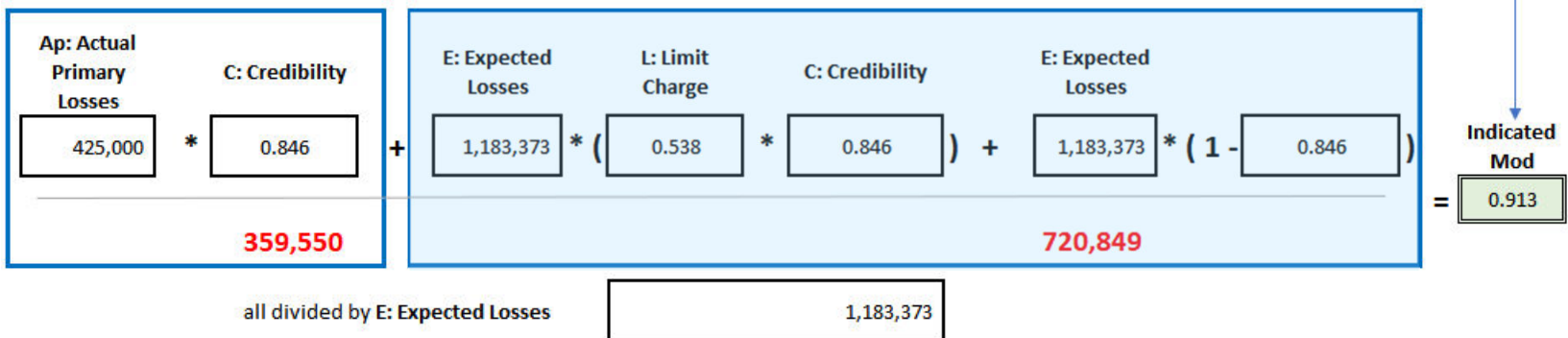


New vs. Old – \$166,000 Split Point (10 x 100K Loss)

NEW



OLD



New vs. Old – \$166,000 Split Point (20 x 50K Loss)

NEW

Diagram illustrating the calculation of the Indicated Mod:

Left side calculation:

$$\text{Ap: Actual Primary Losses} \times \text{C: Credibility} = 1,000,000 \times 0.863 = 863,000$$

Right side calculation:

$$\text{E: Expected Losses} \times (\text{L: Limit Charge} \times \text{C: Credibility}) + \text{E: Expected Losses} \times (1 - \text{C: Credibility}) = 1,183,373 \times (0.2224 \times 0.863) + 1,183,373 \times (1 - 0.863) = 389,248$$

Final calculation:

$$\frac{863,000 + 389,248}{1,183,373} = 1.058$$

The final result is the Indicated Mod: 1.058.

OLD

$$\frac{\text{Ap: Actual Primary Losses} \times \text{C: Credibility} + \text{E: Expected Losses} \times \text{L: Limit Charge} \times \text{C: Credibility} + \text{E: Expected Losses} \times (1 - \text{C: Credibility})}{\text{all divided by E: Expected Losses}} = \text{Indicated Mod}$$

$$\frac{850,000 \times 0.846 + 1,183,373 \times 0.538 \times 0.846 + 1,183,373 \times (1 - 0.846)}{1,183,373} = 1.217$$

PCRB Experience Rating Calculator

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PCRB EXPERIENCE RATING

[Help Guide](#)

Rating Calculation

State: PENNSYLVANIA
Insured's Name: TEST THIS TOOL
Rating Effective Date: 04/15/2024

[Print](#)

Experience Rating Totals

Old Plan	
Total Incurred Losses	\$30,000
Losses Subject to Limitation	\$0
Split Point	\$42,500

New Plan	
Total Incurred Losses	\$30,000
Losses Subject to Limitation	\$0
Split Point	\$21,000

Experience Modification Calculation

Actual Primary Losses (Ap)	\$30,000
Expected Losses (E)	\$40,600
Credibility (C)	0.388
Limit Charge (L)	0.5381
Indicated Modification (M)	1.107

Actual Primary Losses (Ap)	\$30,000
Expected Losses (E)	\$40,600
Credibility (C)	0.703
Limit Charge (L)	0.6774
Indicated Modification (M)	1.293

$$[Ap \times C + E \times (L \times C) + E (1.0 - C)] / E$$

Final Experience Modification

Prior Modification

[Recalculate Mod](#)

Final Mod

1.107

1.293

* Capping or transitional rules apply.

[Losses](#)

[Start Over](#)



PCRB Experience Rating Information



Experience Rating Plan

Experience rating is a procedure utilizing past developed experience of a risk to forecast or predict future experience. It is a mathematical method of modifying future premiums by comparing the actual incurred loss experience of a risk to the average expected loss experience for that risk's classification(s) during the experience period. Under experience rating, risk's maintaining favorable loss levels in prior years receive premium reductions (credit modifications) while those with poor past loss experience are charged increased premiums (debit modifications). Experience rating is a mandatory plan applying to all risks that qualify.

The information and resources on this page are intended to provide an overview of the proposed April 1, 2024 Pennsylvania Experience Rating Plan changes.

More resources

[Rating Values](#)
[Circulars](#)
[Manuals](#)
[Filings](#)

Announcements

The latest news and announcements about the Pennsylvania Experience Rating Plan.

Webinar Presentation and Recording

Experience rating industry filing briefing webinar presentation from July 19, 2023 (including webinar video).

Experience Rating Plan Fact Sheet

Review Experience Rating Plan comparisons and a glossary of terms for the 2024 mod worksheet.

Experience Rating Plan Pamphlet

Overview of the changes in the Experience Rating Plan.

Frequently Asked Questions (FAQ)

Common questions and answers related to the Experience Rating Plan.

Experience Modification Calculator

Enables users to calculate an estimated experience modification factor and compare calculations between the old and new plans. (See [User Guide](#))

