



NATALIE A. HUBLEY
PRESIDENT

COMMONWEALTH AUTOMOBILE REINSURERS

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617-338-4000

NOTICE OF MEETING

ACTUARIAL COMMITTEE

A meeting of the Actuarial Committee will be held at the Automobile Insurers Bureau Conference Center at 101 Arch Street, 7th Floor, Boston, on

THURSDAY, NOVEMBER 1, 2018 AT 10:30 A.M.

MEMBERS OF THE COMMITTEE

Ms. Lynellen Ramirez – Chair
Arbella Insurance Group

Mr. Geoffrey Arnold
Ms. Sarah Clemens
Mr. Hall Crowder
Mr. Christopher Dupill
Mr. Glenn Hiltbold
Mr. Greg Karabinos
Mr. Adam Kreuser
Mr. Todd Lehmann
Ms. Meredith Woodcock

Plymouth Rock Assurance Corporation
MAPFRE U.S.A. Corporation
Allstate Insurance Company
EM Freedman Insurance Agency, Inc.
Safety Insurance Company
The Norfolk & Dedham Group
The Hanover Insurance Company
Quincy Mutual Group
Liberty Mutual Group

AGENDA

AC

18.01 Records of Previous Meeting

The Records of the Actuarial Committee meeting of September 11, 2018 should be read and approved.

AC

18.03 CAR Conflict of Interest Policy

The Chair will read a statement relative to CAR's Conflict of Interest Policy.

AC

18.04 Quota Share Credits for Policies Effective April 1, 2019 and Later

At its September 11, 2018 meeting, the Committee voted to recommend that Quota Share credits for policies effective April 1, 2019 and subsequent be established based upon the Allstate proposal using a 5 year transition to eliminate a credit that is formulaically indicated to go to zero. The motion included a recommendation to evaluate the size of the residual market quarterly to monitor the impact of the change to credit factors. Staff was directed to update final credit factors using data reported through August, as has been done in prior years. Modifications to Rule 29, reflective of the Committee's recommendation, have been included for Committee consideration. (Docket #AC18.04, Exhibits #11 and 12)

Plymouth Rock Assurance Corporation has submitted a statement in opposition to the Actuarial Committee's proposal, and is requesting that the Committee consider an alternative proposal. (Docket #AC18.04, Exhibit #13)

AC

18.05 Potential Impact of Registry System Changes on Quota Share Credits

Staff will report on the status of the impacts of the Registry of Motor Vehicles system issues on company reported data due to the recent migration to the ATLAS system.

Other Business

To transact any other business that may properly come before this Committee.

Executive Session

The Actuarial Committee may convene in Executive Session in accordance with the provisions of G.L. c. 30A, § 21.

TIMOTHY GALLIGAN
Actuarial/Statistical Services Director

Attachments

Boston, Massachusetts
October 19, 2018

**Commonwealth Automobile Reinsurers
4/1/2019 Credit Offer - Data Through August, 2018 (2018 Rates)
Summary by Rate Class**

4/1/2018 Credit Factors

4/1/19 Indicated - Allstate Proposal (5 Year)

| <u>Rate Class</u> | <u>Total Mkt Exposures</u> | <u>Credit Eligible Exposures</u> | <u>Potential Credit Premium</u> | <u>Credit Eligible Exposures</u> | <u>%Δ</u> | <u>Potential Credit Premium</u> | <u>%Δ</u> |
|-------------------|----------------------------|----------------------------------|---------------------------------|----------------------------------|-------------|---------------------------------|---------------|
| 10 | 3,136,725 | 309,113 | 553,537,844 | 309,113 | 0.0% | 465,157,760 | -16.0% |
| 15 | 896,645 | 9,605 | 15,759,542 | 9,605 | 0.0% | 13,383,500 | -15.1% |
| 17 | 172,781 | 75,755 | 170,784,693 | 75,755 | 0.0% | 143,282,369 | -16.1% |
| 18 | 55,759 | 1,226 | 2,265,903 | 1,940 | 58.3% | 3,661,283 | 61.6% |
| 20 | 38,249 | 37,352 | 156,046,798 | 37,352 | 0.0% | 133,236,775 | -14.6% |
| 21 | 14,885 | 5,362 | 15,831,445 | 5,362 | 0.0% | 13,652,476 | -13.8% |
| 25 | 84,168 | 5,137 | 23,136,708 | 5,137 | 0.0% | 20,068,780 | -13.3% |
| 26 | 61,407 | 412 | 1,570,923 | 412 | 0.0% | 1,256,738 | -20.0% |
| 30 | 62,523 | 620 | 1,125,954 | 620 | 0.0% | 940,059 | -16.5% |
| M/M | 172,631 | 20,045 | 5,634,481 | 20,045 | 0.0% | 4,672,546 | -17.1% |
| Total | 4,695,773 | 464,627 | 945,694,292 | 465,341 | 0.2% | 799,312,286 | -15.5% |

% of Total Mkt. Exp. **9.9%**

9.9%

**Estimated Credits Used
Credit Utilization 901,984,512
95.4%**

**Estimated Credits Used
Credit Utilization 761,391,590
95.3%**

| <u>Residual Mark Share Group</u> | <u>Keep Out Credits</u> |
|----------------------------------|-------------------------|
| 0 | 0.00 |
| 1 | 1.00 |
| 2 | 1.00 |
| 3 | 1.00 |
| 4 | 1.25 |
| 5 | 1.50 |
| 6 | 1.75 |
| 7 | 2.00 |
| 8 | 2.25 |
| 9 | 2.50 |

Commonwealth Automobile Reinsurers
4/1/2019 Credit Offer - Data Through August, 2018 (2018 Rates)
Summary by Territory

4/1/2018 Credit Factors

4/1/19 - Allstate Proposal (5 Year)

| <u>Territory</u> | <u>Total Mkt Exposures</u> | <u>Credit Eligible Exposures</u> | <u>Potential Credit Premium</u> | <u>Credit Eligible Exposures</u> | <u>%Δ</u> | <u>Potential Credit Premium</u> | <u>%Δ</u> |
|-----------------------------|----------------------------|----------------------------------|---------------------------------|----------------------------------|-------------|---------------------------------|---------------|
| 1 | 187,446 | 0 | 0 | 0 | 0.0% | 0 | 0.0% |
| 2 | 251,379 | 1,152 | 2,989,689 | 1,152 | 0.0% | 2,391,751 | -20.0% |
| 3 | 539,738 | 2,816 | 7,766,742 | 2,816 | 0.0% | 6,213,394 | -20.0% |
| 4 | 342,309 | 1,548 | 4,690,487 | 1,548 | 0.0% | 3,752,389 | -20.0% |
| 5 | 530,748 | 3,593 | 10,417,015 | 3,593 | 0.0% | 8,333,612 | -20.0% |
| 6 | 354,135 | 1,847 | 5,650,758 | 1,847 | 0.0% | 4,520,607 | -20.0% |
| 7 | 363,578 | 15,648 | 30,713,387 | 15,648 | 0.0% | 24,570,710 | -20.0% |
| 8 | 206,593 | 8,074 | 17,411,988 | 8,074 | 0.0% | 14,846,816 | -14.7% |
| 9 | 208,050 | 10,451 | 23,542,792 | 10,451 | 0.0% | 18,834,234 | -20.0% |
| 10 | 100,155 | 4,909 | 11,036,073 | 4,909 | 0.0% | 9,370,787 | -15.1% |
| 11 | 74,441 | 598 | 2,376,029 | 598 | 0.0% | 1,900,823 | -20.0% |
| 12 | 200,104 | 8,651 | 22,310,060 | 8,651 | 0.0% | 19,234,816 | -13.8% |
| 13 | 223,931 | 20,879 | 38,476,672 | 20,879 | 0.0% | 33,401,714 | -13.2% |
| 14 | 75,880 | 7,786 | 20,253,319 | 7,786 | 0.0% | 17,258,365 | -14.8% |
| 15 | 27,348 | 2,983 | 7,589,927 | 2,983 | 0.0% | 6,197,442 | -18.3% |
| 16 | 14,995 | 13,427 | 24,488,306 | 13,427 | 0.0% | 19,386,378 | -20.8% |
| 17 | 17,813 | 536 | 1,472,611 | 536 | 0.0% | 1,178,089 | -20.0% |
| 18 | 16,501 | 13,844 | 25,940,389 | 13,844 | 0.0% | 20,752,311 | -20.0% |
| 19 | 16,266 | 621 | 1,936,581 | 621 | 0.0% | 1,892,244 | -2.3% |
| 20 | 19,023 | 15,349 | 32,474,330 | 15,553 | 1.3% | 26,725,863 | -17.7% |
| 21 | 49,682 | 48,463 | 117,964,593 | 48,463 | 0.0% | 114,092,152 | -3.3% |
| 22 | 16,553 | 16,553 | 41,653,826 | 16,553 | 0.0% | 40,614,471 | -2.5% |
| 23 | 45,101 | 2,941 | 8,559,863 | 2,941 | 0.0% | 6,847,891 | -20.0% |
| 24 | 25,799 | 1,234 | 2,955,981 | 1,234 | 0.0% | 2,688,543 | -9.0% |
| 25 | 17,921 | 618 | 2,076,221 | 618 | 0.0% | 1,784,252 | -14.1% |
| 26 | 23,217 | 1,961 | 5,858,661 | 1,961 | 0.0% | 4,404,328 | -24.8% |
| 27 | 428,034 | 2,016 | 4,361,104 | 2,016 | 0.0% | 3,488,884 | -20.0% |
| 40 | 21,966 | 17,586 | 27,448,355 | 17,586 | 0.0% | 21,697,980 | -20.9% |
| 41 | 62,813 | 53,179 | 72,731,766 | 53,179 | 0.0% | 58,983,604 | -18.9% |
| 42 | 80,346 | 64,519 | 125,357,732 | 64,519 | 0.0% | 100,286,186 | -20.0% |
| 43 | 50,444 | 42,081 | 83,800,389 | 42,081 | 0.0% | 68,317,835 | -18.5% |
| 44 | 38,685 | 34,177 | 53,668,964 | 34,177 | 0.0% | 43,342,475 | -19.2% |
| 45 | 53,421 | 44,589 | 107,719,683 | 45,099 | 1.1% | 92,001,342 | -14.6% |
| 99 | 11,360 | 0 | 0 | 0 | 0.0% | 0 | 0.0% |
| Total | 4,695,773 | 464,627 | 945,694,292 | 465,341 | 0.2% | 799,312,286 | -15.5% |
| % of Total Mkt. Exp. | | 9.9% | | 9.9% | | | |

| <u>Residual Mark Share Group</u> | <u>Keep Out Credits</u> |
|----------------------------------|-------------------------|
| 0 | 0.00 |
| 1 | 1.00 |
| 2 | 1.00 |
| 3 | 1.00 |
| 4 | 1.25 |
| 5 | 1.50 |
| 6 | 1.75 |
| 7 | 2.00 |
| 8 | 2.25 |
| 9 | 2.50 |

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class 10

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits | |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|--------------------|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | | |
| 1 | 0.74% | 0.74% | 0.65% | 0 | 0 | 0 | 0 | - | - | - | 0 | 0.00 | |
| 2 | 0.77% | 0.77% | 0.73% | 0 | 0 | 0 | 0 | - | - | - | 1 | 1.00 | |
| 3 | 0.79% | 0.83% | 0.81% | 0 | 0 | 0 | 0 | - | - | - | 2 | 1.00 | |
| 4 | 0.70% | 0.75% | 0.70% | 0 | 0 | 0 | 0 | - | - | - | 3 | 1.00 | |
| 5 | 1.07% | 1.14% | 1.08% | 0 | 0 | 0 | 0 | - | - | - | 4 | 1.25 | |
| 6 | 1.08% | 1.07% | 1.00% | 0 | 0 | 0 | 0 | - | - | - | 5 | 1.50 | |
| 7 | 1.45% | 1.49% | 1.34% | 0 | 0 | 0 | 0 | - | - | - | 6 | 1.75 | |
| 8 | 1.30% | 1.35% | 1.25% | 0 | 0 | 0 | 0 | - | - | - | 7 | 2.00 | |
| 9 | 1.57% | 1.62% | 1.55% | 0 | 0 | 0 | 0 | - | - | - | 8 | 2.25 | |
| 10 | 1.60% | 1.63% | 1.50% | 0 | 0 | 0 | 0 | - | - | - | 9 | 2.50 | |
| 11 | 1.27% | 1.27% | 1.21% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 12 | 1.55% | 1.56% | 1.40% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 13 | 2.54% | 2.64% | 2.53% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 14 | 2.60% | 2.84% | 2.55% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 15 | 2.45% | 2.78% | 2.60% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 16 | 3.63% | 3.47% | 3.42% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 17 | 1.66% | 1.70% | 1.34% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 18 | 3.78% | 3.29% | 3.05% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 19 | 2.49% | 2.33% | 2.42% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 20 | 4.97% | 4.90% | 4.55% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> | |
| 21 | 5.41% | 5.85% | 5.22% | 1 | 1 | 1 | 1 | 1.00 | 1.00 | - | | | |
| 22 | 6.46% | 7.63% | 6.79% | 1 | 1 | 1 | 1 | 1.00 | 1.00 | - | 2019 | 465,157,760 | 309,113 |
| 23 | 1.58% | 1.62% | 1.53% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 24 | 1.34% | 1.27% | 1.12% | 0 | 0 | 0 | 0 | - | - | - | 2018 | 553,537,844 | 309,113 |
| 25 | 1.29% | 1.30% | 0.92% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 26 | 2.18% | 2.20% | 1.97% | 0 | 0 | 0 | 0 | - | - | - | | <u>Difference:</u> | <u>Difference:</u> |
| 27 | 0.57% | 0.60% | 0.54% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 40 | 2.10% | 2.59% | 2.96% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | (88,380,085) | - |
| 41 | 2.49% | 2.59% | 2.23% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 42 | 2.11% | 2.01% | 1.82% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Percent Change:</u> | <u>Percent Change:</u> | |
| 43 | 2.53% | 2.64% | 2.65% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 44 | 4.65% | 4.55% | 4.22% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | -16.0% | 0.0% |
| 45 | 3.74% | 4.08% | 4.14% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 99 | 0.53% | 0.51% | 0.41% | 0 | 0 | 0 | 0 | - | - | - | | | |
| Tot | 1.40% | 1.46% | 1.36% | | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class 15

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits | |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|-------|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | | |
| 1 | 0.27% | 0.23% | 0.21% | 0 | 0 | 0 | 0 | - | - | - | 0 | 0.00 | |
| 2 | 0.26% | 0.25% | 0.20% | 0 | 0 | 0 | 0 | - | - | - | 1 | 1.00 | |
| 3 | 0.25% | 0.25% | 0.22% | 0 | 0 | 0 | 0 | - | - | - | 2 | 1.00 | |
| 4 | 0.25% | 0.27% | 0.26% | 0 | 0 | 0 | 0 | - | - | - | 3 | 1.00 | |
| 5 | 0.27% | 0.27% | 0.26% | 0 | 0 | 0 | 0 | - | - | - | 4 | 1.25 | |
| 6 | 0.38% | 0.39% | 0.36% | 0 | 0 | 0 | 0 | - | - | - | 5 | 1.50 | |
| 7 | 0.43% | 0.44% | 0.42% | 0 | 0 | 0 | 0 | - | - | - | 6 | 1.75 | |
| 8 | 0.51% | 0.48% | 0.46% | 0 | 0 | 0 | 0 | - | - | - | 7 | 2.00 | |
| 9 | 0.44% | 0.48% | 0.51% | 0 | 0 | 0 | 0 | - | - | - | 8 | 2.25 | |
| 10 | 0.53% | 0.52% | 0.40% | 0 | 0 | 0 | 0 | - | - | - | 9 | 2.50 | |
| 11 | 0.58% | 0.66% | 0.79% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 12 | 0.72% | 0.72% | 0.69% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 13 | 0.98% | 0.95% | 0.94% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 14 | 1.32% | 1.33% | 1.38% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 15 | 1.65% | 1.47% | 1.45% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 16 | 2.41% | 2.84% | 2.10% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 17 | 0.79% | 1.09% | 1.04% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 18 | 1.98% | 2.17% | 1.96% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 19 | 2.09% | 1.81% | 1.55% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 20 | 2.99% | 3.16% | 3.47% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 21 | 4.21% | 4.37% | 4.53% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> | |
| 22 | 5.89% | 6.67% | 6.50% | 1 | 1 | 1 | 1 | 1.00 | 1.00 | - | 2019 | 13,383,500 | 9,605 |
| 23 | 1.06% | 0.94% | 0.96% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 24 | 1.86% | 1.38% | 1.43% | 0 | 0 | 0 | 0 | - | - | - | 2018 | 15,759,542 | 9,605 |
| 25 | 0.80% | 0.58% | 0.76% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 26 | 1.44% | 1.52% | 0.92% | 0 | 0 | 0 | 0 | - | - | - | <u>Difference:</u> | <u>Difference:</u> | |
| 27 | 0.19% | 0.20% | 0.17% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 40 | 1.22% | 1.22% | 1.49% | 0 | 0 | 0 | 0 | - | - | - | (2,376,042) | - | |
| 41 | 0.81% | 0.80% | 0.75% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 42 | 1.55% | 1.38% | 1.36% | 0 | 0 | 0 | 0 | - | - | - | <u>Percent Change:</u> | <u>Percent Change:</u> | |
| 43 | 0.77% | 0.81% | 0.85% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 44 | 1.93% | 2.54% | 2.61% | 0 | 0 | 0 | 0 | - | - | - | -15.1% | 0.0% | |
| 45 | 1.70% | 2.37% | 2.44% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 99 | 0.19% | 0.16% | 0.20% | 0 | 0 | 0 | 0 | - | - | - | | | |
| Tot | 0.51% | 0.52% | 0.50% | | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class 17

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | |
| 1 | 1.44% | 1.59% | 1.15% | 0 | 0 | 0 | 0 | - | - | - | 0 | 0.00 |
| 2 | 1.53% | 1.61% | 1.24% | 0 | 0 | 0 | 0 | - | - | - | 1 | 1.00 |
| 3 | 1.74% | 1.74% | 1.47% | 0 | 0 | 0 | 0 | - | - | - | 2 | 1.00 |
| 4 | 1.83% | 1.74% | 1.61% | 0 | 0 | 0 | 0 | - | - | - | 3 | 1.00 |
| 5 | 2.35% | 2.44% | 2.16% | 0 | 0 | 0 | 0 | - | - | - | 4 | 1.25 |
| 6 | 2.41% | 2.32% | 1.71% | 0 | 0 | 0 | 0 | - | - | - | 5 | 1.50 |
| 7 | 2.82% | 2.70% | 1.96% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 6 | 1.75 |
| 8 | 3.07% | 2.46% | 2.35% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 7 | 2.00 |
| 9 | 2.72% | 3.32% | 2.95% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 8 | 2.25 |
| 10 | 3.11% | 2.94% | 2.40% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 9 | 2.50 |
| 11 | 2.36% | 2.23% | 1.61% | 0 | 0 | 0 | 0 | - | - | - | | |
| 12 | 3.63% | 3.12% | 2.74% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 13 | 4.26% | 4.43% | 3.71% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 14 | 4.54% | 4.31% | 3.64% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 15 | 4.71% | 3.44% | 3.13% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 16 | 6.07% | 4.68% | 3.99% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 17 | 2.74% | 4.71% | 3.64% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 18 | 7.58% | 4.59% | 4.47% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 19 | 6.60% | 6.04% | 4.18% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | | |
| 20 | 7.18% | 7.50% | 4.95% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> |
| 21 | 10.11% | 10.56% | 7.41% | 2 | 2 | 1 | 2 | 1.00 | 1.00 | - | | |
| 22 | 9.59% | 8.95% | 7.21% | 2 | 2 | 1 | 2 | 1.00 | 1.00 | - | 2019 | 143,282,369 |
| 23 | 5.97% | 3.36% | 2.93% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | 75,755 |
| 24 | 2.44% | 2.52% | 1.59% | 0 | 0 | 0 | 0 | - | - | - | 2018 | 170,784,693 |
| 25 | 3.93% | 5.02% | 2.84% | 0 | 1 | 0 | 0 | 0.80 | 1.00 | (0.20) | | 75,755 |
| 26 | 5.44% | 3.56% | 2.07% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Difference:</u> | <u>Difference:</u> |
| 27 | 1.45% | 1.56% | 1.22% | 0 | 0 | 0 | 0 | - | - | - | | |
| 40 | 4.20% | 4.21% | 4.69% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | (27,502,324) | - |
| 41 | 4.67% | 5.08% | 3.34% | 0 | 1 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 42 | 2.83% | 2.73% | 2.18% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Percent Change:</u> | <u>Percent Change:</u> |
| 43 | 5.57% | 5.09% | 4.92% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | | |
| 44 | 5.99% | 5.19% | 4.55% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | -16.1% | 0.0% |
| 45 | 8.61% | 9.82% | 9.38% | 2 | 2 | 2 | 2 | 1.00 | 1.00 | - | | |
| 99 | 0.48% | 0.46% | 0.51% | 0 | 0 | 0 | 0 | - | - | - | | |
| Tot | 2.85% | 2.82% | 2.33% | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class 18

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits | |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|-------|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | | |
| 1 | 0.58% | 0.54% | 0.42% | 0 | 0 | 0 | 0 | - | - | - | 0 | 0.00 | |
| 2 | 0.63% | 0.69% | 0.62% | 0 | 0 | 0 | 0 | - | - | - | 1 | 1.00 | |
| 3 | 0.60% | 0.53% | 0.41% | 0 | 0 | 0 | 0 | - | - | - | 2 | 1.00 | |
| 4 | 0.52% | 0.63% | 0.53% | 0 | 0 | 0 | 0 | - | - | - | 3 | 1.00 | |
| 5 | 0.99% | 1.04% | 0.82% | 0 | 0 | 0 | 0 | - | - | - | 4 | 1.25 | |
| 6 | 0.87% | 0.82% | 0.76% | 0 | 0 | 0 | 0 | - | - | - | 5 | 1.50 | |
| 7 | 0.85% | 1.10% | 1.09% | 0 | 0 | 0 | 0 | - | - | - | 6 | 1.75 | |
| 8 | 0.90% | 0.88% | 0.88% | 0 | 0 | 0 | 0 | - | - | - | 7 | 2.00 | |
| 9 | 1.41% | 1.12% | 1.35% | 0 | 0 | 0 | 0 | - | - | - | 8 | 2.25 | |
| 10 | 1.32% | 0.96% | 1.63% | 0 | 0 | 0 | 0 | - | - | - | 9 | 2.50 | |
| 11 | 0.94% | 0.81% | 0.66% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 12 | 1.16% | 1.27% | 1.30% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 13 | 2.24% | 2.35% | 1.73% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 14 | 2.71% | 1.88% | 1.80% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 15 | 2.50% | 2.64% | 3.15% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 16 | 1.01% | 3.99% | 2.33% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 17 | 1.44% | 0.84% | 1.06% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 18 | 0.84% | 0.88% | 4.86% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 19 | 3.90% | 2.00% | 0.67% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 20 | 6.45% | 6.87% | 3.32% | 1 | 1 | 0 | 1 | 1.00 | - | 1.00 | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> | |
| 21 | 4.03% | 5.68% | 4.22% | 0 | 1 | 0 | 0 | - | - | - | | | |
| 22 | 3.88% | 6.61% | 3.70% | 0 | 1 | 0 | 0 | 0.80 | 1.00 | (0.20) | 2019 | 3,661,283 | 1,940 |
| 23 | 0.69% | 1.73% | 0.99% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 24 | 0.17% | 1.59% | 0.41% | 0 | 0 | 0 | 0 | - | - | - | 2018 | 2,265,903 | 1,226 |
| 25 | 0.86% | 3.27% | 0.07% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 26 | 1.02% | 0.96% | 1.75% | 0 | 0 | 0 | 0 | - | - | - | <u>Difference:</u> | <u>Difference:</u> | |
| 27 | 0.42% | 0.36% | 0.47% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 40 | 1.03% | 1.93% | 1.21% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | 1,395,380 | 714 |
| 41 | 2.06% | 1.95% | 1.90% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 42 | 0.62% | 1.10% | 1.28% | 0 | 0 | 0 | 0 | - | - | - | <u>Percent Change:</u> | <u>Percent Change:</u> | |
| 43 | 1.02% | 1.86% | 2.77% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 44 | 1.96% | 2.07% | 1.36% | 0 | 0 | 0 | 0 | - | - | - | | 61.6% | 58.3% |
| 45 | 4.33% | 6.35% | 5.73% | 0 | 1 | 1 | 1 | 1.00 | - | 1.00 | | | |
| 99 | 0.43% | 0.43% | 0.00% | 0 | 0 | 0 | 0 | - | - | - | | | |
| Tot | 0.99% | 1.06% | 0.96% | | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class 20

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits | |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|--------|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | | |
| 1 | 5.47% | 4.04% | 3.38% | 1 | 0 | 0 | 0 | - | - | - | 0 | 0.00 | |
| 2 | 3.84% | 2.18% | 1.92% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 1 | 1.00 | |
| 3 | 4.04% | 3.29% | 3.19% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 2 | 1.00 | |
| 4 | 2.90% | 2.63% | 2.57% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 3 | 1.00 | |
| 5 | 6.36% | 4.35% | 4.03% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 4 | 1.25 | |
| 6 | 5.16% | 3.50% | 3.03% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 5 | 1.50 | |
| 7 | 6.46% | 4.70% | 4.47% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 6 | 1.75 | |
| 8 | 6.24% | 5.69% | 4.02% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | 7 | 2.00 | |
| 9 | 6.15% | 4.82% | 4.16% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 8 | 2.25 | |
| 10 | 7.28% | 5.95% | 4.07% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | 9 | 2.50 | |
| 11 | 6.61% | 3.94% | 3.76% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 12 | 7.64% | 5.55% | 4.31% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | | | |
| 13 | 9.26% | 8.38% | 5.84% | 2 | 2 | 1 | 2 | 1.00 | 1.00 | - | | | |
| 14 | 11.27% | 9.64% | 8.04% | 3 | 2 | 2 | 2 | 1.00 | 1.00 | - | | | |
| 15 | 14.61% | 11.33% | 10.59% | 3 | 3 | 2 | 3 | 1.00 | 1.25 | (0.25) | | | |
| 16 | 16.39% | 12.01% | 11.82% | 3 | 3 | 3 | 3 | 1.00 | 1.50 | (0.50) | | | |
| 17 | 14.00% | 13.66% | 3.38% | 3 | 3 | 0 | 3 | 1.00 | 1.25 | (0.25) | | | |
| 18 | 8.63% | 9.10% | 9.65% | 2 | 2 | 2 | 2 | 1.00 | 1.25 | (0.25) | | | |
| 19 | 15.81% | 17.14% | 11.70% | 3 | 4 | 3 | 3 | 1.00 | 1.00 | - | | | |
| 20 | 16.33% | 16.15% | 9.78% | 3 | 3 | 2 | 3 | 1.00 | 1.50 | (0.50) | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> | |
| 21 | 24.33% | 24.69% | 20.09% | 5 | 5 | 4 | 5 | 1.50 | 1.75 | (0.25) | | | |
| 22 | 27.23% | 23.86% | 19.28% | 5 | 5 | 4 | 5 | 1.50 | 1.75 | (0.25) | 2019 | 133,236,775 | 37,352 |
| 23 | 7.28% | 6.73% | 4.37% | 1 | 1 | 0 | 1 | 1.00 | 1.25 | (0.25) | | | |
| 24 | 5.53% | 6.27% | 4.38% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | 2018 | 156,046,798 | 37,352 |
| 25 | 15.05% | 11.07% | 7.75% | 3 | 3 | 1 | 3 | 1.00 | 1.00 | - | | | |
| 26 | 14.32% | 12.78% | 10.02% | 3 | 3 | 2 | 3 | 1.00 | 1.50 | (0.50) | <u>Difference:</u> | <u>Difference:</u> | |
| 27 | 3.97% | 3.33% | 2.98% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | (22,810,023) | - | |
| 40 | 13.23% | 6.71% | 4.82% | 3 | 1 | 0 | 1 | 1.00 | 1.50 | (0.50) | | | |
| 41 | 8.88% | 8.32% | 6.20% | 2 | 2 | 1 | 2 | 1.00 | 1.00 | - | | | |
| 42 | 7.59% | 5.52% | 5.07% | 1 | 1 | 1 | 1 | 1.00 | 1.25 | (0.25) | <u>Percent Change:</u> | <u>Percent Change:</u> | |
| 43 | 12.58% | 9.34% | 10.50% | 3 | 2 | 2 | 2 | 1.00 | 1.25 | (0.25) | | | |
| 44 | 13.72% | 11.42% | 9.07% | 3 | 3 | 2 | 3 | 1.00 | 1.50 | (0.50) | -14.6% | 0.0% | |
| 45 | 22.95% | 21.35% | 18.76% | 4 | 4 | 4 | 4 | 1.25 | 1.25 | - | | | |
| 99 | 1.37% | 1.25% | 2.01% | 0 | 0 | 0 | 0 | - | - | - | | | |
| Tot | 8.59% | 6.93% | 5.80% | | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class 21

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | |
| 1 | 1.40% | 0.96% | 1.25% | 0 | 0 | 0 | 0 | - | - | - | 0 | 0.00 |
| 2 | 1.61% | 1.72% | 1.66% | 0 | 0 | 0 | 0 | - | - | - | 1 | 1.00 |
| 3 | 1.39% | 1.85% | 1.51% | 0 | 0 | 0 | 0 | - | - | - | 2 | 1.00 |
| 4 | 1.33% | 1.18% | 0.99% | 0 | 0 | 0 | 0 | - | - | - | 3 | 1.00 |
| 5 | 2.31% | 2.23% | 1.95% | 0 | 0 | 0 | 0 | - | - | - | 4 | 1.25 |
| 6 | 1.65% | 2.11% | 1.72% | 0 | 0 | 0 | 0 | - | - | - | 5 | 1.50 |
| 7 | 3.24% | 3.08% | 2.25% | 0 | 0 | 0 | 0 | - | - | - | 6 | 1.75 |
| 8 | 1.25% | 1.73% | 2.11% | 0 | 0 | 0 | 0 | - | - | - | 7 | 2.00 |
| 9 | 2.60% | 2.95% | 1.96% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 8 | 2.25 |
| 10 | 2.18% | 2.88% | 3.98% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 9 | 2.50 |
| 11 | 1.56% | 2.01% | 1.16% | 0 | 0 | 0 | 0 | - | - | - | | |
| 12 | 3.18% | 3.36% | 2.33% | 0 | 0 | 0 | 0 | - | - | - | | |
| 13 | 2.67% | 4.62% | 4.07% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 14 | 3.47% | 4.04% | 3.34% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 15 | 5.64% | 7.68% | 4.58% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | | |
| 16 | 6.28% | 4.05% | 4.35% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 17 | 2.48% | 1.79% | 2.96% | 0 | 0 | 0 | 0 | - | - | - | | |
| 18 | 5.68% | 4.16% | -0.59% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 19 | 2.63% | 1.65% | 1.29% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 20 | 4.87% | 9.06% | 5.78% | 0 | 2 | 1 | 1 | 1.00 | 1.00 | - | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> |
| 21 | 7.15% | 5.67% | 6.08% | 1 | 1 | 1 | 1 | 1.00 | 1.00 | - | | |
| 22 | 3.53% | 13.53% | 9.73% | 0 | 3 | 2 | 2 | 1.00 | 1.00 | - | 2019 | 13,652,476 |
| 23 | 3.33% | 4.16% | 2.01% | 0 | 0 | 0 | 0 | - | - | - | | 5,362 |
| 24 | 1.94% | 1.63% | 1.62% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 2018 | 15,831,445 |
| 25 | 2.46% | 1.89% | 2.09% | 0 | 0 | 0 | 0 | - | - | - | | 5,362 |
| 26 | 4.54% | 2.21% | 2.89% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Difference:</u> | <u>Difference:</u> |
| 27 | 1.41% | 0.97% | 0.79% | 0 | 0 | 0 | 0 | - | - | - | | |
| 40 | 3.77% | 5.68% | 5.54% | 0 | 1 | 1 | 1 | 1.00 | 1.00 | - | (2,178,969) | - |
| 41 | 2.15% | 3.71% | 5.95% | 0 | 0 | 1 | 0 | 0.80 | 1.00 | (0.20) | | |
| 42 | 2.79% | 3.53% | 3.89% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Percent Change:</u> | <u>Percent Change:</u> |
| 43 | 4.00% | 2.52% | 4.82% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | |
| 44 | 5.05% | 5.17% | 3.67% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | -13.8% | 0.0% |
| 45 | 7.38% | 7.23% | 6.85% | 1 | 1 | 1 | 1 | 1.00 | 1.00 | - | | |
| 99 | -3.28% | 3.97% | 1.52% | 0 | 0 | 0 | 0 | - | - | - | | |
| Tot | 2.58% | 2.86% | 2.55% | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class 2E

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits | |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|-------|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | | |
| 1 | 1.25% | 1.06% | 0.95% | 0 | 0 | 0 | 0 | - | - | - | 0 | 0.00 | |
| 2 | 1.10% | 1.12% | 0.78% | 0 | 0 | 0 | 0 | - | - | - | 1 | 1.00 | |
| 3 | 1.07% | 1.01% | 0.98% | 0 | 0 | 0 | 0 | - | - | - | 2 | 1.00 | |
| 4 | 0.88% | 0.95% | 0.80% | 0 | 0 | 0 | 0 | - | - | - | 3 | 1.00 | |
| 5 | 1.62% | 1.48% | 1.34% | 0 | 0 | 0 | 0 | - | - | - | 4 | 1.25 | |
| 6 | 1.54% | 1.64% | 1.30% | 0 | 0 | 0 | 0 | - | - | - | 5 | 1.50 | |
| 7 | 1.50% | 1.20% | 1.20% | 0 | 0 | 0 | 0 | - | - | - | 6 | 1.75 | |
| 8 | 1.84% | 1.92% | 1.72% | 0 | 0 | 0 | 0 | - | - | - | 7 | 2.00 | |
| 9 | 1.95% | 1.69% | 1.64% | 0 | 0 | 0 | 0 | - | - | - | 8 | 2.25 | |
| 10 | 1.99% | 1.55% | 1.35% | 0 | 0 | 0 | 0 | - | - | - | 9 | 2.50 | |
| 11 | 1.68% | 1.17% | 1.77% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 12 | 2.39% | 2.33% | 1.75% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 13 | 3.12% | 2.66% | 2.85% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 14 | 3.46% | 2.38% | 2.91% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 15 | 4.55% | 3.38% | 3.70% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 16 | 5.74% | 5.42% | 2.94% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | | | |
| 17 | 1.48% | 0.37% | 0.69% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 18 | 2.69% | 4.59% | 4.63% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 19 | 0.35% | 1.20% | 0.09% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 20 | 3.11% | 1.88% | 2.41% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> | |
| 21 | 5.32% | 5.16% | 4.11% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | | | |
| 22 | 3.41% | 3.64% | 3.02% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 2019 | 20,068,780 | 5,137 |
| 23 | 1.20% | 3.48% | 2.69% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 24 | 0.49% | 0.46% | 0.64% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 2018 | 23,136,708 | 5,137 |
| 25 | 8.23% | 4.59% | 3.31% | 2 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 26 | 3.42% | 0.58% | 3.67% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Difference:</u> | <u>Difference:</u> | |
| 27 | 0.82% | 0.91% | 0.75% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 40 | 0.78% | 3.27% | 3.18% | 0 | 0 | 0 | 0 | - | - | - | (3,067,928) | - | |
| 41 | 2.01% | 3.23% | 1.89% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 42 | 2.15% | 1.94% | 2.45% | 0 | 0 | 0 | 0 | - | - | - | <u>Percent Change:</u> | <u>Percent Change:</u> | |
| 43 | 3.61% | 3.35% | 3.98% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 44 | 4.05% | 2.49% | 3.19% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | -13.3% | 0.0% | |
| 45 | 5.35% | 8.21% | 8.26% | 1 | 2 | 2 | 2 | 1.00 | 1.00 | - | | | |
| 99 | 0.02% | 0.40% | 0.89% | 0 | 0 | 0 | 0 | - | - | - | | | |
| Tot | 1.58% | 1.51% | 1.40% | | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class 26

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits | |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|-----|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | | |
| 1 | 0.27% | 0.50% | 0.30% | 0 | 0 | 0 | 0 | - | - | - | 0 | 0.00 | |
| 2 | 0.56% | 0.41% | 0.33% | 0 | 0 | 0 | 0 | - | - | - | 1 | 1.00 | |
| 3 | 0.49% | 0.45% | 0.40% | 0 | 0 | 0 | 0 | - | - | - | 2 | 1.00 | |
| 4 | 0.39% | 0.32% | 0.38% | 0 | 0 | 0 | 0 | - | - | - | 3 | 1.00 | |
| 5 | 0.66% | 0.63% | 0.57% | 0 | 0 | 0 | 0 | - | - | - | 4 | 1.25 | |
| 6 | 0.42% | 0.56% | 0.34% | 0 | 0 | 0 | 0 | - | - | - | 5 | 1.50 | |
| 7 | 0.74% | 0.59% | 0.47% | 0 | 0 | 0 | 0 | - | - | - | 6 | 1.75 | |
| 8 | 0.62% | 0.84% | 0.61% | 0 | 0 | 0 | 0 | - | - | - | 7 | 2.00 | |
| 9 | 0.66% | 0.65% | 0.76% | 0 | 0 | 0 | 0 | - | - | - | 8 | 2.25 | |
| 10 | 1.08% | 1.08% | 0.75% | 0 | 0 | 0 | 0 | - | - | - | 9 | 2.50 | |
| 11 | 0.21% | 0.16% | 0.42% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 12 | 0.92% | 1.25% | 0.96% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 13 | 1.10% | 1.43% | 1.07% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 14 | 0.98% | 0.92% | 0.50% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 15 | 1.99% | 2.99% | 1.54% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 16 | 0.43% | 2.31% | 3.66% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 17 | 0.36% | 0.32% | 0.33% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 18 | 1.93% | 1.06% | 0.77% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 19 | 0.11% | 0.00% | 0.00% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 20 | 4.65% | 1.85% | 1.77% | 0 | 0 | 0 | 0 | - | - | - | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> | |
| 21 | 2.17% | 1.74% | 2.89% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 22 | 1.79% | 0.00% | 0.00% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 2019 | 1,256,738 | 412 |
| 23 | 1.46% | 0.41% | 0.27% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 24 | 0.00% | 0.27% | 1.06% | 0 | 0 | 0 | 0 | - | - | - | 2018 | 1,570,923 | 412 |
| 25 | 0.43% | 1.21% | 0.00% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 26 | 0.36% | 0.12% | 0.15% | 0 | 0 | 0 | 0 | - | - | - | <u>Difference:</u> | <u>Difference:</u> | |
| 27 | 0.35% | 0.40% | 0.33% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 40 | 0.08% | 0.68% | 2.38% | 0 | 0 | 0 | 0 | - | - | - | (314,185) | - | |
| 41 | 1.31% | 1.11% | 1.34% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 42 | 0.66% | 1.88% | 1.01% | 0 | 0 | 0 | 0 | - | - | - | <u>Percent Change:</u> | <u>Percent Change:</u> | |
| 43 | 0.54% | 1.04% | 0.78% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 44 | 1.00% | 2.47% | 2.49% | 0 | 0 | 0 | 0 | - | - | - | -20.0% | 0.0% | |
| 45 | 2.65% | 3.63% | 4.29% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 99 | 0.78% | 0.00% | 1.78% | 0 | 0 | 0 | 0 | - | - | - | | | |
| Tot | 0.59% | 0.62% | 0.53% | | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class 30

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits | |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|-----|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | | |
| 1 | 0.26% | 0.23% | 0.35% | 0 | 0 | 0 | 0 | - | - | - | 0 | 0.00 | |
| 2 | 0.68% | 0.60% | 0.57% | 0 | 0 | 0 | 0 | - | - | - | 1 | 1.00 | |
| 3 | 0.57% | 0.50% | 0.36% | 0 | 0 | 0 | 0 | - | - | - | 2 | 1.00 | |
| 4 | 0.62% | 0.64% | 0.62% | 0 | 0 | 0 | 0 | - | - | - | 3 | 1.00 | |
| 5 | 0.96% | 0.94% | 0.96% | 0 | 0 | 0 | 0 | - | - | - | 4 | 1.25 | |
| 6 | 0.74% | 0.63% | 0.72% | 0 | 0 | 0 | 0 | - | - | - | 5 | 1.50 | |
| 7 | 0.69% | 0.94% | 1.08% | 0 | 0 | 0 | 0 | - | - | - | 6 | 1.75 | |
| 8 | 1.07% | 1.24% | 0.94% | 0 | 0 | 0 | 0 | - | - | - | 7 | 2.00 | |
| 9 | 0.95% | 1.54% | 1.72% | 0 | 0 | 0 | 0 | - | - | - | 8 | 2.25 | |
| 10 | 1.49% | 1.07% | 0.85% | 0 | 0 | 0 | 0 | - | - | - | 9 | 2.50 | |
| 11 | 1.40% | 1.03% | 1.15% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 12 | 1.49% | 1.22% | 1.19% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 13 | 1.31% | 1.03% | 0.81% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 14 | 2.56% | 2.21% | 2.51% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 15 | 3.32% | 4.49% | 2.73% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 16 | 3.77% | 4.28% | 7.27% | 0 | 0 | 1 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 17 | 1.39% | 0.00% | 1.15% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 18 | 0.32% | 0.55% | 1.50% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 19 | 1.94% | 0.35% | 1.33% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 20 | 1.34% | 1.27% | 0.78% | 0 | 0 | 0 | 0 | - | - | - | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> | |
| 21 | 1.66% | 3.04% | 2.76% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 22 | 1.87% | 6.41% | 7.59% | 0 | 1 | 1 | 1 | 1.00 | 1.00 | - | 2019 | 940,059 | 620 |
| 23 | 0.75% | 1.05% | 0.87% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 24 | 1.27% | 1.22% | 0.29% | 0 | 0 | 0 | 0 | - | - | - | 2018 | 1,125,954 | 620 |
| 25 | 1.24% | 0.83% | 0.52% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 26 | 3.39% | 3.01% | 2.51% | 0 | 0 | 0 | 0 | - | - | - | <u>Difference:</u> | <u>Difference:</u> | |
| 27 | 0.40% | 0.51% | 0.53% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 40 | 0.51% | 0.00% | 0.00% | 0 | 0 | 0 | 0 | - | - | - | (185,896) | - | |
| 41 | 1.37% | 1.19% | 1.00% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 42 | 0.73% | 0.44% | 0.19% | 0 | 0 | 0 | 0 | - | - | - | <u>Percent Change:</u> | <u>Percent Change:</u> | |
| 43 | 3.05% | 4.30% | 3.82% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 44 | 4.92% | 4.96% | 3.66% | 0 | 0 | 0 | 0 | - | - | - | -16.5% | 0.0% | |
| 45 | 1.82% | 2.01% | 2.60% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 99 | 0.00% | 0.00% | 1.55% | 0 | 0 | 0 | 0 | - | - | - | | | |
| Tot | 0.87% | 0.90% | 0.89% | | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer
Indicated Private Passenger Auto Residual Market Share Group - Operator Class MM

| Terr | Residual Market Share | | | Indicated Mkt Share Range | | | Selected Range* | 2019 Credits | 2018 Credits | Change | Residual Mark Shr Group | Keep Out Credits | |
|------------|-----------------------|--------------|--------------|---------------------------|------|------|-----------------|--------------|--------------|--------|-------------------------------|-----------------------------|--------|
| | Aug-16 | Aug-17 | Aug-18 | 2017 | 2018 | 2019 | | | | | | | |
| 1 | 0.97% | 1.12% | 0.89% | 0 | 0 | 0 | 0 | - | - | - | 0 | 0.00 | |
| 2 | 1.27% | 1.00% | 0.91% | 0 | 0 | 0 | 0 | - | - | - | 1 | 1.00 | |
| 3 | 1.32% | 1.23% | 1.06% | 0 | 0 | 0 | 0 | - | - | - | 2 | 1.00 | |
| 4 | 1.09% | 1.03% | 0.94% | 0 | 0 | 0 | 0 | - | - | - | 3 | 1.00 | |
| 5 | 1.74% | 1.53% | 1.35% | 0 | 0 | 0 | 0 | - | - | - | 4 | 1.25 | |
| 6 | 1.74% | 1.41% | 1.12% | 0 | 0 | 0 | 0 | - | - | - | 5 | 1.50 | |
| 7 | 2.26% | 1.99% | 1.61% | 0 | 0 | 0 | 0 | - | - | - | 6 | 1.75 | |
| 8 | 1.89% | 1.67% | 1.56% | 0 | 0 | 0 | 0 | - | - | - | 7 | 2.00 | |
| 9 | 2.38% | 1.89% | 1.74% | 0 | 0 | 0 | 0 | - | - | - | 8 | 2.25 | |
| 10 | 2.00% | 1.95% | 2.02% | 0 | 0 | 0 | 0 | - | - | - | 9 | 2.50 | |
| 11 | 1.75% | 2.15% | 1.97% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 12 | 2.98% | 2.61% | 2.30% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 13 | 3.61% | 2.86% | 2.55% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 14 | 3.47% | 3.10% | 2.76% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 15 | 5.88% | 5.72% | 5.18% | 1 | 1 | 1 | 1 | 1.00 | 1.00 | - | | | |
| 16 | 5.29% | 2.99% | 3.66% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 17 | 3.92% | 2.47% | 3.18% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 18 | 5.25% | 4.05% | 2.26% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 19 | 3.92% | 2.27% | 2.19% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 20 | 4.38% | 4.48% | 4.06% | 0 | 0 | 0 | 0 | - | - | - | <u>Available Credit Prem:</u> | <u>Credit Eligible Exp:</u> | |
| 21 | 7.83% | 6.46% | 3.67% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | 2019 | 4,672,546 | 20,045 |
| 22 | 4.92% | 4.00% | 7.38% | 0 | 0 | 1 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 23 | 2.83% | 2.16% | 1.53% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 24 | 1.63% | 1.76% | 1.10% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | 2018 | 5,634,481 | 20,045 |
| 25 | 3.57% | 3.60% | 1.23% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 26 | 6.82% | 5.13% | 2.63% | 1 | 1 | 0 | 1 | 1.00 | 1.00 | - | <u>Difference:</u> | <u>Difference:</u> | |
| 27 | 1.05% | 0.98% | 0.82% | 0 | 0 | 0 | 0 | - | - | - | | | |
| 40 | 3.91% | 3.49% | 3.47% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | (961,935) | - |
| 41 | 4.05% | 3.65% | 3.26% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 42 | 4.69% | 3.47% | 2.80% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | <u>Percent Change:</u> | <u>Percent Change:</u> | |
| 43 | 2.81% | 2.42% | 1.32% | 0 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 44 | 8.90% | 6.60% | 7.67% | 2 | 1 | 1 | 1 | 1.00 | 1.00 | - | | -17.1% | 0.0% |
| 45 | 5.03% | 4.87% | 4.25% | 1 | 0 | 0 | 0 | 0.80 | 1.00 | (0.20) | | | |
| 99 | 1.18% | 1.23% | 1.28% | 0 | 0 | 0 | 0 | - | - | - | | | |
| Tot | 1.92% | 1.68% | 1.45% | | | | | | | | | | |

*Selection Criteria

- a. If the indicated residual market share group equal in all three years, select that residual market share group.
- b. If two of the three years indicate the same residual market share group, select that residual market share group.
- c. If all three years indicate a different residual market share group, select the median residual market share group.

Commonwealth Automobile Reinsurers - 4/1/2019 Credit Offer Data Through August, 2019

4/1/2019 Formulaic Credit Factor Indications Using Allstate Methodology (5 Year)

| Territory | Rate Class Group | | | | | | | | | |
|-----------|------------------|------|------|------|------|------|------|------|------|----------|
| | 10 | 15 | 17 | 18 | 20 | 21 | 25 | 26 | 30 | MC/Misc. |
| 1 | - | - | - | - | - | - | - | - | - | - |
| 2 | - | - | - | - | 0.80 | - | - | - | - | - |
| 3 | - | - | - | - | 0.80 | - | - | - | - | - |
| 4 | - | - | - | - | 0.80 | - | - | - | - | - |
| 5 | - | - | - | - | 0.80 | - | - | - | - | - |
| 6 | - | - | - | - | 0.80 | - | - | - | - | - |
| 7 | - | - | 0.80 | - | 0.80 | - | - | - | - | - |
| 8 | - | - | 0.80 | - | 1.00 | - | - | - | - | - |
| 9 | - | - | 0.80 | - | 0.80 | 0.80 | - | - | - | - |
| 10 | - | - | 0.80 | - | 1.00 | 0.80 | - | - | - | - |
| 11 | - | - | - | - | 0.80 | - | - | - | - | - |
| 12 | - | - | 0.80 | - | 1.00 | - | - | - | - | - |
| 13 | - | - | 0.80 | - | 1.00 | 0.80 | - | - | - | 0.80 |
| 14 | - | - | 0.80 | - | 1.00 | 0.80 | 0.80 | - | - | 0.80 |
| 15 | - | - | 0.80 | - | 1.00 | 1.00 | 0.80 | - | 0.80 | 1.00 |
| 16 | 0.80 | - | 0.80 | - | 1.00 | 0.80 | 1.00 | - | 0.80 | 0.80 |
| 17 | - | - | 0.80 | - | 1.00 | - | - | - | - | - |
| 18 | 0.80 | - | 0.80 | 0.80 | 1.00 | 0.80 | 0.80 | - | - | 0.80 |
| 19 | - | - | 1.00 | - | 1.00 | 0.80 | - | - | - | - |
| 20 | 0.80 | - | 1.00 | 1.00 | 1.00 | 1.00 | 0.80 | - | - | - |
| 21 | 1.00 | 0.80 | 1.00 | - | 1.50 | 1.00 | 1.00 | - | - | 1.00 |
| 22 | 1.00 | 1.00 | 1.00 | 0.80 | 1.50 | 1.00 | 0.80 | 0.80 | 1.00 | 0.80 |
| 23 | - | - | 0.80 | - | 1.00 | - | 0.80 | - | - | 0.80 |
| 24 | - | - | - | - | 1.00 | 0.80 | 0.80 | - | - | 0.80 |
| 25 | - | - | 0.80 | - | 1.00 | - | 0.80 | - | - | - |
| 26 | - | - | 0.80 | - | 1.00 | 0.80 | 0.80 | - | - | 1.00 |
| 27 | - | - | - | - | 0.80 | - | - | - | - | - |
| 40 | 0.80 | - | 0.80 | 0.80 | 1.00 | 1.00 | - | - | - | 0.80 |
| 41 | 0.80 | - | 0.80 | 0.80 | 1.00 | 0.80 | - | - | - | 0.80 |
| 42 | 0.80 | - | 0.80 | - | 1.00 | 0.80 | - | - | - | 0.80 |
| 43 | 0.80 | - | 1.00 | - | 1.00 | 0.80 | 0.80 | - | - | 0.80 |
| 44 | 0.80 | - | 1.00 | - | 1.00 | 1.00 | 0.80 | - | - | 1.00 |
| 45 | 0.80 | - | 1.00 | 1.00 | 1.25 | 1.00 | 1.00 | 0.80 | - | 0.80 |
| 99 | - | - | - | - | - | - | - | - | - | - |

Highlighted 4/1/2018 Credit Eligible Cells

| Residual Mark Shr Group | Keep Out Credits |
|-------------------------------|------------------------|
| 0 | 0.00 |
| 1 | 1.00 |
| 2 | 1.00 |
| 3 | 1.00 |
| 4 | 1.25 |
| 5 | 1.50 |
| 6 | 1.75 |
| 7 | 2.00 |
| 8 | 2.25 |
| 9 | 2.50 |

CAR | **Rules of Operation**
Rule 29 | **Assignment Process**
Revision Date | **2016.12.15**
Page | **5 of 9**

No less than 60 days prior to the expiration date, if replacement coverage is not obtained for the Eligible Risk, the ARP shall submit an application to the MAIP. The application will be assigned to a Member such that the designated ARC is different than the former ARC. Upon receiving the assignment, the ARP shall submit a Notice of Transfer of Insurer to the former ARC identifying the newly designated ARC. A down payment is not required and upon receipt of the application, the newly designated ARC will bill the applicant for 20% of the premium to be charged, which shall be the lower of the MAIP premium or the voluntary premium for which the applicant qualifies. The pre-inspection requirement shall be waived provided that the vehicle(s) to be insured is the same as the vehicle(s) insured under the previous policy.

If a Notice of Transfer of Insurer is not received, the designated ARC will issue a Notice of Expiration of Policy Assignment to the named insured at least 45 days prior to the expiration date with a copy sent to the ARP.

Upon receipt of the Notice of Expiration of Policy Assignment, the Eligible Risk may reapply for coverage through the MAIP. Such reapplication shall be considered a new business application and the Eligible Risk shall be assigned to a different Member such that the designated ARC is different than the former ARC.

3. In the case of a non-resident military person, pursuant to Rule 26.A.1.c., the designated ARC need not renew if at the time of the renewal the policyholder is stationed in another state and his motor vehicle is not registered in Massachusetts.

E. Credit Programs

Credits shall be reviewed annually and submitted to the Commissioner for approval. Any premium credited under this Rule that in aggregate exceeds 100% of the overall Quota Share may not be credited against the Quota Share.

1. Voluntary Credit

- a. For policies with effective dates of April 1, 201~~7~~⁵ and subsequent, a Member shall receive a credit for any exposure that it insures voluntarily in the territory and operator classes pursuant to Sections E.2. and E.3.

CAR | **Rules of Operation**
Rule 29 | **Assignment Process**
Revision Date | **2016.12.15**
Page | **6 of 9**

- b. Credit shall be applied to the Member's Quota Share pursuant to Section C. for the appropriate premiums pursuant to Sections E.2. and E.3.

2. Amount of Credits

Members shall receive credit for each exposure written voluntarily pursuant to Section E.1.b. in the territory and operator classes listed in Section E.3. The amount of credit shall equal the annual Private Passenger Motor Vehicle MAIP premium for the risk as if it has been insured through the MAIP, multiplied by the appropriate factor as displayed in the policy effective date tables.

~~For policies with effective dates of April 1, 2013 and subsequent, t~~The factor will be determined based on a review of the three most recent prior years of residual market share data, by territory and operator class. Credit eligible groups will be defined by ranges of residual market shares, and credit factors will be established in accordance with the following criteria:

| Residual Market Group | Residual Market Share Range | Voluntary Credit Factor |
|------------------------------|------------------------------------|--------------------------------|
| 0 | 0.0% - 4.9% | 0.00 |
| 1 | 5.0% - 7.9% | 1.00 |
| 2 | 8.0% - 10.9% | 1.00 |
| 3 | 11.0% - 16.9% | 1.00 |
| 4 | 17.0% - 22.9% | 1.25 |
| 5 | 23.0% - 28.9% | 1.50 |
| 6 | 29.0% - 34.9% | 1.75 |
| 7 | 35.0% - 40.9% | 2.00 |
| 8 | 41.0% - 46.9% | 2.25 |
| 9 | 47.0% - 100.0% | 2.50 |

CAR | **Rules of Operation**
Rule 29 | **Assignment Process**
Revision Date | **2016.12.15**
Page | **7 of 9**

3. Credit Factors

The following factors are applicable for policies with effective dates of April 1, 201~~7~~5 through March 31, 2019, and subsequent.

| Territory | Operator Class | | | | | | | | | |
|-----------|----------------|------|------|------|------|------|------|------|------|------|
| | 10 | 15 | 17 | 18 | 20 | 21 | 25 | 26 | 30 | M/M* |
| 01 | | | | | | | | | | |
| 02 | | | | | 1.00 | | | | | |
| 03 | | | | | 1.00 | | | | | |
| 04 | | | | | 1.00 | | | | | |
| 05 | | | | | 1.00 | | | | | |
| 06 | | | | | 1.00 | | | | | |
| 07 | | | 1.00 | | 1.00 | | | | | |
| 08 | | | 1.00 | | 1.00 | | | | | |
| 09 | | | 1.00 | | 1.00 | 1.00 | | | | |
| 10 | | | 1.00 | | 1.00 | 1.00 | | | | |
| 11 | | | | | 1.00 | | | | | |
| 12 | | | 1.00 | | 1.00 | | | | | |
| 13 | | | 1.00 | | 1.00 | 1.00 | | | | 1.00 |
| 14 | | | 1.00 | | 1.00 | 1.00 | 1.00 | | | 1.00 |
| 15 | | | 1.00 | | 1.25 | 1.00 | 1.00 | | 1.00 | 1.00 |
| 16 | 1.00 | | 1.00 | | 1.50 | 1.00 | 1.00 | | 1.00 | 1.00 |
| 17 | | | 1.00 | | 1.25 | | | | | |
| 18 | 1.00 | | 1.00 | 1.00 | 1.25 | 1.00 | 1.00 | | | 1.00 |
| 19 | | | 1.00 | | 1.00 | 1.00 | | | | |
| 20 | 1.00 | | 1.00 | | 1.50 | 1.00 | 1.00 | | | |
| 21 | 1.00 | 1.00 | 1.00 | | 1.75 | 1.00 | 1.00 | | | 1.00 |
| 22 | 1.00 | 1.00 | 1.00 | 1.00 | 1.75 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 23 | | | 1.00 | | 1.25 | | 1.00 | | | 1.00 |
| 24 | | | | | 1.00 | 1.00 | 1.00 | | | 1.00 |
| 25 | | | 1.00 | | 1.00 | | 1.00 | | | |
| 26 | | | 1.00 | | 1.50 | 1.00 | 1.00 | | | 1.00 |
| 27 | | | | | 1.00 | | | | | |
| 40 | 1.00 | | 1.00 | 1.00 | 1.50 | 1.00 | | | | 1.00 |
| 41 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | | | | 1.00 |
| 42 | 1.00 | | 1.00 | | 1.25 | 1.00 | | | | 1.00 |
| 43 | 1.00 | | 1.00 | | 1.25 | 1.00 | 1.00 | | | 1.00 |
| 44 | 1.00 | | 1.00 | | 1.50 | 1.00 | 1.00 | | | 1.00 |
| 45 | 1.00 | | 1.00 | | 1.25 | 1.00 | 1.00 | 1.00 | | 1.00 |
| 99 | | | | | | | | | | |

* Motorcycle and Miscellaneous Classes

Geoff Arnold Statement in Opposition to Proposed Changes to CAR Rule 29.E –
for November 1, 2018 CAR Actuarial Committee Meeting

Plymouth Rock is opposed to the approach that was approved at the CAR Actuarial Committee's September 2018 meeting for establishing the credit offer for the year beginning April 1, 2019, and I will be voting against the proposed changes to the rule. If others join me, I would suggest an alternative approach.

We are opposed to the proposed approach because it does not address the problem of disproportionality in a small MAIP and as a result, it does not comply with the law. While much of the discussions at the Actuarial Committee have focused on keeping the size of the MAIP small, that is only one of the goals mandated by Chapter 175, Section 113H. The statute requires that:

“The size of the credits shall be such as to enhance the prospects that no classification or territory is disproportionately represented in the plan.”¹

The approach approved at the September meeting makes no effort to “enhance the prospects that no territory is disproportionately represented in the plan.” It is focused entirely on the overall size of the plan and not the existing disproportionate distribution of MAIP policies by class and territory. In fact, it would make that disproportionate distribution worse. The Commissioner has previously rejected CAR proposals in 2009, 2011 and 2016, and the CAR Governing Committee rejected an Actuarial Committee proposal in 2017, all of which would have increased disproportionate representation in the MAIP. We don't believe this Committee should send up yet another proposal that makes no effort to reduce disproportionality.

The plan to implement the new credit offer over a five year period does not cure the noncompliance. Under this plan nearly 90% of today's credit eligible risks will eventually lose the credits that help to keep them out of the MAIP and the total reduction in potential credit premium is 72.7% of today's number – a dramatic change. Many of the risks who will lose their eligibility for credits are located in class/territory combinations that are already disproportionately represented in the MAIP and they are from the disadvantaged territories that the Commissioner has previously noted to be of particular concern. Whether this approach is implemented in one year or over five years, it still would not comply with the law, which requires a credit offer designed to “enhance the prospects that no classification or territory is disproportionately represented in the plan.”

The Committee's approach would make it far more difficult for a class/territory to qualify for credits than is the case today. The Residual Market Group Table (at Rule 29.E.2) on which the Committee's recommendation is based provides that a class/territory combination does not

¹ The full paragraph is: *“To control the size of the population of the plan, the plan shall annually provide for territorial and classification credits for those companies voluntarily writing private passenger automobile insurance within those territories and classifications that would otherwise be disproportionately represented in the plan. The size of the credits shall be such as to enhance the prospects that no classification or territory is disproportionately represented in the plan.”*

qualify for a credit unless at least 5% of that class/territory combination is in the MAIP. That needs to change because the MAIP has changed. The 5% standard was created for the 2012 credit offer at a time when the MAIP was more than twice its current size. The MAIP represented 2.8% of exposures at that time, but now represents only 1.25%. When the MAIP was at 2.8%, under Rule 29 a class/territory combination would have to be disproportionately represented in the MAIP at a rate that is 80% above the average to qualify for one credit. Applying the 5% standard to the current MAIP, at 1.25% of the market, a class/territory combination has to be disproportionately represented in the MAIP at a rate that is 400% times the average to qualify for one credit. Allowing that dramatic change to occur will fail to “enhance the prospects that no classification or territory is disproportionately represented in the plan.”

The statute does not allow CAR to ignore disproportionality when the MAIP is small. The Attorney General’s Office has confirmed that CAR is required to develop a credit offer that at least makes a reasonable effort to reduce disproportionality, regardless of the overall size of the MAIP. In a letter to the Governing Committee dated November 13, 2015 (which the AGO later sent to the Commissioner as part of the Commissioner’s hearing), the Attorney General’s Office stated:

“the fact that the residual market share has decreased over time does not obviate the need (and statutory responsibility) to develop a system that has a reasonable chance of eliminating territorial overrepresentation in the residual market.”

The total elimination of disproportionality is not possible, but CAR is required by law to work toward that goal and not against it. The approach approved at our last meeting not only fails to even try to reduce disproportionality but it would make it worse, especially in those territories that the Commissioner has previously identified as needing protection. The accompanying chart (Exhibit A) illustrates this. It contrasts the ultimate effects of the Actuarial Committee’s September recommendations with the levels of disproportionate representation for the most recent three years in each territory, when summarized across all classes.

While the impact of the Committee’s recommendation for any individual class of course varies from the territory average shown, that variation is relatively minor, and it does not alter the degree to which the recommendation would injure the insureds in those territories. Territories such as Brockton, Holyoke, Hyde Park, Lawrence, Lynn, and Chelsea, in which insureds are from 2 to 3-½ times as likely to be in the MAIP as average, are slated to lose the lion’s share of their credits. Moreover, even Roxbury and Dorchester, whose levels of disproportionate representation (5.7 times average and 4.3 times average respectively) would normally be expected to result in an increase in credits, are slated to lose some. It is also worth noting that in the territories for which the Committee is recommending the most extreme reductions in credits, even the current level of credits has been insufficient to meaningfully “enhance the prospects that no classification or territory is disproportionately represented in the plan.” In Brockton, for example, where the level of disproportionality has risen from 3.0 to 3.5 in just two years, it is manifestly inappropriate to recommend an 89% reduction in the number of credit eligible risks.

In a letter that the Attorney General's Office sent to the CAR Governing Committee during last year's discussions in November 2017, the AGO noted that the overrepresentation in the MAIP by these territories is:

“of particular concern because these territories are low-income and have large minority populations. Policyholders in these territories already pay, on average, significantly higher premiums than statewide premiums while purchasing less coverage. Reducing or removing credits in these territories will decrease incentives for carriers to write policies voluntarily or at lower rates, and may ultimately result in increased overrepresentation in the MAIP.”

The existing Rule 29 methodology is fundamentally sound. When it was initially implemented in 2011 for a larger MAIP, Commissioner Murphy deemed it appropriate to grant credits to every risk whose class and territory was overrepresented in the MAIP by 80% or more (a disproportionality factor of 1.8). This standard is no less appropriate for today's 1.25% MAIP than it was for the 2.8% MAIP cited in the Commissioner's December 19, 2011 letter to CAR. A reasonable effort to “enhance the prospects that no classification or territory is disproportionately represented in the plan” requires us to maintain that standard, and the outcome – whether an increase or a decrease – would enable CAR to fulfill its statutory responsibility.

We've all been thinking about this issue for a long time and have struggled to reach agreement each year on a reasonable approach that will comply with the statute. Plymouth Rock continues to believe that a relatively minor change in Rule 29 could easily be substituted for the changes approved in September and allow CAR to fulfill its legal obligation going forward. We would keep the methodology precisely as is, but update the table at Rule 29.E.2 by substituting the relativities 1.8, 2.9, 3.9, 6.1, 8.2, 10.4, 12.5, 14.6 and 16.8 for the 5%, 8%, 11%, 17%, 23%, 29%, 35%, 41% and 47% market share levels currently in the table. Attached is an exhibit showing the proposed change to that table (Exhibit B).

I hope after considering these comments you will join me in voting against the proposed rule changes. Thank you.

EXHIBIT A – Disproportionality by Territory

| Territory | | September 11, 2018, Committee Recommendation | | | | Disproportionality | | | |
|--------------|---|--|----------------|-----------------------|----------------|--------------------|-------------|-------------|---|
| | | Exposures | %Δ | Premium | %Δ | 2016 | 2017 | 2018 | |
| 22 | Roxbury | 16,030 | -3.00% | \$ 39,757,029 | -5.00% | 5.14 | 5.75 | 5.66 | OVER-REPRESENTED IN EXCESS OF DOI STANDARD |
| 21 | Dorchester | 41,865 | -13.80% | \$ 106,790,316 | -10.00% | 4.31 | 4.51 | 4.33 | |
| 45 | Brockton | 4,947 | -88.90% | \$ 24,105,064 | -77.70% | 3.02 | 3.29 | 3.49 | |
| 20 | Hyde Park | 1,268 | -91.80% | \$ 4,650,255 | -85.70% | 3.64 | 3.56 | 3.47 | |
| 44 | Lawrence | 4,555 | -86.60% | \$ 10,721,070 | -80.00% | 3.55 | 3.35 | 3.38 | |
| 16 | Chelsea | 524 | -96.10% | \$ 2,165,537 | -91.10% | 2.99 | 2.72 | 2.74 | |
| 18 | Roslindale | 195 | -98.60% | \$ 936,605 | -96.40% | 2.72 | 2.34 | 2.33 | |
| 40 | Holyoke | 523 | -97.00% | \$ 1,999,256 | -92.80% | 1.66 | 1.83 | 2.26 | |
| 15 | Revere | 1,205 | -59.50% | \$ 2,176,661 | -71.10% | 2.00 | 2.08 | 2.12 | |
| 43 | Lynn | 3,268 | -92.20% | \$ 11,281,954 | -86.50% | 1.93 | 1.93 | 2.07 | |
| 14 | Everett/Malden/Randolph | 1,153 | -85.20% | \$ 5,200,953 | -74.30% | 1.97 | 2.03 | 1.98 | |
| 13 | Fall River/New Bedford/Winthrop/Worcester | 3,511 | -83.20% | \$ 13,584,040 | -65.10% | 1.84 | 1.85 | 1.88 | |
| 19 | Jamaica Plain | 563 | -10.90% | \$ 1,742,371 | -10.90% | 1.97 | 1.77 | 1.81 | |
| 41 | Lowell | 1,170 | -97.80% | \$ 4,087,263 | -94.40% | 1.87 | 1.91 | 1.79 | |
| 26 | Charlestown/East Boston | 755 | -60.80% | \$ 1,623,748 | -71.70% | 1.85 | 1.73 | 1.53 | |
| 42 | Springfield | 1,849 | -97.10% | \$ 8,804,957 | -93.00% | 1.63 | 1.49 | 1.46 | |
| 23 | Boston Central | 587 | -80.30% | \$ 2,728,040 | -68.80% | 1.29 | 1.23 | 1.24 | |
| 9 | Chicopee/Framingham/Hull/Rockland/Swampscott/Taunton/Weymouth | 0 | -100.00% | \$ - | -100.00% | 1.09 | 1.10 | 1.14 | |
| 17 | West Roxbury | 95 | -82.20% | \$ 372,970 | -74.80% | 1.18 | 1.21 | 1.13 | |
| 12 | Medford/Quincy/Salem/Saugus/Somerville/Stoughton | 1,815 | -79.00% | \$ 7,158,531 | -68.10% | 1.17 | 1.13 | 1.09 | |
| 10 | Methuen/Peabody/West Springfield | 763 | -84.50% | \$ 2,738,878 | -75.30% | 1.12 | 1.09 | 1.08 | |
| Total | | 88,567 | -80.90% | \$ 259,570,112 | -72.70% | 1.00 | 1.00 | 1.00 | |
| 7 | Assorted Towns (17) | 0 | -100.00% | \$ - | -100.00% | 1.00 | 0.98 | 0.98 | UNDER-REPRESENTED |
| 24 | Allston-Brighton | 408 | -67.50% | \$ 1,653,765 | -44.60% | 1.11 | 1.05 | 0.94 | |
| 8 | Assorted Towns (11) | 1,374 | -83.00% | \$ 4,649,113 | -73.40% | 0.93 | 0.92 | 0.92 | |
| 11 | Avon/Cambridge/Holbrook/Milton | 0 | -100.00% | \$ - | -100.00% | 0.91 | 0.89 | 0.91 | |
| 25 | South Boston | 147 | -76.40% | \$ 641,736 | -69.60% | 1.10 | 1.07 | 0.82 | |
| 5 | Assorted Towns (29) | 0 | -100.00% | \$ - | -100.00% | 0.77 | 0.78 | 0.78 | |
| 6 | Assorted Towns (21) | 0 | -100.00% | \$ - | -100.00% | 0.77 | 0.74 | 0.72 | |
| 3 | Assorted Towns (47) | 0 | -100.00% | \$ - | -100.00% | 0.55 | 0.56 | 0.58 | |
| 2 | Assorted Towns (33) | 0 | -100.00% | \$ - | -100.00% | 0.54 | 0.52 | 0.53 | |
| 4 | Assorted Towns (24) | 0 | -100.00% | \$ - | -100.00% | 0.49 | 0.51 | 0.52 | |
| 1 | Assorted Towns (40) | 0 | 0.00% | \$ - | 0.00% | 0.51 | 0.50 | 0.47 | |
| 27 | Assorted Towns (93) | 0 | -100.00% | \$ - | -100.00% | 0.41 | 0.42 | 0.41 | |
| 99 | Out-of-State | 0 | 0.00% | \$ - | 0.00% | 0.34 | 0.34 | 0.34 | |

EXHIBIT B – Proposed Change to Table at Rule 29.E.2

Current Table:

| Residual Market Group | Residual Market Share Range | Voluntary Credit Factor |
|------------------------------|------------------------------------|--------------------------------|
| 0 | 0.0% - 4.9% | 0.00 |
| 1 | 5.0% - 7.9% | 1.00 |
| 2 | 8.0% - 10.9% | 1.00 |
| 3 | 11.0% - 16.9% | 1.00 |
| 4 | 17.0% - 22.9% | 1.25 |
| 5 | 23.0% - 28.9% | 1.50 |
| 6 | 29.0% - 34.9% | 1.75 |
| 7 | 35.0% - 40.9% | 2.00 |
| 8 | 41.00% - 46.9% | 2.25 |
| 9 | 47.0% - 100.0% | 2.50 |

Proposed Revisions

| Residual Market Group | Disproportionate Representation Range* | Voluntary Credit Factor |
|------------------------------|---|--------------------------------|
| 0 | 0.0 - 1.7 | 0.00 |
| 1 | 1.8 - 2.8 | 1.00 |
| 2 | 2.9 - 3.8 | 1.00 |
| 3 | 3.9 - 6.0 | 1.00 |
| 4 | 6.1- 8.1 | 1.25 |
| 5 | 8.2 - 10.3 | 1.50 |
| 6 | 10.4 - 12.4 | 1.75 |
| 7 | 12.5 - 14.5 | 2.00 |
| 8 | 14.6 - 16.7 | 2.25 |
| 9 | 16.8 and up | 2.50 |

*Disproportionate Representation reflects MAIP usage relative to the statewide average (1.0). For example, a Disproportionate Representation of 1.8 means the cell’s MAIP representation is 1.8 times the statewide average.