

COMMONWEALTH AUTOMOBILE REINSURERS

225 Franklin Street Boston, Massachusetts 02110 www.commauto.com 617-338-4000

February 19, 2016

Docket Clerk, Hearings and Appeals MA Division of Insurance 1000 Washington Street, Suite 810 Boston, MA 02118-6200

RE: Docket No. C2016-01 – Submission of Written Comment

Per the Notice of Hearing distributed on February 2, 2016, Commonwealth Automobile Reinsurers (CAR) submits the attached written testimony with respect to the proposed amendments to Rule 29 of CAR's Rules of Operation.

CAR will be available at the February 25, 2016 hearing to respond to questions, if needed, but expects that all relevant points are addressed in the submission.

Respectfully submitted,

Natalie A. Hubley

President



COMMONWEALTH AUTOMOBILE REINSURERS

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STATEMENT OF COMMONWEALTH AUTOMOBILE REINSURERS PROPOSED AMENDMENTS TO CAR RULE OF OPERATION NO. 29 Division of Insurance Docket No. C2016-01 February 25, 2016

Commonwealth Automobile Reinsurers (CAR) hereby submits this written testimony regarding the proposed amendments to Rule 29 of CAR's Rules of Operation. The amendments recommend adjustments to the method for determining factors for voluntary credits for policies effective April 1, 2016 and later. CAR submits this testimony to provide additional information with respect to the deliberations of the CAR Actuarial and Governing Committees as they undertook their annual review of MAIP quota share credits required pursuant to Rule 29.E.

The proposed amendments to Rule 29 fulfill CAR's annual obligation to review credits and submit its recommendation to the Commissioner for approval. The Actuarial Committee began its annual review in June 2015 of the three most recent prior years of residual market share data by territory and operator class pursuant to Rule 29.E.2. Based upon the credit eligible groups defined in the Rule by ranges of residual market shares, the Committee observed a significant indicated decrease in credit eligible exposures and available quota share credit premium. The general consensus of the Committee was that implementation of the large indicated decrease may be disruptive to the marketplace and may result in an increased volume of assignments. The Committee, therefore, undertook a thorough and deliberative analysis of several alternative proposals during multiple meetings, and considered widely divergent views with respect to the appropriate level of available credits. Ultimately, the Actuarial Committee's recommendation to the Governing Committee represented a compromise of the Committee members which was supported by a vote of eight members in favor and two opposed.

The Actuarial Committee's recommendation to the Governing Committee maintains in substance the approach for determining credit factors, but recalibrates the ranges of residual market shares upon which credit eligible groups are defined. The majority of Actuarial Committee members asserted that the recalibration is necessary and consistent with current market conditions.

In consideration of the Actuarial Committee's proposal, the CAR Governing Committee also discussed letters submitted to the Governing Committee by Ms. Paula Gold, representing Plymouth Rock Assurance Corporation, and by the Office of the Attorney General. Both letters urged CAR to carefully consider its statutory obligation with respect to its credit recommendation. Accordingly, the Governing Committee remanded the credit proposal to the Actuarial Committee to further consider whether and to what extent the proposal complies with the statutory requirement of G.L. c.175, §113H 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. Both letters were forwarded to the Actuarial Committee as it considered the remand. By vote of eight members in favor and one opposed, the Actuarial Committee affirmed its credit proposal and its position that the recommendation complies with the statutory requirement.

After discussion, the Governing Committee voted with nine members in favor and three opposed to recommend Division of Insurance approval of the proposed credit factors employing the adjusted methodology for determining credit values. Additional detail with respect to the Committee discussions is included in the attached Notices and Records of the Actuarial Committee meetings of June 23, 2015, September 2, 2015, October 7, 2015, and December 10, 2015. Also included are Transcripts of the Governing Committee meetings of November 18, 2015 and January 13, 2016. After careful consideration, the Governing Committee voted with nine members in favor and three opposed to recommend Division of Insurance approval of the proposed amendments to Rule 29.

Respectfully submitted,

Natalie A. Hubley

President

¹ Sections of the October 7, 2015 Records and the November 18, 2015 and January 13, 2016 Transcripts have been redacted as those agenda items are not a subject of this hearing.

² The October 7, 2015 Records and the January 13, 2016 Transcript have not been approved. They will be approved at the next meeting of the Actuarial Committee and Governing Committee, respectively.

NOTICE OF MEETING

ACTUARIAL COMMITTEE

A meeting of the Actuarial Committee will be held at the offices of Commonwealth Automobile Reinsurers, 225 Franklin Street, Boston, on

TUESDAY, JUNE 23, 2015 AT 10:00 A.M.

MEMBERS OF THE COMMITTEE

Mr. Joseph F. Cofield – Chair Metropolitan P & C Insurance Company

Mr. Geoffrey H. Arnold Plymouth Rock Assurance Corporation Mr. Alex F. Butensky The Norfolk & Dedham Group Mr. Hall D. Crowder The Hanover Insurance Company EM Freedman Insurance Agency, Inc. Mr. Christopher Dupill Mr. Glenn R. Hiltpold Safety Insurance Company Mr. John V. Kelly MAPFRE U.S.A. Corporation Amica Mutual Insurance Company Mr. Michael Petrarca, Jr. Ms. Lynellen Ramirez Arbella Insurance Group Mr. John P. Tierney Quincy Mutual Group Ms. Meredith M. Woodcock Liberty Mutual Group

AGENDA

AC

14.01 Records of Previous Meeting

The Records of the Actuarial Committee meeting of September 24, 2014 should be read and approved.

\mathbf{AC}

15.03 Quota Share Credits for Policies Effective April 1, 2016 and Later

The Committee should be prepared to begin discussions relative to quota share credits for policies effective April 1, 2016 and later in order to formulate its recommendation to the Governing Committee at its meeting in November 2015. Exhibits illustrating the determination of credit factors and estimating available credit eligible exposures and credit premium using data reported through March, 2015 are attached. (Docket #AC15.03, Exhibit #1)

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, $\S~21$.

TIMOTHY GALLIGAN Financial Services Coordinator

Attachment

Boston, Massachusetts June 12, 2015

MEMORANDUM

To: Actuarial Committee

From: Tim Galligan

Financial Services Coordinator

Date: June 12, 2015

Re: Exhibit #1 for AC 15.03 - 4/1/2016 Indicated Quota Share Credits

The following is a summary of the data used to calculate the Actuarial Committee exhibits relating to the indicated 4/1/2016 credit factors.

Premiums/Credit Factors - Rate Year

- Data used for the residual market shares for 2013-2014 reflects the effective period from September to August, and 2015 is updated through March, 2015. The premiums used for calculations throughout the exhibits use rates effective October 1, 2013.
- Voluntary Market Data includes CAR ID Codes 1 and 8 for the 12 month period. Residual Market Data includes CAR ID Code 9 for the 12 month period.

Definitions

- Credit Eligible Exposures the number of exposures that would receive credit if all policies were written voluntarily for the 12 month period
- Potential Credit Premium the amount of credit premium that would be written if all policies were written voluntarily for the 12 month period
- Estimated Credits Used the amount of credit premium that would be written for the 12 month period based on the voluntary MAIP premium.

2016 Indicated Credit Matrix

The proposed 2015 credit matrix is calculated using the three most recent prior years of residual market share data, by territory and operator class. Credit eligible groupings are defined by ranges of residual market shares, and credit factors are assigned to each credit eligible group as defined in Rule 29.E.2.

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer

Exhibit Descriptions by Page

<u>Page</u>	Description
3	Rate Class Summary
4	Territory Summary
5-14	Indicated Market Share Group Results By Operator Class
15	4/1/2016 Indicated Credit Factor Matrix By Class/Territory

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through March, 2015 (2013 Rates) Summary by Rate Class

4/1/2015 Credit Factors

4/1/16 Indicated - Residual Market Share Group Methodology

Rate <u>Class</u>	Total Mkt Exposures	Credit Eligible <u>Exposures</u>	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
10	3,065,892	291,754	435.418.534	46.377	-84.1%	88.015.705	-79.8%
		,	, -,	- / -		/	
15	776,968	7,996	10,770,537	1,870	-76.6%	2,595,079	-75.9%
17	142,056	59,977	113,462,766	25,548	-57.4%	55,941,594	-50.7%
18	53,976	1,184	1,927,432	178	-85.0%	299,058	-84.5%
20	34,067	33,229	115,509,242	26,817	-19.3%	93,475,083	-19.1%
21	15,432	5,771	14,125,728	740	-87.2%	1,619,527	-88.5%
25	73,028	3,827	14,361,057	2,868	-25.1%	11,366,300	-20.9%
26	65,040	369	1,101,350	0	-100.0%	0	-100.0%
30	61,899	523	796,291	291	-44.4%	414,275	-48.0%
M/M	161,222	17,983	3,978,423	6,488	-63.9%	1,621,460	-59.2%
Total	4,449,580	422,613	711,451,359	111,178	-73.7%	255,348,082	-64.1%

% of Total Mkt. Exp.	9.5%		2.5%		
Estimated Cred Credit Utilizatio		672,496,616 94.5%	Estimated Credits Used Credit Utilization	234,664,991 91.9%	
			Residual	Keep	
			Mark Share	Out	
			<u>Group</u>	<u>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 4/1/2016 Credit Offer - Data Through March, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 - Residual Market Share Group

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible <u>Exposures</u>	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	178,268	0	0	0	0.0%	0	0.0%
2	239,841	1,058	2,106,504	0	-100.0%	0	-100.0%
3	514,579	2,406	4,994,361	0	-100.0%	0	-100.0%
4	326,908	1,351	3,189,530	0	-100.0%	0	-100.0%
5	501,440	2,951	6,576,255	2,951	0.0%	6,576,255	0.0%
6	335,867	1,638	4,255,375	1,638	0.0%	4,255,375	0.0%
7	344,560	13,129	21,812,393	2,318	-82.3%	5,845,554	-73.2%
8	197,202	6,627	11,641,572	1,181	-82.2%	3,069,393	-73.6%
9	196,608	8,867	16,579,137	1,605	-81.9%	4,798,563	-71.1%
10	94,960	4,352	8,239,962	697	-84.0%	2,086,593	-74.7%
11	71,847	627	2,076,171	627	0.0%	2,076,171	0.0%
12	192,450	7,084	14,724,867	1,701	-76.0%	5,083,399	-65.5%
13	207,467	17,190	25,777,273	10,147	-41.0%	22,464,606	-12.9%
14	71,337	6,450	13,828,269	4,260	-34.0%	12,081,616	-12.6%
15	25,289	2,507	5,477,040	2,359	-5.9%	4,778,047	-12.8%
16	13,570	12,227	19,304,589	1,212	-90.1%	3,614,901	-81.3%
17	17,176	377	894,855	377	0.0%	819,612	-8.4%
18	15,929	13,746	20,243,528	1,155	-91.6%	2,647,637	-86.9%
19	15,445	517	1,384,434	508	-1.6%	1,419,047	2.5%
20	17,751	14,642	22,880,580	1,045	-92.9%	3,566,115	-84.4%
21	46,671	45,542	92,007,384	39,045	-14.3%	81,342,213	-11.6%
22	14,883	14,883	32,020,129	14,462	-2.8%	29,728,822	-7.2%
23	44,556	2,773	7,225,769	1,943	-29.9%	5,742,950	-20.5%
24	24,559	1,192	2,508,996	453	-62.0%	1,561,609	-37.8%
25	16,428	488	1,395,926	157	-67.9%	566,555	-59.4%
26	21,226	1,595	4,334,780	1,315	-17.5%	2,818,052	-35.0%
27	408,215	1,597	2,779,899	0	-100.0%	0	-100.0%
40	20,278	16,445	22,260,459	1,707	-89.6%	2,905,478	-86.9%
41	58,274	50,238	59,769,619	3,973	-92.1%	8,414,747	-85.9%
42	72,740	59,155	96,365,901	3,113	-94.7%	5,947,513	-93.8%
43	46,778	39,335	64,894,289	3,003	-92.4%	9,147,367	-85.9%
44	33,097	29,332	38,501,352	3,397	-88.4%	6,859,440	-82.2%
45	50,256	42,293	81,400,159	4,829	-88.6%	15,130,452	-81.4%
99	13,125	0	0	0	0.0%	0	0.0%
Total	4,449,580	422,613	711,451,359	111,178	-73.7%	255,348,082	-64.1%
% of Total I	Mkt Evn	0.5%		2 50/			

% of Total Mkt. Exp. 9.5% 2.5%

Keep Out <u>Credits</u>
0.00
1.00
1.00
1.00
1.25
1.50
1.75
2.00
2.25
2.50

											Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	re Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	Mar-15	2014	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.17%	0.90%	0.75%	0	0	0	0	-	-	-	0	0.00	
2	1.19%	0.92%	0.82%	0	0	0	0	-	-	-	1	1.00	
3	1.45%	1.06%	0.87%	0	0	0	0	-	-	-	2	1.00	
4	1.27%	0.98%	0.86%	0	0	0	0	-	-	-	3	1.00	
5	1.91%	1.44%	1.17%	0	0	0	0	-	-	-	4	1.25	
6	1.91%	1.46%	1.25%	0	0	0	0	-	-	-	5	1.50	
7	2.46%	1.81%	1.49%	0	0	0	0	-	-	-	6	1.75	
8	2.25%	1.64%	1.38%	0	0	0	0	-	-	-	7	2.00	
9	2.87%	2.03%	1.61%	0	0	0	0	-	-	-	8	2.25	
10	2.92%	2.18%	1.82%	0	0	0	0	-	-	-	9	2.50	
11	1.99%	1.51%	1.35%	0	0	0	0	-	-	-			
12	2.50%	1.93%	1.70%	0	0	0	0	-	-	-			
13	4.32%	3.11%	2.59%	0	0	0	0	-	-	-			
14	3.84%	2.79%	2.37%	0	0	0	0	-	-	-			
15	4.35%	2.67%	2.20%	0	0	0	0	-	-	-			
16	6.39%	4.97%	3.78%	1	0	0	0	-	1.00	(1.00)			
17	2.20%	1.81%	1.70%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.82%	1	0	0	0	-	1.00	(1.00)			
19	3.68%	3.20%	2.77%	0	0	0	0	-	-	-			
20	6.23%	4.87%	4.53%	1	0	0	0	-	1.00	(1.00)	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.20%	1	1	1	1	1.00	1.00	-			
22	9.85%	6.82%	5.87%	2	1	1	1	1.00	1.00	-	2016	88,015,705	46,377
23	3.63%	2.49%	1.97%	0	0	0	0	-	-	-			
24	2.15%	1.75%	1.40%	0	0	0	0	-	-	-	2015	435,418,534	291,754
25	2.15%	1.50%	1.36%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.08%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.93%	0.77%	0.66%	0	0	0	0	-	-	-			
40	7.63%	4.08%	3.12%	1	0	0	0	-	1.00	(1.00)		(347,402,828)	(245,377)
41	5.88%	3.11%	2.73%	1	0	0	0	-	1.00	(1.00)			
42	6.48%	4.37%	3.13%	1	0	0	0	-	1.00	(1.00)	<u>P</u> 6	ercent Change:	Percent Change:
43	5.28%	3.09%	2.50%	1	0	0	0	-	1.00	(1.00)		-	•
44	7.95%	4.99%	4.43%	1	0	0	0	-	1.00	(1.00)		-79.8%	-84.1%
45	6.64%	3.49%	2.96%	1	0	0	0	-	1.00	(1.00)			
99	0.70%	0.56%	0.69%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.49%										

- 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.

Residual Market Share Ind				Indicator	d Mkt Shar	o Panga	Soloatod	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	Mar-15	2014	2015	2016	Selected <u>Range*</u>	Credits	Credits	Change	Group	<u>Credits</u>	
1	0.32%	0.27%	0.30%	0	0	0	0	-	Orcuits -	<u>Orlange</u>	<u>отоар</u> 0	0.00	
2	0.29%	0.29%	0.28%	0	0	0	0	_	_	_	1	1.00	
3	0.38%	0.29%	0.27%	0	0	0	0	_	_	_	2	1.00	
4	0.30%	0.29%	0.27%	0	0	0	0	_	_	_	3	1.00	
5	0.44%	0.38%	0.31%	0	0	0	0	_	_	_	4	1.25	
6	0.58%	0.53%	0.46%	0	0	0	0	-	_	_	5	1.50	
7	0.56%	0.46%	0.43%	0	0	0	0	-	-	_	6	1.75	
8	0.78%	0.67%	0.63%	0	0	0	0	-	-	-	7	2.00	
9	0.78%	0.63%	0.57%	0	0	0	0	-	-	-	8	2.25	
10	0.71%	0.62%	0.54%	0	0	0	0	-	-	-	9	2.50	
11	1.12%	0.88%	0.75%	0	0	0	0	-	-	-			
12	0.88%	0.86%	0.77%	0	0	0	0	-	-	-			
13	1.46%	1.17%	1.00%	0	0	0	0	-	-	-			
14	1.65%	1.32%	1.13%	0	0	0	0	-	-	-			
15	1.42%	1.43%	1.27%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.26%	0	0	0	0	-	-	-			
17	0.79%	0.76%	0.85%	0	0	0	0	-	-	-			
18	2.45%	2.07%	2.24%	0	0	0	0	-	-	-			
19	2.18%	2.18%	2.09%	0	0	0	0	-	-	-			
20	2.70%	2.39%	2.55%	0	0	0	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.19%	1	0	0	0	-	1.00	(1.00)			
22	8.10%	6.62%	6.43%	2	1	1	1	1.00	1.00	-	2016	2,595,079	1,870
23	2.82%	1.98%	1.63%	0	0	0	0	-	-	-			
24	2.99%	2.98%	2.36%	0	0	0	0	-	-	-	2015	10,770,537	7,996
25	1.73%	1.28%	1.11%	0	0	0	0	-	-	-			
26	1.99%	1.56%	1.53%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.26%	0.24%	0.22%	0	0	0	0	-	-	-			
40	2.44%	1.80%	1.33%	0	0	0	0	-	-	-		(8,175,458)	(6,125)
41	1.68%	1.28%	1.13%	0	0	0	0	-	-	-			
42	3.10%	3.10%	2.64%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	1.59%	1.06%	0.98%	0	0	0	0	-	-	-			
44	3.16%	2.11%	2.13%	0	0	0	0	-	-	-		-75.9%	-76.6%
45	2.38%	1.83%	1.59%	0	0	0	0	-	-	-			
99	0.36%	0.26%	0.12%	0	0	0	0	-	-	-			
Tot	0.73%	0.62%	0.56%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	<u>Aug-14</u>	Mar-15	2014	<u>2015</u>	2016	Range*	Credits	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	3.25%	2.47%	2.12%	0	0	0	0	-	-	-	0	0.00	
2	2.96%	2.03%	2.05%	0	0	0	0	-	-	-	1	1.00	
3	4.05%	2.61%	2.36%	0	0	0	0	-	-	-	2	1.00	
4	3.21%	2.63%	2.24%	0	0	0	0	-	-	-	3	1.00	
5	4.26%	3.06%	2.62%	0	0	0	0	-	-	-	4	1.25	
6	4.40%	3.57%	3.25%	0	0	0	0	-	-	-	5	1.50	
7	5.00%	3.57%	2.93%	1	0	0	0	-	1.00	(1.00)	6	1.75	
8	5.01%	3.58%	3.23%	1	0	0	0	-	1.00	(1.00)	7	2.00	
9	5.05%	3.56%	2.80%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	5.55%	3.98%	3.36%	1	0	0	0	-	1.00	(1.00)	9	2.50	
11	4.60%	3.99%	2.83%	0	0	0	0	-	_	-			
12	5.90%	4.74%	3.99%	1	0	0	0	-	1.00	(1.00)			
13	7.34%	5.15%	4.95%	1	1	0	1	1.00	1.00	-			
14	8.44%	5.78%	5.28%	2	1	1	1	1.00	1.00	-			
15	8.90%	6.45%	5.21%	2	1	1	1	1.00	1.00	-			
16	14.02%	9.76%	7.50%	3	2	1	2	1.00	1.00	-			
17	6.51%	5.57%	4.23%	1	1	0	1	1.00	1.00	-			
18	10.10%	7.78%	5.58%	2	1	1	1	1.00	1.00	-			
19	11.66%	7.72%	5.90%	3	1	1	1	1.00	1.00	-			
20	12.72%	10.84%	10.17%	3	2	2	2	1.00	1.00	-	<u>Availa</u>	ble Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	10.02%	3	3	2	3	1.00	1.00	-			
22	14.23%	10.75%	9.08%	3	2	2	2	1.00	1.00	-	2016	55,941,594	25,548
23	8.79%	6.11%	5.15%	2	1	1	1	1.00	1.00	-			
24	4.64%	3.61%	3.22%	0	0	0	0	-	-	-	2015	113,462,766	59,977
25	6.65%	4.56%	4.00%	1	0	0	0	-	1.00	(1.00)			
26	8.63%	5.64%	5.68%	2	1	1	1	1.00	1.00	-		Difference:	<u>Difference:</u>
27	2.51%	2.07%	1.72%	0	0	0	0	-	-	-			
40	12.55%	7.28%	6.30%	3	1	1	1	1.00	1.00	-		(57,521,172)	(34,429)
41	12.06%	6.14%	5.03%	3	1	1	1	1.00	1.00	-			
42	9.55%	4.71%	3.88%	2	0	0	0	-	1.00	(1.00)	<u>F</u>	Percent Change:	Percent Change:
43	8.81%	5.59%	5.11%	2	1	1	1	1.00	1.00	-	_		
44	11.57%	6.62%	7.29%	3	1	1	1	1.00	1.00	-		-50.7%	-57.4%
45	12.13%	6.63%	6.66%	3	1	1	1	1.00	1.00	-			
99	0.83%	0.39%	0.40%	0	0	0	0	-	=	-			
Tot	5.17%	3.64%	3.20%										

- 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.

	Residual Market Share				11414 01			0040	2215		Residual	Keep	
Torr	Aug-13	Aug-14	Snare Mar-15	2014	d Mkt Shar 2015	e Range 2016	Selected Range*	2016 Credits	2015 Credits	Chango	Mark Shr	Out	
<u>Terr</u> 1	1.12%	0.63%	0.58%	0	0	0	<u>Kange</u> 0	Credits	Credits	<u>Change</u>	<u>Group</u> 0	<u>Credits</u> 0.00	
2	0.84%	0.55%	0.33%	0	0	0	0	<u>-</u>	-	- -	1	1.00	
3	1.34%	0.92%	0.85%	0	0	0	0	_	_	_	2	1.00	
4	1.14%	0.86%	0.63%	0	0	0	0	_	_	_	3	1.00	
5	1.75%	1.26%	0.99%	0	0	0	0	_	_	_	4	1.25	
6	1.10%	1.13%	0.79%	0	0	0	0	_	_	_	5	1.50	
7	1.98%	1.31%	0.75%	0	0	0	0	_	_	_	6	1.75	
8	1.08%	0.94%	0.97%	0	0	0	0	_	_	_	7	2.00	
9	2.17%	1.57%	1.29%	0	0	0	0	_	_	_	8	2.25	
10	1.83%	1.02%	1.45%	0	0	0	0	_	_	_	9	2.50	
11	1.24%	0.77%	0.72%	0	0	0	0	_	_	_	Ü	2.00	
12	2.44%	1.85%	1.49%	0	0	0	0	_	_	_			
13	2.71%	1.96%	1.83%	0	0	0	0	_	_	_			
14	3.53%	2.39%	1.94%	0	0	0	0	_	_	_			
15	4.75%	4.06%	3.15%	0	0	0	0	_	_	_			
16	1.75%	0.00%	0.00%	0	0	0	0	-	_	_			
17	2.14%	1.13%	1.72%	0	0	0	0	-	_	_			
18	5.63%	5.10%	5.20%	1	1	1	1	1.00	1.00	_			
19	3.16%	2.04%	1.42%	0	0	0	0	-	-	-			
20	3.59%	4.15%	2.45%	0	0	0	0	-	-	_	Availabl	e Credit Prem:	Credit Eligible Exp:
21	4.86%	3.05%	3.12%	0	0	0	0	-	-	-			
22	9.76%	4.32%	3.55%	2	0	0	0	-	1.00	(1.00)	2016	299,058	178
23	2.12%	1.27%	1.46%	0	0	0	0	-	-	` -		ŕ	
24	3.56%	0.43%	1.94%	0	0	0	0	-	-	-	2015	1,927,432	1,184
25	0.15%	1.68%	0.87%	0	0	0	0	-	-	-			
26	4.20%	3.21%	2.55%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.89%	0.72%	0.51%	0	0	0	0	-	-	-			
40	5.77%	2.78%	1.57%	1	0	0	0	-	1.00	(1.00)		(1,628,374)	(1,006)
41	7.29%	1.64%	1.61%	1	0	0	0	-	1.00	(1.00)			
42	2.50%	1.69%	1.36%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	3.03%	3.04%	2.37%	0	0	0	0	-	-	-			
44	1.80%	2.70%	2.31%	0	0	0	0	-	-	-		-84.5%	-85.0%
45	4.86%	3.11%	2.60%	0	0	0	0	-	-	-			
99	1.96%	0.51%	0.68%	0	0	0	0	-	-	-			
Tot	1.72%	1.21%	1.02%										

- 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.

	Residual Market Share Indicated Mkt Share Range					o Pango	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	Aug-14	Mar-15	2014	2015	2016	Range*	Credits	Credits	Change	Group	Credits	
1	4.03%	3.98%	5.60%	0	0	1	0	Orcaits	Orcaits -	<u>onange</u>	<u>огоар</u> 0	0.00	
2	5.82%	4.31%	4.12%	1	0	0	0	_	1.00	(1.00)	1	1.00	
3	7.69%	3.82%	3.93%	1	0	0	0	_	1.00	(1.00)	2	1.00	
4	5.70%	3.32%	3.02%	1	0	0	0	_	1.00	(1.00)	3	1.00	
5	7.89%	6.27%	5.39%	1	1	1	1	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.56%	2	1	1	1	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.60%	2	1	1	1	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.84%	3	1	1	1	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	5.32%	2	1	1	1	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	6.60%	3	1	1	1	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	3.97%	2	1	0	1	1.00	1.00	-			
12	12.77%	7.55%	6.53%	3	1	1	1	1.00	1.00	-			
13	11.99%	8.85%	8.43%	3	2	2	2	1.00	1.00	-			
14	15.28%	13.10%	11.15%	3	3	3	3	1.00	1.00	-			
15	21.15%	13.01%	14.41%	4	3	3	3	1.00	1.25	(0.25)			
16	26.59%	25.13%	20.26%	5	5	4	5	1.50	1.50	-			
17	19.61%	9.89%	11.18%	4	2	3	3	1.00	1.25	(0.25)			
18	20.86%	22.51%	15.04%	4	4	3	4	1.25	1.25	-			
19	15.29%	16.67%	14.91%	3	3	3	3	1.00	1.00	-			
20	24.66%	18.55%	18.24%	5	4	4	4	1.25	1.50	(0.25)	<u>Availab</u>	<u>le Credit Prem:</u>	Credit Eligible Exp:
21	32.61%	23.95%	22.19%	6	5	4	5	1.50	1.75	(0.25)			
22	33.75%	22.17%	18.96%	6	4	4	4	1.25	1.75	(0.50)	2016	93,475,083	26,817
23	18.35%	10.83%	8.16%	4	2	2	2	1.00	1.25	(0.25)			
24	8.54%	5.71%	5.70%	2	1	1	1	1.00	1.00	-	2015	115,509,242	33,229
25	13.28%	13.16%	12.26%	3	3	3	3	1.00	1.00	-			
26	23.56%	13.76%	13.63%	5	3	3	3	1.00	1.50	(0.50)		<u>Difference:</u>	<u>Difference:</u>
27	5.26%	3.54%	2.66%	1	0	0	0	-	1.00	(1.00)			
40	24.85%	11.38%	13.69%	5	3	3	3	1.00	1.50	(0.50)		(22,034,159)	(6,412)
41	14.09%	9.23%	9.40%	3	2	2	2	1.00	1.00	-			
42	18.64%	12.38%	10.96%	4	3	2	3	1.00	1.25	(0.25)	<u>Pe</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	13.50%	4	3	3	3	1.00	1.25	(0.25)			
44	24.27%	16.44%	15.28%	5	3	3	3	1.00	1.50	(0.50)		-19.1%	-19.3%
45	20.07%	18.11%	16.36%	4	4	3	4	1.25	1.25	-			
99	2.48%	3.08%	0.34%	0	0	0	0	-	-	-			
Tot	12.86%	8.91%	8.18%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	Mar-15	2014	<u>2015</u>	<u>2016</u>	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.87%	1.52%	0.60%	0	0	0	0	-	-	-	0	0.00	
2	2.29%	1.29%	0.96%	0	0	0	0	-	=	-	1	1.00	
3	2.90%	1.82%	1.72%	0	0	0	0	-	-	-	2	1.00	
4	2.49%	2.11%	0.81%	0	0	0	0	-	-	-	3	1.00	
5	4.05%	2.57%	2.43%	0	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	1.93%	0	0	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.38%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	1.95%	0	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	1.94%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	9.63%	4.03%	4.08%	2	0	0	0	-	1.00	(1.00)	9	2.50	
11	3.08%	2.33%	1.99%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.18%	0	0	0	0	-	-	-			
13	10.29%	3.92%	4.29%	2	0	0	0	-	1.00	(1.00)			
14	5.89%	4.05%	4.17%	1	0	0	0	-	1.00	(1.00)			
15	10.82%	4.90%	3.05%	2	0	0	0	-	1.00	(1.00)			
16	13.13%	13.16%	10.64%	3	3	2	3	1.00	1.00	-			
17	5.11%	0.00%	1.09%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.93%	1	0	0	0	-	1.00	(1.00)			
19	5.62%	4.17%	0.65%	1	0	0	0	-	1.00	(1.00)			
20	11.09%	6.02%	2.81%	3	1	0	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	4.51%	2	0	0	0	-	1.00	(1.00)			
22	9.88%	2.86%	1.91%	2	0	0	0	-	1.00	(1.00)	2016	1,619,527	740
23	4.67%	4.48%	3.77%	0	0	0	0	-	-	-			
24	6.40%	2.76%	1.01%	1	0	0	0	-	1.00	(1.00)	2015	14,125,728	5,771
25	2.60%	0.00%	0.16%	0	0	0	0	-	-	-			
26	6.32%	1.47%	1.54%	1	0	0	0	-	1.00	(1.00)		Difference:	<u>Difference:</u>
27	2.55%	1.88%	1.47%	0	0	0	0	-	-	-			
40	13.69%	7.00%	4.98%	3	1	0	1	1.00	1.00	-		(12,506,200)	(5,031)
41	12.53%	5.33%	5.20%	3	1	1	1	1.00	1.00	-			
42	6.17%	3.86%	2.60%	1	0	0	0	-	1.00	(1.00)	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	1.55%	1	0	0	0	-	1.00	(1.00)			
44	8.43%	3.35%	3.21%	2	0	0	0	-	1.00	(1.00)		-88.5%	-87.2%
45	10.32%	2.31%	3.14%	2	0	0	0	-	1.00	(1.00)			
99	0.38%	0.00%	-5.38%	0	0	0	0	-	=	-			
Tot	5.15%	2.98%	2.42%										

- 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.

	Residual Market Share										Residual	Keep	
Т					Mkt Shar		Selected	2016	2015	Change	Mark Shr	Out	
<u>Terr</u> 1	<u>Aug-13</u> 1.88%	Aug-14 1.37%	Mar-15 1.47%	<u>2014</u>	<u>2015</u> 0	<u>2016</u> 0	<u>Range*</u> 0	Credits -	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u> 0.00	
	1.61%	1.23%	1.47%	0	0	_	0	- -	-	-	0 1	1.00	
2 3	1.84%	1.23%	0.99%	0 0	0	0 0	0	-	-	-	2	1.00	
4	1.75%	1.20%	1.13%	0	0	0	0	-	-	-	3	1.00	
5	2.37%	2.09%	1.73%	0	0	0	0	-	_	-	4	1.25	
	2.57%	1.99%	1.73%	0	0	0	0	-	_	-	5	1.50	
6 7	2.57%	1.99%	1.68%	0	0	0	0	-	-	-	5 6	1.75	
8	3.30%	2.48%	2.38%	0	0	0	0	-	-	-	7	2.00	
9	2.62%	2.46%	2.34%	0	0	0	0	-	-	-	8	2.25	
9 10	3.19%	3.31%	2.65%	0	0	0	0	-	-	-	9	2.50	
11	2.54%	1.31%	1.71%	0	0	0	0	-	-	-	9	2.50	
12	4.04%	3.41%	3.22%	0	0	0	0	_	_	-			
13	3.75%	3.40%	3.06%	0	0	0	0	-	_	-			
14	6.81%	5.30%	3.21%	1	1	0	1	1.00	1.00	-			
15	11.71%	4.46%	6.11%	3	0	1	1	1.00	1.00	- -			
16	17.01%	4.40%	3.63%	4	0	0	0	-	1.00	(1.00)			
17	3.23%	3.64%	1.10%	0	0	0	0	-	-	(1.00)			
18	9.96%	5.00%	6.47%	2	1	1	1	1.00	1.00	- -			
19	4.46%	11.43%	8.50%	0	3	2	2	1.00	-	1.00			
20	8.81%	5.74%	5.51%	2	1	1	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.86%	2	1	1	1	1.00	1.00	-	Available	c Orcait i iciii.	Orcait Eligible Exp.
22	10.69%	8.39%	4.00%	2	2	0	2	1.00	1.00	_	2016	11,366,300	2,868
23	6.30%	3.39%	2.49%	1	0	0	0	-	1.00	(1.00)	2010	11,000,000	2,000
24	5.30%	2.03%	1.19%	1	0	0	0	_	1.00	(1.00)	2015	14,361,057	3,827
25	8.64%	0.00%	2.29%	2	0	0	0	_	1.00	(1.00)	2010	1 1,00 1,007	0,021
26	9.20%	2.76%	1.62%	2	0	0	0	_	1.00	(1.00)		<u>Difference:</u>	<u>Difference:</u>
27	1.33%	0.88%	0.75%	0	0	0	0	_	-	-		<u>Binoronico.</u>	<u>Directions</u>
40	3.61%	3.64%	3.21%	0	0	0	0	_	_	-		(2,994,757)	(959)
41	4.94%	4.21%	4.82%	0	0	0	0	_	-	_		(=,==,,==,,	(555)
42	4.47%	4.14%	3.06%	0	0	0	0	_	_	-	Pe	rcent Change:	Percent Change:
43	7.06%	6.52%	4.29%	1	1	0	1	1.00	1.00	_			<u> </u>
44	10.75%	4.27%	4.23%	2	0	0	0	-	1.00	(1.00)		-20.9%	-25.1%
45	7.15%	5.62%	5.87%	1	1	1	1	1.00	1.00	-		/-	
99	0.52%	0.40%	0.26%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.76%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
Terr	Aug-13	Aug-14	Mar-15	2014	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	0.85%	0.56%	0.47%	0	0	0	0	-	-	-	0	0.00	
2	0.52%	0.36%	0.39%	0	0	0	0	-	-	-	1	1.00	
3	0.84%	0.58%	0.44%	0	0	0	0	-	-	-	2	1.00	
4	0.67%	0.55%	0.49%	0	0	0	0	-	-	-	3	1.00	
5	0.93%	0.92%	0.67%	0	0	0	0	-	-	-	4	1.25	
6	0.81%	0.67%	0.74%	0	0	0	0	-	-	-	5	1.50	
7	0.92%	0.68%	0.48%	0	0	0	0	-	-	-	6	1.75	
8	0.95%	0.89%	0.67%	0	0	0	0	-	-	-	7	2.00	
9	0.93%	0.58%	0.47%	0	0	0	0	-	-	-	8	2.25	
10	1.56%	1.02%	1.06%	0	0	0	0	-	-	-	9	2.50	
11	0.67%	0.68%	0.64%	0	0	0	0	-	-	-			
12	1.75%	1.20%	1.02%	0	0	0	0	-	-	-			
13	2.28%	1.43%	1.31%	0	0	0	0	-	-	-			
14	1.87%	0.47%	0.37%	0	0	0	0	-	-	-			
15	3.62%	1.93%	0.49%	0	0	0	0	-	-	-			
16	0.76%	0.00%	2.17%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.36%	0	0	0	0	-	-	-			
18	3.56%	3.30%	2.13%	0	0	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	1.21%	0	0	0	0	-	-	-	Available	e Credit Prem:	Credit Eligible Exp:
21	1.76%	0.91%	0.98%	0	0	0	0	-	-	-			
22	5.59%	0.00%	1.53%	1	0	0	0	-	1.00	(1.00)	2016	-	-
23	0.91%	1.55%	0.58%	0	0	0	0	-	-	-			
24	0.85%	0.96%	1.06%	0	0	0	0	-	-	-	2015	1,101,350	369
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	2.35%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.41%	0.35%	0.29%	0	0	0	0	-	-	-			
40	0.06%	1.47%	0.77%	0	0	0	0	-	-	-		(1,101,350)	(369)
41	3.25%	1.54%	1.17%	0	0	0	0	-	-	-			
42	1.58%	0.73%	0.84%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.42%	1.10%	0.97%	0	0	0	0	-	-	-			
44	1.88%	2.14%	3.12%	0	0	0	0	-	-	-		-100.0%	-100.0%
45	5.87%	1.57%	2.26%	1	0	0	0	-	1.00	(1.00)			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.59%										

- 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.

	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	Aug-14	Mar-15	2014	2015	2016	Range*	Credits	Credits	Change	Group	Credits	
1	0.99%	0.64%	0.35%	0	0	0	0	-	-	-	0	0.00	
2	0.86%	0.66%	0.69%	0	0	0	0	-	-	-	1	1.00	
3	0.87%	0.52%	0.53%	0	0	0	0	-	-	-	2	1.00	
4	0.81%	0.51%	0.54%	0	0	0	0	-	-	-	3	1.00	
5	0.97%	0.91%	0.83%	0	0	0	0	-	-	-	4	1.25	
6	1.01%	0.85%	0.89%	0	0	0	0	-	-	-	5	1.50	
7	1.54%	1.13%	0.87%	0	0	0	0	-	-	-	6	1.75	
8	0.93%	1.23%	0.98%	0	0	0	0	-	-	-	7	2.00	
9	1.27%	0.94%	0.73%	0	0	0	0	-	-	-	8	2.25	
10	2.29%	1.49%	1.57%	0	0	0	0	-	-	-	9	2.50	
11	0.97%	1.74%	1.48%	0	0	0	0	-	-	-			
12	1.86%	1.29%	1.38%	0	0	0	0	-	-	-			
13	2.05%	1.29%	1.33%	0	0	0	0	-	-	-			
14	3.24%	3.44%	3.42%	0	0	0	0	-	-	-			
15	5.81%	6.90%	3.98%	1	1	0	1	1.00	1.00	-			
16	7.84%	4.32%	3.49%	1	0	0	0	-	1.00	(1.00)			
17	1.39%	1.36%	1.40%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	2.34%	0	0	0	0	-	-	-			
20	1.68%	0.00%	0.71%	0	0	0	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	2.47%	2.39%	3.47%	0	0	0	0	-	-	-			
22	8.30%	1.27%	3.54%	2	0	0	0	-	1.00	(1.00)	2016	414,275	291
23	0.98%	1.55%	1.43%	0	0	0	0	-	-	-			
24	1.21%	1.06%	2.00%	0	0	0	0	-	-	-	2015	796,291	523
25	1.31%	0.80%	0.67%	0	0	0	0	-	-	-			
26	4.15%	4.92%	3.45%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.62%	0.61%	0.47%	0	0	0	0	-	-	-			
40	1.29%	0.97%	0.95%	0	0	0	0	-	-	-		(382,016)	(233)
41	1.68%	1.20%	0.87%	0	0	0	0	-	-	-			
42	2.10%	1.35%	1.48%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.31%	1.26%	1.74%	0	0	0	0	-	-	-			
44	4.60%	2.87%	2.84%	0	0	0	0	-	-	-		-48.0%	-44.4%
45	2.31%	1.05%	0.71%	0	0	0	0	-	-	-			
99	0.00%	2.41%	1.43%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.89%										

- 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.

				<u> </u>							Residual	Keep	
_		al Market			Mkt Shar		Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	Aug-14	<u>Mar-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.51%	1.25%	1.13%	0	0	0	0	-	-	-	0	0.00	
2	1.50%	1.38%	1.15%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.63%	1.42%	0	0	0	0	-	-	-	2	1.00	
4	1.57%	1.52%	1.22%	0	0	0	0	-	-	-	3	1.00	
5	2.18%	1.81%	1.58%	0	0	0	0	-	-	-	4	1.25	
6	2.36%	1.97%	1.74%	0	0	0	0	-	-	-	5	1.50	
7	2.92%	2.44%	2.03%	0	0	0	0	-	-	-	6	1.75	
8	2.78%	2.60%	2.25%	0	0	0	0	-	-	-	7	2.00	
9	2.91%	2.44%	2.01%	0	0	0	0	-	-	-	8	2.25	
10	4.43%	2.95%	2.63%	0	0	0	0	-	-	-	9	2.50	
11	3.90%	2.96%	2.37%	0	0	0	0	-	-	-			
12	4.32%	3.68%	2.99%	0	0	0	0	-	-	-			
13	5.08%	4.33%	3.69%	1	0	0	0	-	1.00	(1.00)			
14	5.67%	4.70%	3.77%	1	0	0	0	-	1.00	(1.00)			
15	7.59%	7.08%	6.67%	1	1	1	1	1.00	1.00	-			
16	9.92%	8.70%	6.94%	2	2	1	2	1.00	1.00	-			
17	3.40%	3.38%	3.12%	0	0	0	0	-	-	-			
18	5.43%	5.25%	5.47%	1	1	1	1	1.00	1.00	-			
19	4.14%	3.33%	3.93%	0	0	0	0	-	-	-			
20	4.03%	4.17%	4.09%	0	0	0	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	6.51%	2	2	1	2	1.00	1.00	-			
22	10.99%	6.03%	5.13%	2	1	1	1	1.00	1.00	-	2016	1,621,460	6,488
23	6.85%	4.79%	4.21%	1	0	0	0	-	1.00	(1.00)			
24	5.22%	3.74%	2.45%	1	0	0	0	-	1.00	(1.00)	2015	3,978,423	17,983
25	3.76%	2.63%	2.59%	0	0	0	0	-	-	-			
26	8.28%	7.69%	4.90%	2	1	0	1	1.00	1.00	-		Difference:	<u>Difference:</u>
27	1.26%	1.21%	1.00%	0	0	0	0	-	-	-			
40	8.56%	6.78%	7.13%	2	1	1	1	1.00	1.00	-		(2,356,963)	(11,496)
41	5.70%	3.98%	2.96%	1	0	0	0	-	1.00	(1.00)		,	• • •
42	8.14%	6.17%	4.99%	2	1	0	1	1.00	1.00	-	Pe	rcent Change:	Percent Change:
43	5.84%	4.22%	4.13%	1	0	0	0	-	1.00	(1.00)			<u></u>
44	7.90%	7.20%	5.68%	1	1	1	1	1.00	1.00	-		-59.2%	-63.9%
45	7.16%	5.59%	4.52%	1	1	0	1	1.00	1.00	-			
99	1.42%	0.43%	0.69%	0	0	0	0	-	-	-			
Tot	2.66%	2.26%	1.91%										

- 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 - 4/1/2016 Credit Offer 2016 Indicated Credit Factors - Data Through March, 2015

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

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep
Mark Shr	Out
<u>Group</u>	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

RECORDS OF MEETING

ACTUARIAL COMMITTEE – JUNE 23, 2015

Members Present

Mr. Joseph F. Cofield – Chair

Mr. Geoffrey H. Arnold

Mr. Jonathan Blake*

Mr. Alex F. Butensky

Mr. Christopher Dupill

Mr. Glenn R. Hiltpold

Mr. John V. Kelly

Mr. Michael Petrarca, Jr.

Ms. Lynellen Ramirez

Mr. John P. Tierney

Ms. Meredith M. Woodcock

Substituted for:

Mr. Hall D. Crowder*

Metropolitan P & C Insurance Company Plymouth Rock Assurance Corporation The Hanover Insurance Company

The Norfolk & Dedham Group

EM Freedman Insurance Agency, Inc.

Safety Insurance Company MAPFRE U.S.A. Corporation Amica Mutual Insurance Company

Arbella Insurance Group

Quincy Mutual Group

Liberty Mutual Group

14.01 Records of Previous Meeting

The Committee unanimously voted to approve the Records of the Actuarial Committee meeting of September 24, 2014. The Records have been distributed and are on file with CAR's Secretary.

15.03 Quota Share Credits for Policies Effective April 1, 2016 and Later

Mr. Timothy Galligan reviewed reports calculating voluntary credit factors for policies effective April 1, 2016 and later using the algorithm codified in Rule 29. Mr. Galligan noted that the indications estimate a 73.7% decrease in credit-eligible exposures and a corresponding 64.1% decrease in available quota share credit premium using data reported through March, 2015. Mr. Galligan advised the Committee that the current indications result in 73 class/territory cells receiving credit, compared to 127 from the prior year. The decrease in credits is impacted by 55 cells losing the credit entirely, when compared to the prior year's credit factors.

The Committee noted the successful depopulation of the residual market since the implementation of the MAIP and competitive rating. Some members highlighted the impact of the credit offers and credit usage as an influential factor in the depopulation. Other members suggested that

although credits and credit usage were a part of the depopulation, that successful rating strategies were more influential in the depopulation.

Some members suggested that the current formula indication represents a significant decrease in credit premium that could result in market disruption to those writing credit eligible risks, and that it could result in more risks being put back into the residual market. Others disagreed, and noted that the current mechanism has worked well, and was built to be self-correcting.

The Committee's discussion focused on three general alternatives:

- The adoption of the credit factors as indicated, with a 64.1% decrease in potential credit eligible premium.
- Modification of the formula to mitigate the substantial decrease.
- A "freeze" of credit factors, using the 2015 credit factors for the 2016 credit offer.

Members favoring the adoption of the current formulaic approach and the current credit indications opined the following:

- The current formula works well and the mechanism was designed to be self-correcting in the event of any swings in the residual market ranges.
- The size of the residual market is more influenced by adequate voluntary rating in the competitive market and less influenced by the credits and credit usage.
- Companies have easier accessibility to buying and selling excess credit premium because of the amount of credit premium in the system; this reduces companies direct participation in the assignment sharing process.
- With a smaller residual market, companies are better incented to write the remaining business voluntarily by strengthening take-out credits and allowing the keep-out mechanism to adjust credits as indicated by the formulaic approach.
- As the size of the residual market decreases, so does the need for credits. If all MAIP business was written voluntarily, the value of credit premium would be zero.

Members supporting modifications to the formula or the "freezing" of credit factors opined the following:

- The size of the indicated credit premium decrease is extreme, and if implemented, would cause repopulation of the residual market.
- A significant reduction in credit eligible cells would be disruptive to companies strategically writing risks voluntarily in those classes and territories that lost the credit.
- The Division of Insurance (DOI) may not approve the offer. In a prior credit decision, the DOI indicated that it would not approve an extreme reduction of credits in certain classes and territories, and put forth specific constraints on any reductions allowed.

The Committee then discussed the statutory objective and considered how to measure disproportionate representation in the residual market. Mr. Geoffrey Arnold distributed an exhibit that measured MAIP residual market shares at varying levels above the statewide average, and included statistics on standard deviation to define where credits are needed by highlighting "disproportionate" as a numerical percentage above the statewide average residual market rate.

Other members suggested that the statutory objective has been successfully met.

After considerable discussion, the Committee identified the following areas of interest and requested Staff investigate and prepare exhibits for the next meeting:

- The current formulaic indication, incorporating the most recent data. The Committee also requested Staff to compare the April-May 2015 results to April-May 2014.
- Freeze the April, 2015 approved credit factors for policies effective April, 2016 and subsequent.
- Calculate the credit indications using an average of the indicated April, 2016 credit factors and the April, 2015 approved credit factors.
- Redefine the credit ranges into relative ranges based on what the relativities were when the initial ranges were established as compared to the overall residual market rate.
- Produce loss ratio results for credit business in order to consider the impact to credit usage.

The Committee also encouraged members to forward additional proposals to Staff and scheduled its next meeting on Wednesday, September 2, 2015 at 1 pm to continue discussions relative to the 2016 credit offer.

TIMOTHY GALLIGAN
Financial Services Coordinator

Attachments

Boston, Massachusetts August 4, 2015

ATTACHMENT LISTING

Docket #AC15.02, Exhibit #1 Attendance Listing

Docket #AC15.03, Exhibit #2 Exhibit Distributed by Geoffrey Arnold

ACTUARIAL COMMITTEE MEETING SIGN-IN SHEET June 23, 2015

Individual's Name	Company / Agency
Im Galligan	CAR Staff
Toe Cotheld	Metropolitan
Votalie Hubbley	CAR
Glenn Hillpap	Safety Ins.
Geoffrey Arnold	Plymarth Rock
JOHN TIERNOY	QUINCY MUTUAL
MIKE PETENRIA	AMICA MUNUAL
Lynellen Ramirez	Arbella Ins Group
Alex Butenshy	Norfolk & Dedliam Group
Meredith Wood cock	Liberty Mutual Insurance
Chris Durice	EMFreedman Insurance
John Kelly	MAPFREUSA
Jonarum Beaut	HANDER
Kary Robbins	CAR
	

ACTUARIAL COMMITTEE MEETING SIGN-IN SHEET June 23, 2015

Individual's Name	Company / Agency
Parah Clemens	Company / Agency
Allen Chaves	Arpella
Michael Beaulieu	16 Pella
Steve Gartiers	100
Wendy Browns	CAR
Bruce Cregger	Encompass
Sean Thompson	Encompass Hanover
San Jagres	my commercial
Flithoman /	180
SEAN MODNE	NED
B. Feinberg	A60
)	
	,
	,

Historical Credit Offers as a function of Alternate Definitions of "Disproportionate"

		Perce	nt of Expos	ures in Exc	ess of Floor	as of:	Percent of These Exposures Receiving Credits as of:				
		Aug-2011	Aug-2012	Aug-2013	Aug-2014	Mar-2015	Aug-2011	Aug-2012	Aug-2013	Aug-2014	Mar-2015
	100%	28.9%	33.8%	33.9%	35.2%	34.9%	37.9%	30.9%	30.2%	26.7%	7.18%
CREDIT	125%	21.6%	21.0%	23.4%	20.6%	20.9%	50.6%	49.7%	43.7%	45.7%	12.0%
FLOOR	150%	17.2%	17.3%	17.3%	17.0%	17.3%	63.4%	60.0%	59.1%	55.4%	14.5%
when MAIP	175%	15.8%	15.6%	14.4%	14.6%	14.5%	68.6%	65.9%	68.0%	64.4%	17.0%
Share = 'n'	185%	10.4%	10.3%	14.0%	13.0%	9.58%	99.8%	99.4%	69.8%	66.2%	25.8%
Percent of	200%	10.3%	9.70%	9.36%	8.21%	8.05%	99.9%	99.8%	99.8%	92.1%	30.6%
Average	250%	8.41%	8.26%	7.18%	5.66%	4.61%	100.0%	99.9%	100.0%	99.5%	50.7%
Avelage	300%	6.99%	5.61%	3.39%	2.47%	3.38%	100.0%	100.0%	100.0%	99.9%	68.1%
	500%	0.82%	0.61%	0.58%	0.39%	0.44%	100.0%	100.0%	100.0%	99.6%	97.1%
	0.00	28.9%	33.8%	33.9%	35.2%	34.9%	37.9%	30.9%	30.2%	26.7%	7.18%
	0.10	24.6%	24.4%	27.6%	28.6%	29.3%	44.5%	42.7%	37.1%	32.9%	8.54%
	0.20	22.3%	23.2%	23.7%	24.9%	25.4%	49.1%	45.0%	43.1%	37.7%	9.85%
	0.30	21.2%	20.8%	20.3%	20.6%	20.9%	51.6%	50.1%	50.4%	45.7%	12.0%
	0.40	20.8%	17.3%	17.8%	18.9%	19.3%	52.6%	59.8%	57.4%	49.7%	13.0%
	0.45	17.2%	17.3%	17.7%	18.9%	18.5%	63.4%	59.9%	57.7%	49.7%	13.6%
	0.50	17.2%	17.3%	17.3%	18.9%	18.0%	63.4%	60.0%	59.1%	49.8%	13.9%
	0.55	17.1%	16.1%	17.3%	18.3%	17.4%	63.9%	64.3%	59.1%	51.3%	14.4%
	0.60	16.9%	16.1%	17.3%	17.0%	17.3%	64.2%	64.6%	59.1%	55.4%	14.5%
	0.65	16.1%	16.0%	17.2%	16.8%	16.8%	67.4%	64.8%	59.2%	56.0%	14.9%
	0.70	15.8%	15.7%	15.8%	16.2%	16.4%	68.6%	66.0%	62.3%	57.9%	15.3%
	0.75	14.6%	15.7%	15.7%	15.8%	16.0%	74.3%	66.0%	62.6%	59.4%	15.7%
	0.80	10.5%	15.6%	14.4%	14.6%	14.6%	99.4%	65.9%	68.0%	64.3%	16.9%
CREDIT	0.85	10.4%	10.7%	14.4%	14.6%	14.5%	99.9%	95.9%	68.0%	64.4%	17.0%
FLOOR	0.90	10.4%	9.74%	14.0%	14.5%	13.7%	99.9%	99.8%	69.8%	64.7%	18.0%
when MAIP	0.95	10.3%	9.74%	14.0%	14.4%	10.3%	99.9%	99.8%	69.8%	65.1%	24.0%
Share = 'n'	1.00	10.2%	9.70%	10.1%	13.2%	9.51%	99.9%	99.8%	96.8%	65.0%	26.0%
Standard	1.10	9.72%	9.70%	9.36%	8.32%	8.25%	99.9%	99.8%	99.8%	91.4%	29.9%
Deviations	1.20	9.29%	8.93%	9.29%	8.21%	8.05%	100.0%	99.9%	99.9%	92.2%	30.6%
above the	1.30	8.74%	8.88%	9.23%	7.26%	6.80%	100.0%	99.9%	99.9%	92.8%	34.6%
Mean	1.40	8.45%	8.88%	8.59%	6.45%	5.17%	100.0%	99.9%	99.9%	95.9%	45.5%
Modif	1.50	8.41%	8.33%	7.37%	6.32%	4.72%	100.0%	99.9%	99.9%	97.7%	49.4%
	1.60	8.19%	7.22%	7.28%	6.21%	4.63%	100.0%	99.9%	100.0%	98.0%	50.4%
	1.70	7.07%	7.04%	7.17%	5.69%	4.61%	100.0%	99.9%	100.0%	99.0%	50.7%
	1.80	7.03%	6.84%	6.00%	5.34%	4.60%	100.0%	99.9%	100.0%	99.8%	50.7%
	1.90	7.02%	5.75%	5.99%	3.96%	4.18%	100.0%	99.9%	100.0%	99.7%	55.8%
	2.00	6.54%	5.62%	5.45%	3.81%	3.84%	100.0%	100.0%	100.0%	99.8%	60.7%
	2.25	5.22%	5.46%	3.39%	3.27%	3.39%	100.0%	100.0%	100.0%	99.8%	68.1%
	2.50	3.79%	3.26%	3.16%	2.27%	2.44%	100.0%	100.0%	100.0%	99.9%	93.9%
	2.75	1.66%	1.60%	1.90%	2.16%	2.43%	100.0%	100.0%	100.0%	99.9%	94.5%
	3.00	1.56%	1.52%	1.13%	1.21%	2.08%	100.0%	100.0%	100.0%	99.9%	96.1%
	3.50	1.22%	0.81%	0.98%	0.79%	0.94%	100.0%	100.0%	100.0%	99.8%	95.0%
	4.00	0.78%	0.61%	0.61%	0.47%	0.65%	100.0%	100.0%	100.0%	99.7%	92.8%
1	4.50	0.42%	0.45%	0.58%	0.41%	0.44%	100.0%	100.0%	100.0%	99.6%	97.1%
	5.00	0.37%	0.38%	0.35%	0.38%	0.38%	100.0%	100.0%	100.0%	99.6%	100.0%

NOTICE OF MEETING

ACTUARIAL COMMITTEE

A meeting of the Actuarial Committee will be held at the offices of Commonwealth Automobile Reinsurers, 225 Franklin Street, Boston, on

WEDNESDAY, SEPTEMBER 2, 2015 AT 1:00 P.M.

MEMBERS OF THE COMMITTEE

Mr. Joseph F. Cofield – Chair Metropolitan P & C Insurance Company

Mr. Geoffrey H. Arnold Plymouth Rock Assurance Corporation Mr. Alex F. Butensky The Norfolk & Dedham Group Mr. Jonathan Blake The Hanover Insurance Company Mr. Christopher Dupill EM Freedman Insurance Agency, Inc. Mr. Glenn R. Hiltpold Safety Insurance Company Mr. John V. Kelly MAPFRE U.S.A. Corporation Mr. Michael Petrarca, Jr. Amica Mutual Insurance Company Ms. Lynellen Ramirez Arbella Insurance Group Mr. John P. Tierney Quincy Mutual Group Liberty Mutual Group Ms. Meredith M. Woodcock

AGENDA

\mathbf{AC}

15.01 Records of Previous Meeting

The Records of the Actuarial Committee meeting of June 23, 2015 should be read and approved.

\mathbf{AC}

15.03 Quota Share Credits for Policies Effective April 1, 2016 and Later

At its June 23, 2015 meeting, the Committee began discussions relative to the April 1, 2016 Credit Offer, and requested Staff prepare the following exhibits related to the Quota Share Credits:

- A Summary of Exhibits (Docket #AC15.03, Exhibit #3)
- The current formulaic indication, incorporating data through May 2015. (Docket #AC15.03, Exhibit #4)

- Credit Indications freezing the April 2015 approved credit factors for policies effective April 2016 and subsequent. (Docket #AC15.03, Exhibit #5)
- Credit Indications using an average of the indicated April 2016 credit factors and the April 2015 approved credit factors. (Docket #AC15.03, Exhibit #6)
- Credit Indications using relative ranges based on what the relativities were when the initial ranges were established as compared to the overall residual market rate. (Docket #AC15.03, Exhibit #7)
- An exhibit detailing loss ratio results by class/territory to consider the impact to credit usage. (Docket #AC15.03, Exhibit #8)
- An exhibit that compares the April May 2015 residual market share data to April May 2014. (Docket #AC15.03, Exhibit #9)
- An exhibit displaying take-out credit premium and exposure by class and territory. (Docket #AC15.03, Exhibit #10)

Staff has also included summaries of the credit indications and a historical perspective of prior years proposed credit indications vs. approved credit offers to assist the Committee. (Docket #AC15.03, Exhibits #11 and 12)

Additionally, per request at the prior meeting, CAR Bulletin No. 918 dated December 18, 2009 is attached, and details a Remand from the Division of Insurance that included specific criteria to be satisfied in a credit premium offer. (Docket #AC15.03, Exhibit #13)

Similarly, CAR Bulletin No. 953 dated December 20, 2011 is attached and details the Division of Insurance Decision that created the Residual Market Share Group Methodology used for credit factor indications based on a three year residual market share analysis. (Docket #AC15.03, Exhibit #14)

The Committee should be prepared to review these exhibits and to continue discussions relative to quota share credits for policies effective April 1, 2016 and later in order to formulate its recommendation to the Governing Committee at its meeting in November 2015.

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
Financial Services Coordinator

Attachments

Boston, Massachusetts August 20, 2015

Commonwealth Automobile Reinsurers Actuarial Committee

Exhibit Summary

Exhibit #	# Pages	<u>Description</u>
3	1	Exhibit Summary
4	13	Indicated Results (1) - Residual Market Share Group Methodology
5	13	Indicated Results (2) - "Freeze": Use April, 2015 Credits for April, 2016
6	13	Indicated Results (3) - Average of April, 2016 Indications and April, 2015 Approved
7	13	Indicated Results (4) - Relative Credit Factor Ranges
8	2	Loss Ratios By Class/Territory
9	3	Data Comparison: April-May 2015 vs. April-May 2014 - Residual Market Shares
10	4	Summary of Take-Out Credits By Class/Territory
11	1	Summary of Credit Indications Requested By Committee (Data through May, 2015)
12	2	Summary of Credit Offers Proposed vs. Approved 2010-2015
13	6	CAR Bulletin 918, Remand of Rule 29, Dated December 18, 2009
14	29	CAR Bulletin 953, Decision to the create Residual Market Share Group Methodology , Dated December 20, 2011

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Summary by Rate Class

4/	1/20	15	Cred	lit l	Fact	tors
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4/1/16 Indicated - Residual Market Share Group Methodology

Rate <u>Class</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
Class	Exposures	Lxposures	<u>Credit i reillidili</u>	LXPOSUICS	<u>70/1</u>	Credit i reilliain	<u>70/1</u>
10	3,070,466	293,247	437,702,290	46,736	-84.1%	88,648,806	-79.7%
15	782,127	8,091	10,891,112	1,897	-76.6%	2,628,381	-75.9%
17	144,383	60,950	115,233,840	25,988	-57.4%	56,889,710	-50.6%
18	55,019	1,192	1,939,846	180	-84.9%	300,668	-84.5%
20	34,282	33,449	116,472,201	27,067	-19.1%	94,391,768	-19.0%
21	15,499	5,813	14,215,271	750	-87.1%	1,631,037	-88.5%
25	74,621	3,973	14,864,458	2,961	-25.5%	11,730,229	-21.1%
26	65,541	372	1,115,203	0	-100.0%	0	-100.0%
30	62,038	523	798,566	296	-43.5%	419,288	-47.5%
M/M	166,422	19,116	4,231,745	6,940	-63.7%	1,739,815	-58.9%
Total	4,470,398	426,727	717,464,534	112,815	-73.6%	258,379,702	-64.0%

% of Total Mkt. Exp.

9.5%

2.5%

Estimated Credits Used Credit Utilization	678,766,758 94.6%	Estimated Credits Used Credit Utilization	237,609,432 92.0%
		Residual	Keep
		Mark Share	Out
		<u>Group</u>	<u>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 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 - Residual Market Share Group

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible <u>Exposures</u>	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	178,846	0	0	0	0.0%	0	0.0%
2	240,517	1,071	2,136,317	0	-100.0%	0	-100.0%
3	516,709	2,389	4,958,166	0	-100.0%	0	-100.0%
4	328,044	1,323	3,128,040	0	-100.0%	0	-100.0%
5	503,612	2,979	6,640,413	2,979	0.0%	6,640,413	0.0%
6	337,265	1,686	4,381,658	1,686	0.0%	4,381,658	0.0%
7	346,203	13,242	21,955,577	2,318	-82.5%	5,849,345	-73.4%
8	198,142	6,783	11,898,661	1,190	-82.4%	3,092,648	-74.0%
9	197,535	8,959	16,771,593	1,629	-81.8%	4,868,042	-71.0%
10	95,365	4,425	8,333,668	686	-84.5%	2,051,669	-75.4%
11	72,051	622	2,067,094	622	0.0%	2,067,094	0.0%
12	193,543	7,214	14,969,401	1,717	-76.2%	5,141,427	-65.7%
13	209,132	17,789	26,280,639	10,333	-41.9%	22,869,438	-13.0%
14	71,888	6,624	14,066,453	4,359	-34.2%	12,317,854	-12.4%
15	25,481	2,572	5,523,585	2,416	-6.1%	4,799,810	-13.1%
16	13,716	12,349	19,409,286	1,222	-90.1%	3,576,125	-81.6%
17	17,221	394	935,879	394	0.0%	856,049	-8.5%
18	16,024	13,819	20,313,141	1,163	-91.6%	2,637,227	-87.0%
19	15,535	507	1,369,708	507	0.0%	1,428,138	4.3%
20	17,850	14,698	22,950,553	1,035	-93.0%	3,558,690	-84.5%
21	47,126	45,990	92,918,729	39,410	-14.3%	82,090,118	-11.7%
22	15,070	15,070	32,426,892	14,652	-2.8%	30,116,039	-7.1%
23	44,947	2,840	7,306,664	1,974	-30.5%	5,812,082	-20.5%
24	24,678	1,240	2,582,239	468	-62.3%	1,607,971	-37.7%
25	16,489	501	1,420,658	156	-68.8%	561,755	-60.5%
26	21,310	1,627	4,331,949	1,335	-18.0%	2,790,379	-35.6%
27	410,054	1,599	2,794,681	0	-100.0%	0	-100.0%
40	20,429	16,563	22,445,108	1,745	-89.5%	2,969,260	-86.8%
41	58,493	50,381	59,922,425	4,015	-92.0%	8,506,644	-85.8%
42	73,196	59,487	96,870,257	3,245	-94.5%	6,075,638	-93.7%
43	47,219	39,711	65,489,722	3,064	-92.3%	9,322,970	-85.8%
44	33,392	29,611	38,826,123	3,475	-88.3%	6,908,192	-82.2%
45	50,680	42,661	82,039,256	5,020	-88.2%	15,483,030	-81.1%
99	12,637	0	0	0	0.0%	0	0.0%
Total	4,470,398	426,727	717,464,534	112,815	-73.6%	258,379,702	-64.0%
% of Total l	Mkt. Exp.	9.5%		2.5%			

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

	Residual Market Share				Mid Char	o Dongo	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	Mkt Shar 2015	2016	Range*	Credits	Credits	Change	Group	Credits	
1	1.17%	0.90%	0.73%	0	0	0	0	-	-	-	<u>010up</u> 0	0.00	
2	1.19%	0.92%	0.79%	0	0	0	0	_	_	_	1	1.00	
3	1.45%	1.06%	0.83%	0	0	0	0	-	_	-	2	1.00	
4	1.27%	0.98%	0.83%	0	0	0	0	-	-	-	3	1.00	
5	1.91%	1.44%	1.12%	0	0	0	0	-	-	-	4	1.25	
6	1.91%	1.46%	1.20%	0	0	0	0	-	-	-	5	1.50	
7	2.46%	1.81%	1.42%	0	0	0	0	-	-	-	6	1.75	
8	2.25%	1.64%	1.34%	0	0	0	0	-	-	-	7	2.00	
9	2.87%	2.03%	1.53%	0	0	0	0	-	-	-	8	2.25	
10	2.92%	2.18%	1.78%	0	0	0	0	-	-	-	9	2.50	
11	1.99%	1.51%	1.33%	0	0	0	0	-	-	-			
12	2.50%	1.93%	1.62%	0	0	0	0	-	-	-			
13	4.32%	3.11%	2.52%	0	0	0	0	-	-	-			
14	3.84%	2.79%	2.28%	0	0	0	0	-	-	-			
15	4.35%	2.67%	2.19%	0	0	0	0	-	-	-			
16	6.39%	4.97%	3.50%	1	0	0	0	-	1.00	(1.00)			
17	2.20%	1.81%	1.64%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.80%	1	0	0	0	-	1.00	(1.00)			
19	3.68%	3.20%	2.68%	0	0	0	0	-	-	-			
20	6.23%	4.87%	4.59%	1	0	0	0	-	1.00	(1.00)	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.08%	1	1	1	1	1.00	1.00	-			
22	9.85%	6.82%	5.90%	2	1	1	1	1.00	1.00	-	2016	88,648,806	46,736
23	3.63%	2.49%	1.85%	0	0	0	0	-	-	-			
24	2.15%	1.75%	1.41%	0	0	0	0	-	-	-	2015	437,702,290	293,247
25	2.15%	1.50%	1.24%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.06%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.93%	0.77%	0.64%	0	0	0	0	-	-	-			
40	7.63%	4.08%	2.87%	1	0	0	0	-	1.00	(1.00)		(349,053,484)	(246,512)
41	5.88%	3.11%	2.57%	1	0	0	0	-	1.00	(1.00)			
42	6.48%	4.37%	2.88%	1	0	0	0	-	1.00	(1.00)	<u>Pe</u>	ercent Change:	Percent Change:
43	5.28%	3.09%	2.51%	1	0	0	0	-	1.00	(1.00)			-
44	7.95%	4.99%	4.33%	1	0	0	0	-	1.00	(1.00)		-79.7%	-84.1%
45	6.64%	3.49%	2.91%	1	0	0	0	-	1.00	(1.00)			
99	0.70%	0.56%	0.64%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.43%										

- 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.

	Residual Market Share				-l Ml-t Ch-a-	D	Colootod	2016	2045		Residual Mark Shr	Keep	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	d Mkt Shar 2015	2016	Selected Range*	2016 Credits	2015 Credits	Change	Group	Out <u>Credits</u>	
1	0.32%	0.27%	0.30%	0	0	0	0	-	<u>Ciedita</u>	<u>Change</u>	<u>отоир</u> 0	0.00	
2	0.32 %	0.29%	0.28%	0	0	0	0	_	_	_	1	1.00	
3	0.38%	0.29%	0.26%	0	0	0	0	_	_	_	2	1.00	
4	0.30%	0.29%	0.27%	0	0	0	0	_	_	_	3	1.00	
5	0.44%	0.38%	0.31%	0	0	0	0	_	_	-	4	1.25	
6	0.58%	0.53%	0.43%	0	0	0	0	_	_	_	5	1.50	
7	0.56%	0.46%	0.43%	0	0	0	0	_	_	_	6	1.75	
8	0.78%	0.67%	0.63%	0	0	0	0	_	_	_	7	2.00	
9	0.78%	0.63%	0.52%	0	0	0	0	_	_	_	8	2.25	
10	0.71%	0.62%	0.52%	0	0	0	0	-	_	_	9	2.50	
11	1.12%	0.88%	0.77%	0	0	0	0	-	_	-			
12	0.88%	0.86%	0.75%	0	0	0	0	-	_	-			
13	1.46%	1.17%	0.94%	0	0	0	0	-	-	-			
14	1.65%	1.32%	1.18%	0	0	0	0	-	-	-			
15	1.42%	1.43%	1.25%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.14%	0	0	0	0	-	-	-			
17	0.79%	0.76%	0.89%	0	0	0	0	-	-	-			
18	2.45%	2.07%	2.02%	0	0	0	0	-	-	-			
19	2.18%	2.18%	1.81%	0	0	0	0	-	-	-			
20	2.70%	2.39%	2.41%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.25%	1	0	0	0	-	1.00	(1.00)			-
22	8.10%	6.62%	5.91%	2	1	1	1	1.00	1.00	-	2016	2,628,381	1,897
23	2.82%	1.98%	1.48%	0	0	0	0	-	-	-			
24	2.99%	2.98%	2.44%	0	0	0	0	-	-	-	2015	10,891,112	8,091
25	1.73%	1.28%	1.20%	0	0	0	0	-	-	-			
26	1.99%	1.56%	1.38%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.26%	0.24%	0.20%	0	0	0	0	-	-	-			
40	2.44%	1.80%	1.20%	0	0	0	0	-	-	-		(8,262,731)	(6,194)
41	1.68%	1.28%	1.08%	0	0	0	0	-	-	-			
42	3.10%	3.10%	2.41%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	1.59%	1.06%	0.96%	0	0	0	0	-	-	-			
44	3.16%	2.11%	1.91%	0	0	0	0	-	-	-		-75.9%	-76.6%
45	2.38%	1.83%	1.51%	0	0	0	0	-	-	-			
99	0.36%	0.26%	0.13%	0	0	0	0	-	-	-			
Tot	0.73%	0.62%	0.54%										

- 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.

											Residual	Keep	
	Residual Market Share				Mkt Shar		Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	<u>May-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	3.25%	2.47%	2.09%	0	0	0	0	-	-	-	0	0.00	
2	2.96%	2.03%	1.94%	0	0	0	0	-	-	-	1	1.00	
3	4.05%	2.61%	2.21%	0	0	0	0	-	-	-	2	1.00	
4	3.21%	2.63%	2.20%	0	0	0	0	-	-	-	3	1.00	
5	4.26%	3.06%	2.54%	0	0	0	0	-	-	-	4	1.25	
6	4.40%	3.57%	3.16%	0	0	0	0	-	-	-	5	1.50	
7	5.00%	3.57%	2.85%	1	0	0	0	-	1.00	(1.00)	6	1.75	
8	5.01%	3.58%	3.43%	1	0	0	0	-	1.00	(1.00)	7	2.00	
9	5.05%	3.56%	2.83%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	5.55%	3.98%	3.35%	1	0	0	0	-	1.00	(1.00)	9	2.50	
11	4.60%	3.99%	2.71%	0	0	0	0	-	-	-			
12	5.90%	4.74%	4.01%	1	0	0	0	-	1.00	(1.00)			
13	7.34%	5.15%	4.50%	1	1	0	1	1.00	1.00	-			
14	8.44%	5.78%	5.38%	2	1	1	1	1.00	1.00	-			
15	8.90%	6.45%	4.43%	2	1	0	1	1.00	1.00	-			
16	14.02%	9.76%	6.38%	3	2	1	2	1.00	1.00	-			
17	6.51%	5.57%	3.71%	1	1	0	1	1.00	1.00	-			
18	10.10%	7.78%	6.18%	2	1	1	1	1.00	1.00	-			
19	11.66%	7.72%	6.94%	3	1	1	1	1.00	1.00	-			
20	12.72%	10.84%	10.03%	3	2	2	2	1.00	1.00	-	<u>Availal</u>	ole Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	10.21%	3	3	2	3	1.00	1.00	-			
22	14.23%	10.75%	9.70%	3	2	2	2	1.00	1.00	-	2016	56,889,710	25,988
23	8.79%	6.11%	5.46%	2	1	1	1	1.00	1.00	-			
24	4.64%	3.61%	2.90%	0	0	0	0	-	-	-	2015	115,233,840	60,950
25	6.65%	4.56%	3.40%	1	0	0	0	-	1.00	(1.00)			
26	8.63%	5.64%	4.78%	2	1	0	1	1.00	1.00	-		<u>Difference:</u>	<u>Difference:</u>
27	2.51%	2.07%	1.52%	0	0	0	0	-	-	-			
40	12.55%	7.28%	5.44%	3	1	1	1	1.00	1.00	-		(58,344,130)	(34,962)
41	12.06%	6.14%	4.77%	3	1	0	1	1.00	1.00	-			
42	9.55%	4.71%	3.63%	2	0	0	0	-	1.00	(1.00)	<u> </u>	Percent Change:	Percent Change:
43	8.81%	5.59%	5.43%	2	1	1	1	1.00	1.00	-			· · · · · · · · · · · · · · · · · · ·
44	11.57%	6.62%	6.20%	3	1	1	1	1.00	1.00	-		-50.6%	-57.4%
45	12.13%	6.63%	6.56%	3	1	1	1	1.00	1.00	-			
99	0.83%	0.39%	0.43%	0	0	0	0	-	-	-			
Tot	5.17%	3.64%	3.09%										

- 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.

	Residual Market Share		Choro	Indicator	Mat Char	o Dongo	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	Aug-14	May-15	2014	Mkt Shar 2015	2016	Range*	Credits	Credits	Change	Group	Credits	
1	1.12%	0.63%	0.61%	0	0	0	0	-	Orcaits -	Onlange -	<u>огоар</u> 0	0.00	
2	0.84%	0.55%	0.44%	0	0	0	0	_	_	-	1	1.00	
3	1.34%	0.92%	0.77%	0	0	0	0	_	_	-	2	1.00	
4	1.14%	0.86%	0.53%	0	0	0	0	_	_	-	3	1.00	
5	1.75%	1.26%	1.01%	0	0	0	0	-	-	-	4	1.25	
6	1.10%	1.13%	0.71%	0	0	0	0	-	-	-	5	1.50	
7	1.98%	1.31%	0.84%	0	0	0	0	-	-	-	6	1.75	
8	1.08%	0.94%	1.05%	0	0	0	0	-	-	-	7	2.00	
9	2.17%	1.57%	1.02%	0	0	0	0	-	-	-	8	2.25	
10	1.83%	1.02%	1.22%	0	0	0	0	-	-	-	9	2.50	
11	1.24%	0.77%	0.84%	0	0	0	0	-	-	-			
12	2.44%	1.85%	1.41%	0	0	0	0	-	-	-			
13	2.71%	1.96%	1.89%	0	0	0	0	-	-	-			
14	3.53%	2.39%	1.77%	0	0	0	0	-	-	-			
15	4.75%	4.06%	3.02%	0	0	0	0	-	-	-			
16	1.75%	0.00%	1.75%	0	0	0	0	-	-	-			
17	2.14%	1.13%	1.38%	0	0	0	0	-	-	-			
18	5.63%	5.10%	5.99%	1	1	1	1	1.00	1.00	-			
19	3.16%	2.04%	1.16%	0	0	0	0	-	-	-			
20	3.59%	4.15%	2.44%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	4.86%	3.05%	3.08%	0	0	0	0	-	-	-			
22	9.76%	4.32%	3.49%	2	0	0	0	-	1.00	(1.00)	2016	300,668	180
23	2.12%	1.27%	1.88%	0	0	0	0	-	-	-			
24	3.56%	0.43%	1.85%	0	0	0	0	-	-	-	2015	1,939,846	1,192
25	0.15%	1.68%	0.83%	0	0	0	0	-	-	-			
26	4.20%	3.21%	2.12%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.89%	0.72%	0.48%	0	0	0	0	-	-	-			
40	5.77%	2.78%	1.26%	1	0	0	0	-	1.00	(1.00)		(1,639,178)	(1,012)
41	7.29%	1.64%	1.51%	1	0	0	0	-	1.00	(1.00)			
42	2.50%	1.69%	1.29%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	3.03%	3.04%	2.07%	0	0	0	0	-	-	-			
44	1.80%	2.70%	1.73%	0	0	0	0	-	-	-		-84.5%	-84.9%
45	4.86%	3.11%	2.34%	0	0	0	0	-	-	-			
99	1.96%	0.51%	0.66%	0	0	0	0	-	-	-			
Tot	1.72%	1.21%	0.97%										

- 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.

	Posidu	al Market	Shara	Indicator	d Mkt Shar	o Pango	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	4.03%	3.98%	5.35%	0	0	1	0	-	-	-	<u>0.00p</u> 0	0.00	
2	5.82%	4.31%	4.05%	1	0	0	0	_	1.00	(1.00)	1	1.00	
3	7.69%	3.82%	4.45%	1	0	0	0	-	1.00	(1.00)	2	1.00	
4	5.70%	3.32%	2.72%	1	0	0	0	-	1.00	(1.00)	3	1.00	
5	7.89%	6.27%	5.24%	1	1	1	1	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.80%	2	1	1	1	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.16%	2	1	1	1	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.47%	3	1	1	1	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	5.98%	2	1	1	1	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	6.24%	3	1	1	1	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	4.73%	2	1	0	1	1.00	1.00	-			
12	12.77%	7.55%	6.58%	3	1	1	1	1.00	1.00	-			
13	11.99%	8.85%	8.43%	3	2	2	2	1.00	1.00	-			
14	15.28%	13.10%	11.05%	3	3	3	3	1.00	1.00	-			
15	21.15%	13.01%	13.27%	4	3	3	3	1.00	1.25	(0.25)			
16	26.59%	25.13%	19.78%	5	5	4	5	1.50	1.50	-			
17	19.61%	9.89%	10.30%	4	2	2	2	1.00	1.25	(0.25)			
18	20.86%	22.51%	13.75%	4	4	3	4	1.25	1.25	-			
19	15.29%	16.67%	15.09%	3	3	3	3	1.00	1.00	-			
20	24.66%	18.55%	21.63%	5	4	4	4	1.25	1.50	(0.25)	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	32.61%	23.95%	24.05%	6	5	5	5	1.50	1.75	(0.25)			
22	33.75%	22.17%	19.18%	6	4	4	4	1.25	1.75	(0.50)	2016	94,391,768	27,067
23	18.35%	10.83%	8.04%	4	2	2	2	1.00	1.25	(0.25)			
24	8.54%	5.71%	5.75%	2	1	1	1	1.00	1.00	-	2015	116,472,201	33,449
25	13.28%	13.16%	13.61%	3	3	3	3	1.00	1.00	-			
26	23.56%	13.76%	13.82%	5	3	3	3	1.00	1.50	(0.50)		Difference:	<u>Difference:</u>
27	5.26%	3.54%	2.29%	1	0	0	0	-	1.00	(1.00)			
40	24.85%	11.38%	12.36%	5	3	3	3	1.00	1.50	(0.50)		(22,080,434)	(6,382)
41	14.09%	9.23%	9.19%	3	2	2	2	1.00	1.00	-			
42	18.64%	12.38%	10.10%	4	3	2	3	1.00	1.25	(0.25)	<u>Pe</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	13.66%	4	3	3	3	1.00	1.25	(0.25)			
44	24.27%	16.44%	14.98%	5	3	3	3	1.00	1.50	(0.50)		-19.0%	-19.1%
45	20.07%	18.11%	15.95%	4	4	3	4	1.25	1.25	-			
99	2.48%	3.08%	0.21%	0	0	0	0	-	-	-			
Tot	12.86%	8.91%	8.18%										

^{*}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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	<u>Aug-14</u>	May-15	<u>2014</u>	<u>2015</u>	2016	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	Credits	
1	1.87%	1.52%	0.45%	0	0	0	0	-	-	-	0	0.00	
2	2.29%	1.29%	0.83%	0	0	0	0	-	-	-	1	1.00	
3	2.90%	1.82%	1.51%	0	0	0	0	-	-	-	2	1.00	
4	2.49%	2.11%	0.76%	0	0	0	0	-	-	-	3	1.00	
5	4.05%	2.57%	2.02%	0	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	1.82%	0	0	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.35%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	2.07%	0	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	2.12%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	9.63%	4.03%	4.10%	2	0	0	0	-	1.00	(1.00)	9	2.50	
11	3.08%	2.33%	1.49%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.32%	0	0	0	0	-	-	-			
13	10.29%	3.92%	4.73%	2	0	0	0	-	1.00	(1.00)			
14	5.89%	4.05%	3.82%	1	0	0	0	-	1.00	(1.00)			
15	10.82%	4.90%	2.14%	2	0	0	0	-	1.00	(1.00)			
16	13.13%	13.16%	6.89%	3	3	1	3	1.00	1.00	-			
17	5.11%	0.00%	0.68%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.94%	1	0	0	0	-	1.00	(1.00)			
19	5.62%	4.17%	0.72%	1	0	0	0	-	1.00	(1.00)			
20	11.09%	6.02%	4.59%	3	1	0	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	4.13%	2	0	0	0	-	1.00	(1.00)			
22	9.88%	2.86%	2.75%	2	0	0	0	-	1.00	(1.00)	2016	1,631,037	750
23	4.67%	4.48%	2.39%	0	0	0	0	-	-	-			
24	6.40%	2.76%	1.19%	1	0	0	0	-	1.00	(1.00)	2015	14,215,271	5,813
25	2.60%	0.00%	1.80%	0	0	0	0	-	-	-			
26	6.32%	1.47%	1.48%	1	0	0	0	-	1.00	(1.00)		Difference:	<u>Difference:</u>
27	2.55%	1.88%	1.39%	0	0	0	0	-	-	-			
40	13.69%	7.00%	5.37%	3	1	1	1	1.00	1.00	-		(12,584,234)	(5,063)
41	12.53%	5.33%	4.95%	3	1	0	1	1.00	1.00	-			
42	6.17%	3.86%	1.25%	1	0	0	0	-	1.00	(1.00)	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	2.67%	1	0	0	0	-	1.00	(1.00)			 -
44	8.43%	3.35%	3.47%	2	0	0	0	-	1.00	(1.00)		-88.5%	-87.1%
45	10.32%	2.31%	3.00%	2	0	0	0	-	1.00	(1.00)			
99	0.38%	0.00%	-6.54%	0	0	0	0	-	-	-			
Tot	5.15%	2.98%	2.33%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	<u>2014</u>	<u>2015</u>	2016	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.88%	1.37%	1.40%	0	0	0	0	-	-	-	0	0.00	
2	1.61%	1.23%	1.30%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.26%	0.89%	0	0	0	0	-	-	-	2	1.00	
4	1.75%	1.27%	1.18%	0	0	0	0	-	-	-	3	1.00	
5	2.37%	2.09%	1.69%	0	0	0	0	-	-	-	4	1.25	
6	2.57%	1.99%	1.67%	0	0	0	0	-	-	-	5	1.50	
7	2.53%	1.92%	1.53%	0	0	0	0	-	-	-	6	1.75	
8	3.30%	2.48%	2.47%	0	0	0	0	-	-	-	7	2.00	
9	2.62%	2.15%	2.40%	0	0	0	0	-	-	-	8	2.25	
10	3.19%	3.31%	2.48%	0	0	0	0	-	-	-	9	2.50	
11	2.54%	1.31%	1.98%	0	0	0	0	-	-	-			
12	4.04%	3.41%	3.27%	0	0	0	0	-	-	-			
13	3.75%	3.40%	3.27%	0	0	0	0	-	-	-			
14	6.81%	5.30%	2.99%	1	1	0	1	1.00	1.00	-			
15	11.71%	4.46%	5.23%	3	0	1	1	1.00	1.00	-			
16	17.01%	4.90%	3.66%	4	0	0	0	-	1.00	(1.00)			
17	3.23%	3.64%	1.05%	0	0	0	0	-	-	-			
18	9.96%	5.00%	7.21%	2	1	1	1	1.00	1.00	-			
19	4.46%	11.43%	8.06%	0	3	2	2	1.00	-	1.00			
20	8.81%	5.74%	5.27%	2	1	1	1	1.00	1.00	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.41%	2	1	1	1	1.00	1.00	-			
22	10.69%	8.39%	3.58%	2	2	0	2	1.00	1.00	-	2016	11,730,229	2,961
23	6.30%	3.39%	1.52%	1	0	0	0	-	1.00	(1.00)			
24	5.30%	2.03%	1.15%	1	0	0	0	-	1.00	(1.00)	2015	14,864,458	3,973
25	8.64%	0.00%	2.18%	2	0	0	0	-	1.00	(1.00)			
26	9.20%	2.76%	2.08%	2	0	0	0	-	1.00	(1.00)		<u>Difference:</u>	<u>Difference:</u>
27	1.33%	0.88%	0.70%	0	0	0	0	-	-	-			
40	3.61%	3.64%	2.86%	0	0	0	0	-	-	-		(3,134,229)	(1,012)
41	4.94%	4.21%	4.76%	0	0	0	0	-	-	-			
42	4.47%	4.14%	2.87%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.06%	6.52%	4.05%	1	1	0	1	1.00	1.00	-			
44	10.75%	4.27%	4.46%	2	0	0	0	-	1.00	(1.00)		-21.1%	-25.5%
45	7.15%	5.62%	6.23%	1	1	1	1	1.00	1.00	-			
99	0.52%	0.40%	0.05%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.73%										

- 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.

	Posidu	al Market	Sharo	Indicator	d Mkt Shar	o Pango	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13		May-15	2014	2015	2016	Range*	Credits	<u>Credits</u>	Change	Group	<u>Credits</u>	
1	0.85%	0.56%	0.42%	0	0	0	0	-	-	-	<u>0,045</u> 0	0.00	
2	0.52%	0.36%	0.41%	0	0	0	0	_	-	_	1	1.00	
3	0.84%	0.58%	0.48%	0	0	0	0	-	-	_	2	1.00	
4	0.67%	0.55%	0.48%	0	0	0	0	-	-	-	3	1.00	
5	0.93%	0.92%	0.57%	0	0	0	0	-	-	-	4	1.25	
6	0.81%	0.67%	0.71%	0	0	0	0	-	-	-	5	1.50	
7	0.92%	0.68%	0.47%	0	0	0	0	-	-	-	6	1.75	
8	0.95%	0.89%	0.59%	0	0	0	0	-	-	-	7	2.00	
9	0.93%	0.58%	0.52%	0	0	0	0	-	-	-	8	2.25	
10	1.56%	1.02%	1.16%	0	0	0	0	-	-	-	9	2.50	
11	0.67%	0.68%	0.74%	0	0	0	0	-	-	-			
12	1.75%	1.20%	0.91%	0	0	0	0	-	-	-			
13	2.28%	1.43%	1.17%	0	0	0	0	-	-	-			
14	1.87%	0.47%	0.64%	0	0	0	0	-	-	-			
15	3.62%	1.93%	0.52%	0	0	0	0	-	-	-			
16	0.76%	0.00%	2.11%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.36%	0	0	0	0	-	-	-			
18	3.56%	3.30%	2.01%	0	0	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	0.06%	0	0	0	0	-	-	-	<u>Availabl</u>	<u>e Credit Prem:</u>	Credit Eligible Exp:
21	1.76%	0.91%	0.99%	0	0	0	0	-	-	-			
22	5.59%	0.00%	1.49%	1	0	0	0	-	1.00	(1.00)	2016	-	-
23	0.91%	1.55%	0.54%	0	0	0	0	-	-	-			
24	0.85%	0.96%	0.99%	0	0	0	0	-	-	-	2015	1,115,203	372
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	1.87%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.41%	0.35%	0.30%	0	0	0	0	-	-	-			
40	0.06%	1.47%	0.78%	0	0	0	0	-	-	-		(1,115,203)	(372)
41	3.25%	1.54%	1.79%	0	0	0	0	-	-	-			
42	1.58%	0.73%	0.99%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.42%	1.10%	0.97%	0	0	0	0	-	-	-			
44	1.88%	2.14%	2.71%	0	0	0	0	-	-	-		-100.0%	-100.0%
45	5.87%	1.57%	1.81%	1	0	0	0	-	1.00	(1.00)			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.57%										

^{*}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.

	D	-1.541(Oleana	1. 2	L MILL OL -		0-141	0040	0045		Residual	Keep	
Torr	Aug-13	al Market Aug-14	May-15	2014	d Mkt Shar 2015	<u>2016</u>	Selected Range*	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
<u>Terr</u> 1	0.99%	0.64%	0.30%	<u>2014</u> 0	0	0	<u>Kange</u> 0	<u>Credits</u>	<u>Credits</u>	Change -	<u> </u>	0.00	
2	0.86%	0.66%	0.64%	0	0	0	0	<u>-</u>	_	- -	1	1.00	
3	0.87%	0.52%	0.57%	0	0	0	0	_	_	_	2	1.00	
4	0.81%	0.51%	0.50%	0	0	0	0	_	_	_	3	1.00	
5	0.97%	0.91%	0.85%	0	0	0	0	_	_	-	4	1.25	
6	1.01%	0.85%	0.90%	0	0	0	0	_	_	-	5	1.50	
7	1.54%	1.13%	0.86%	0	0	0	0	_	-	_	6	1.75	
8	0.93%	1.23%	1.07%	0	0	0	0	_	-	_	7	2.00	
9	1.27%	0.94%	0.62%	0	0	0	0	-	-	-	8	2.25	
10	2.29%	1.49%	1.75%	0	0	0	0	-	-	-	9	2.50	
11	0.97%	1.74%	1.39%	0	0	0	0	-	-	-			
12	1.86%	1.29%	1.42%	0	0	0	0	-	-	-			
13	2.05%	1.29%	1.44%	0	0	0	0	-	-	-			
14	3.24%	3.44%	3.39%	0	0	0	0	-	-	-			
15	5.81%	6.90%	2.62%	1	1	0	1	1.00	1.00	-			
16	7.84%	4.32%	2.46%	1	0	0	0	-	1.00	(1.00)			
17	1.39%	1.36%	1.85%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	2.08%	0	0	0	0	-	-	-			
20	1.68%	0.00%	0.72%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	2.47%	2.39%	2.97%	0	0	0	0	-	-	-			
22	8.30%	1.27%	2.44%	2	0	0	0	-	1.00	(1.00)	2016	419,288	296
23	0.98%	1.55%	1.14%	0	0	0	0	-	-	-			
24	1.21%	1.06%	2.06%	0	0	0	0	-	-	-	2015	798,566	523
25	1.31%	0.80%	0.69%	0	0	0	0	-	-	-			
26	4.15%	4.92%	3.90%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.62%	0.61%	0.41%	0	0	0	0	-	-	-			
40	1.29%	0.97%	0.56%	0	0	0	0	-	-	-		(379,278)	(227)
41	1.68%	1.20%	1.22%	0	0	0	0	-	-	-			
42	2.10%	1.35%	1.47%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.31%	1.26%	1.64%	0	0	0	0	-	-	-			
44	4.60%	2.87%	2.40%	0	0	0	0	-	-	-		-47.5%	-43.5%
45	2.31%	1.05%	0.66%	0	0	0	0	-	-	-			
99	0.00%	2.41%	0.65%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.87%										

- 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.

	Deside	al Mauliat	Ohara	la dia ata a	l Mist Obser	- D	Colootod	2046	2015		Residual Mark Shr	Keep	
Terr	Aug-13	al Market Aug-14	May-15	2014	Mkt Shar 2015	2016	Selected Range*	2016 <u>Credits</u>	2015 Credits	Change	Group	Out <u>Credits</u>	
1	1.51%	1.25%	1.04%	0	0	0	0	-	Orcaits	Onlange -	<u>огоар</u> 0	0.00	
2	1.50%	1.38%	1.23%	0	0	0	0	_	_	_	1	1.00	
3	1.84%	1.63%	1.42%	0	0	0	0	_	_	-	2	1.00	
4	1.57%	1.52%	1.23%	0	0	0	0	_	_	-	3	1.00	
5	2.18%	1.81%	1.63%	0	0	0	0	_	_	-	4	1.25	
6	2.36%	1.97%	1.84%	0	0	0	0	_	_	-	5	1.50	
7	2.92%	2.44%	1.99%	0	0	0	0	-	_	-	6	1.75	
8	2.78%	2.60%	2.06%	0	0	0	0	-	-	-	7	2.00	
9	2.91%	2.44%	2.09%	0	0	0	0	-	-	-	8	2.25	
10	4.43%	2.95%	2.58%	0	0	0	0	-	-	-	9	2.50	
11	3.90%	2.96%	1.98%	0	0	0	0	-	-	-			
12	4.32%	3.68%	3.16%	0	0	0	0	-	-	-			
13	5.08%	4.33%	3.83%	1	0	0	0	-	1.00	(1.00)			
14	5.67%	4.70%	3.63%	1	0	0	0	-	1.00	(1.00)			
15	7.59%	7.08%	5.25%	1	1	1	1	1.00	1.00	-			
16	9.92%	8.70%	7.53%	2	2	1	2	1.00	1.00	-			
17	3.40%	3.38%	4.02%	0	0	0	0	-	-	-			
18	5.43%	5.25%	4.21%	1	1	0	1	1.00	1.00	-			
19	4.14%	3.33%	4.82%	0	0	0	0	-	-	-			
20	4.03%	4.17%	5.33%	0	0	1	0	-	-	-	Availabl	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	7.34%	2	2	1	2	1.00	1.00	-			
22	10.99%	6.03%	3.14%	2	1	0	1	1.00	1.00	-	2016	1,739,815	6,940
23	6.85%	4.79%	4.19%	1	0	0	0	-	1.00	(1.00)			
24	5.22%	3.74%	1.74%	1	0	0	0	-	1.00	(1.00)	2015	4,231,745	19,116
25	3.76%	2.63%	2.34%	0	0	0	0	-	-	-			
26	8.28%	7.69%	4.50%	2	1	0	1	1.00	1.00	-		Difference:	<u>Difference:</u>
27	1.26%	1.21%	0.95%	0	0	0	0	-	-	-			
40	8.56%	6.78%	6.69%	2	1	1	1	1.00	1.00	-		(2,491,930)	(12,176)
41	5.70%	3.98%	3.52%	1	0	0	0	-	1.00	(1.00)			
42	8.14%	6.17%	5.10%	2	1	1	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	5.84%	4.22%	4.22%	1	0	0	0	-	1.00	(1.00)		-	,
44	7.90%	7.20%	6.69%	1	1	1	1	1.00	1.00	-		-58.9%	-63.7%
45	7.16%	5.59%	4.77%	1	1	0	1	1.00	1.00	-			
99	1.42%	0.43%	0.82%	0	0	0	0	-	-	-			
Tot	2.66%	2.26%	1.93%										

- 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.

2016 Proposed Credit Factors - Data Through May, 2015

	Rate Clas	s Group								
Terr	10	15	17	18	20	21	25	26	30	MC/Misc.
1	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	1.00	-	-	-	-	-
6	-	-	-	-	1.00	-	-	-	-	-
7	-	-	-	-	1.00	-	-	-	-	-
8	-	-	-	-	1.00	-	-	-	-	-
9	-	-	-	-	1.00	-	-	-	-	-
10	-	-	-	-	1.00	-	-	-	-	-
11	-	-	-	-	1.00	-	-	-	-	-
12	-	-	-	-	1.00	-	-	-	-	-
13	-	-	1.00	-	1.00	-	-	-	-	-
14	-	-	1.00	-	1.00	-	1.00	-	-	-
15	-	-	1.00	-	1.00	-	1.00	-	1.00	1.00
16	-	-	1.00	-	1.50	1.00	-	-	-	1.00
17	-	-	1.00	-	1.00	-	-	-	-	-
18	-	-	1.00	1.00	1.25	-	1.00	-	-	1.00
19		-	1.00	-	1.00	-	1.00	-	-	-
20		-	1.00	-	1.25	1.00	1.00	-	-	-
21	1.00	-	1.00	-	1.50	-	1.00	-	-	1.00
22	1.00	1.00	1.00	-	1.25	-	1.00	-	-	1.00
23	-	-	1.00	-	1.00	-	-	-	-	-
24	-	-	-	-	1.00	-	-	-	-	-
25	-	-	-	-	1.00	-	-	-	-	-
26	-	-	1.00	-	1.00	-	-	-	-	1.00
27	-	-	-	-	-	-	-	-	-	-
40	-	-	1.00	-	1.00	1.00	-	-	-	1.00
41	-	-	1.00	-	1.00	1.00	-	-	-	4.00
42	-	-	-	-	1.00	-	1.00	-	-	1.00
43	-	-	1.00	-	1.00	-	1.00	-	-	1.00
44 45	-	-	1.00	-	1.00	-	_	-	-	1.00
45 00	-	-	1.00	-	1.25	-	1.00	-	-	1.00
99	-	-	-	-	-	-	-	-	-	-

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep
Mark Shr	Out
Group	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

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Freeze Methodology Summary by Rate Class

4/1/2015 Credit Factors

4/1/16 Indicated - Freeze Methodology

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
<u>Class</u>	<u>Exposures</u>	<u>Exposures</u>	Credit Premium	<u>Exposures</u>	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,070,466	293,247	437,702,290	293,247	0.0%	437,702,290	0.0%
15	782,127	8,091	10,891,112	8,091	0.0%	10,891,112	0.0%
17	144,383	60,950	115,233,840	60,950	0.0%	115,233,840	0.0%
18	55,019	1,192	1,939,846	1,192	0.0%	1,939,846	0.0%
20	34,282	33,449	116,472,201	33,449	0.0%	116,472,201	0.0%
21	15,499	5,813	14,215,271	5,813	0.0%	14,215,271	0.0%
25	74,621	3,973	14,864,458	3,973	0.0%	14,864,458	0.0%
26	65,541	372	1,115,203	372	0.0%	1,115,203	0.0%
30	62,038	523	798,566	523	0.0%	798,566	0.0%
M/M	166,422	19,116	4,231,745	19,116	0.0%	4,231,745	0.0%
Total	4,470,398	426,727	717,464,534	426,727	0.0%	717,464,534	0.0%

% of Total Mkt. Exp.

9.5%

9.5%

Estimated Credits Used Credit Utilization	678,766,758 94.6%	Estimated Credits Used Credit Utilization	678,766,758 94.6%	
		Posidual	Koon	
			-	
		Group	<u>Credits</u>	
		0	0.00	
		1		
		2		
		3		
		4	1.25	
		5	1.50	
		6	1.75	
		7	2.00	
		8	2.25	
		9	2.50	
		, ,	Credit Utilization 94.6% Credit Utilization Residual Mark Share Group 0 1 2 3 4 5 6 7 8	Credit Utilization 94.6% Credit Utilization 94.6% Residual Mark Share Out Group Credits 0 0.00 0.00 1 1.00 2 1.00 3 1.00 4 1.25 5 1.50 6 1.75 6 1.75 7 2.00 8 2.25

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 - Freeze Methodology

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential <u>Credit Premium</u>	<u>%∆</u>
1	178,846	0	0	0	0.0%	0	0.0%
2	240,517	1,071	2,136,317	1,071	0.0%	2,136,317	0.0%
3	516,709	2,389	4,958,166	2,389	0.0%	4,958,166	0.0%
4	328,044	1,323	3,128,040	1,323	0.0%	3,128,040	0.0%
5	503,612	2,979	6,640,413	2,979	0.0%	6,640,413	0.0%
6	337,265	1,686	4,381,658	1,686	0.0%	4,381,658	0.0%
7	346,203	13,242	21,955,577	13,242	0.0%	21,955,577	0.0%
8	198,142	6,783	11,898,661	6,783	0.0%	11,898,661	0.0%
9	197,535	8,959	16,771,593	8,959	0.0%	16,771,593	0.0%
10	95,365	4,425	8,333,668	4,425	0.0%	8,333,668	0.0%
11	72,051	622	2,067,094	622	0.0%	2,067,094	0.0%
12	193,543	7,214	14,969,401	7,214	0.0%	14,969,401	0.0%
13	209,132	17,789	26,280,639	17,789	0.0%	26,280,639	0.0%
14	71,888	6,624	14,066,453	6,624	0.0%	14,066,453	0.0%
15	25,481	2,572	5,523,585	2,572	0.0%	5,523,585	0.0%
16	13,716	12,349	19,409,286	12,349	0.0%	19,409,286	0.0%
17	17,221	394	935,879	394	0.0%	935,879	0.0%
18	16,024	13,819	20,313,141	13,819	0.0%	20,313,141	0.0%
19	15,535	507	1,369,708	507	0.0%	1,369,708	0.0%
20	17,850	14,698	22,950,553	14,698	0.0%	22,950,553	0.0%
21	47,126	45,990	92,918,729	45,990	0.0%	92,918,729	0.0%
22	15,070	15,070	32,426,892	15,070	0.0%	32,426,892	0.0%
23	44,947	2,840	7,306,664	2,840	0.0%	7,306,664	0.0%
24	24,678	1,240	2,582,239	1,240	0.0%	2,582,239	0.0%
25	16,489	501	1,420,658	501	0.0%	1,420,658	0.0%
26	21,310	1,627	4,331,949	1,627	0.0%	4,331,949	0.0%
27	410,054	1,599	2,794,681	1,599	0.0%	2,794,681	0.0%
40	20,429	16,563	22,445,108	16,563	0.0%	22,445,108	0.0%
41	58,493	50,381	59,922,425	50,381	0.0%	59,922,425	0.0%
42	73,196	59,487	96,870,257	59,487	0.0%	96,870,257	0.0%
43	47,219	39,711	65,489,722	39,711	0.0%	65,489,722	0.0%
44	33,392	29,611	38,826,123	29,611	0.0%	38,826,123	0.0%
45	50,680	42,661	82,039,256	42,661	0.0%	82,039,256	0.0%
99	12,637	0	0	0	0.0%	0	0.0%
Total	4,470,398	426,727	717,464,534	426,727	0.0%	717,464,534	0.0%
% of Total I	Mkt. Exp.	9.5%		9.5%			

Residual Mark Share <u>Group</u>	Keep Out <u>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

	D	-1.541(01	1. 2	LMLCOL	- D	0-141	2015 =	0045		Residual	Keep	
Torr		al Market Aug-14	May-15	2014	d Mkt Shar 2015	<u>2016</u>	Selected Range*	2016 Credits	2015 Credits	Change	Mark Shr	Out	
<u>Terr</u> 1	Aug-13 1.17%	0.90%	0.73%	<u>2014</u> 0	0	0	<u>Range</u> 0	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u> 0	<u>Credits</u> 0.00	
2	1.19%	0.92%	0.79%	0	0	0	0	-	_	_	1	1.00	
3	1.45%	1.06%	0.83%	0	0	0	0	_	_	_	2	1.00	
4	1.27%	0.98%	0.83%	0	0	0	0	_	_	_	3	1.00	
5	1.91%	1.44%	1.12%	0	0	0	0	_	_	_	4	1.25	
6	1.91%	1.46%	1.20%	0	0	0	0	_	_	_	5	1.50	
7	2.46%	1.81%	1.42%	0	0	0	0	_	_	_	6	1.75	
8	2.25%	1.64%	1.34%	0	0	0	0	_	_	_	7	2.00	
9	2.87%	2.03%	1.53%	0	0	0	0	_	_	_	8	2.25	
10	2.92%	2.18%	1.78%	0	0	0	0	-	-	_	9	2.50	
11	1.99%	1.51%	1.33%	0	0	0	0	-	-	-			
12	2.50%	1.93%	1.62%	0	0	0	0	-	-	-			
13	4.32%	3.11%	2.52%	0	0	0	0	-	-	-			
14	3.84%	2.79%	2.28%	0	0	0	0	-	-	-			
15	4.35%	2.67%	2.19%	0	0	0	0	-	-	-			
16	6.39%	4.97%	3.50%	1	0	0	0	1.00	1.00	-			
17	2.20%	1.81%	1.64%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.80%	1	0	0	0	1.00	1.00	-			
19	3.68%	3.20%	2.68%	0	0	0	0	-	-	-			
20	6.23%	4.87%	4.59%	1	0	0	0	1.00	1.00	-	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.08%	1	1	1	1	1.00	1.00	-			
22	9.85%	6.82%	5.90%	2	1	1	1	1.00	1.00	-	2016	437,702,290	293,247
23	3.63%	2.49%	1.85%	0	0	0	0	-	-	-			
24	2.15%	1.75%	1.41%	0	0	0	0	-	-	-	2015	437,702,290	293,247
25	2.15%	1.50%	1.24%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.06%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.93%	0.77%	0.64%	0	0	0	0	-	-	-			
40	7.63%	4.08%	2.87%	1	0	0	0	1.00	1.00	-		-	-
41	5.88%	3.11%	2.57%	1	0	0	0	1.00	1.00	-			
42	6.48%	4.37%	2.88%	1	0	0	0	1.00	1.00	-	<u>Pe</u>	ercent Change:	Percent Change:
43	5.28%	3.09%	2.51%	1	0	0	0	1.00	1.00	-			
44	7.95%	4.99%	4.33%	1	0	0	0	1.00	1.00	-		0.0%	0.0%
45	6.64%	3.49%	2.91%	1	0	0	0	1.00	1.00	-			
99	0.70%	0.56%	0.64%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.43%										

- 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.

								2015 =			Residual	Keep	
	Residu	al Market	Share	Indicate	d Mkt Shai	re Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	<u>2015</u>	<u>2016</u>	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	0.32%	0.27%	0.30%	0	0	0	0	-	-	-	0	0.00	
2	0.29%	0.29%	0.28%	0	0	0	0	-	-	-	1	1.00	
3	0.38%	0.29%	0.26%	0	0	0	0	-	-	-	2	1.00	
4	0.30%	0.29%	0.27%	0	0	0	0	-	-	-	3	1.00	
5	0.44%	0.38%	0.31%	0	0	0	0	-	-	-	4	1.25	
6	0.58%	0.53%	0.43%	0	0	0	0	-	-	-	5	1.50	
7	0.56%	0.46%	0.43%	0	0	0	0	-	-	-	6	1.75	
8	0.78%	0.67%	0.63%	0	0	0	0	-	-	-	7	2.00	
9	0.78%	0.63%	0.52%	0	0	0	0	-	-	-	8	2.25	
10	0.71%	0.62%	0.52%	0	0	0	0	-	-	-	9	2.50	
11	1.12%	0.88%	0.77%	0	0	0	0	-	-	-			
12	0.88%	0.86%	0.75%	0	0	0	0	-	-	-			
13	1.46%	1.17%	0.94%	0	0	0	0	-	-	-			
14	1.65%	1.32%	1.18%	0	0	0	0	-	-	-			
15	1.42%	1.43%	1.25%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.14%	0	0	0	0	-	-	-			
17	0.79%	0.76%	0.89%	0	0	0	0	-	-	-			
18	2.45%	2.07%	2.02%	0	0	0	0	-	-	-			
19	2.18%	2.18%	1.81%	0	0	0	0	-	-	-			
20	2.70%	2.39%	2.41%	0	0	0	0	-	-	-	Available	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.25%	1	0	0	0	1.00	1.00	-			
22	8.10%	6.62%	5.91%	2	1	1	1	1.00	1.00	-	2016	10,891,112	8,091
23	2.82%	1.98%	1.48%	0	0	0	0	-	-	-			
24	2.99%	2.98%	2.44%	0	0	0	0	-	-	-	2015	10,891,112	8,091
25	1.73%	1.28%	1.20%	0	0	0	0	-	-	-			
26	1.99%	1.56%	1.38%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.26%	0.24%	0.20%	0	0	0	0	-	-	-			
40	2.44%	1.80%	1.20%	0	0	0	0	-	-	-		-	-
41	1.68%	1.28%	1.08%	0	0	0	0	-	-	-			
42	3.10%	3.10%	2.41%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	1.59%	1.06%	0.96%	0	0	0	0	-	-	-			 _
44	3.16%	2.11%	1.91%	0	0	0	0	-	-	-		0.0%	0.0%
45	2.38%	1.83%	1.51%	0	0	0	0	-	-	-			
99	0.36%	0.26%	0.13%	0	0	0	0	-	-	-			
Tot	0.73%	0.62%	0.54%										

^{*}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.

								2015 =			Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	3.25%	2.47%	2.09%	0	0	0	0	-	-	-	0	0.00	
2	2.96%	2.03%	1.94%	0	0	0	0	-	-	-	1	1.00	
3	4.05%	2.61%	2.21%	0	0	0	0	-	-	-	2	1.00	
4	3.21%	2.63%	2.20%	0	0	0	0	-	-	-	3	1.00	
5	4.26%	3.06%	2.54%	0	0	0	0	-	-	-	4	1.25	
6	4.40%	3.57%	3.16%	0	0	0	0	-	-	-	5	1.50	
7	5.00%	3.57%	2.85%	1	0	0	0	1.00	1.00	-	6	1.75	
8	5.01%	3.58%	3.43%	1	0	0	0	1.00	1.00	-	7	2.00	
9	5.05%	3.56%	2.83%	1	0	0	0	1.00	1.00	-	8	2.25	
10	5.55%	3.98%	3.35%	1	0	0	0	1.00	1.00	-	9	2.50	
11	4.60%	3.99%	2.71%	0	0	0	0	-	-	-			
12	5.90%	4.74%	4.01%	1	0	0	0	1.00	1.00	-			
13	7.34%	5.15%	4.50%	1	1	0	1	1.00	1.00	-			
14	8.44%	5.78%	5.38%	2	1	1	1	1.00	1.00	-			
15	8.90%	6.45%	4.43%	2	1	0	1	1.00	1.00	-			
16	14.02%	9.76%	6.38%	3	2	1	2	1.00	1.00	-			
17	6.51%	5.57%	3.71%	1	1	0	1	1.00	1.00	-			
18	10.10%	7.78%	6.18%	2	1	1	1	1.00	1.00	-			
19	11.66%	7.72%	6.94%	3	1	1	1	1.00	1.00	-			
20	12.72%	10.84%	10.03%	3	2	2	2	1.00	1.00	-	<u>Availal</u>	ole Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	10.21%	3	3	2	3	1.00	1.00	-			
22	14.23%	10.75%	9.70%	3	2	2	2	1.00	1.00	-	2016	115,233,840	60,950
23	8.79%	6.11%	5.46%	2	1	1	1	1.00	1.00	-			
24	4.64%	3.61%	2.90%	0	0	0	0	-	-	-	2015	115,233,840	60,950
25	6.65%	4.56%	3.40%	1	0	0	0	1.00	1.00	-			
26	8.63%	5.64%	4.78%	2	1	0	1	1.00	1.00	-		<u>Difference:</u>	<u>Difference:</u>
27	2.51%	2.07%	1.52%	0	0	0	0	-	-	-			
40	12.55%	7.28%	5.44%	3	1	1	1	1.00	1.00	-		-	-
41	12.06%	6.14%	4.77%	3	1	0	1	1.00	1.00	-			
42	9.55%	4.71%	3.63%	2	0	0	0	1.00	1.00	-	<u> </u>	Percent Change:	Percent Change:
43	8.81%	5.59%	5.43%	2	1	1	1	1.00	1.00	-			
44	11.57%	6.62%	6.20%	3	1	1	1	1.00	1.00	-		0.0%	0.0%
45	12.13%	6.63%	6.56%	3	1	1	1	1.00	1.00	-			
99	0.83%	0.39%	0.43%	0	0	0	0	-	-	-			
Tot	5.17%	3.64%	3.09%										

- 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.

								2015 =			Residual	Keep	
	Residu	al Market	Share	Indicate	d Mkt Shai	re Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	<u>2015</u>	<u>2016</u>	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.12%	0.63%	0.61%	0	0	0	0	-	-	-	0	0.00	
2	0.84%	0.55%	0.44%	0	0	0	0	-	-	-	1	1.00	
3	1.34%	0.92%	0.77%	0	0	0	0	-	-	-	2	1.00	
4	1.14%	0.86%	0.53%	0	0	0	0	-	-	-	3	1.00	
5	1.75%	1.26%	1.01%	0	0	0	0	-	-	-	4	1.25	
6	1.10%	1.13%	0.71%	0	0	0	0	-	-	-	5	1.50	
7	1.98%	1.31%	0.84%	0	0	0	0	-	-	-	6	1.75	
8	1.08%	0.94%	1.05%	0	0	0	0	-	-	-	7	2.00	
9	2.17%	1.57%	1.02%	0	0	0	0	-	-	-	8	2.25	
10	1.83%	1.02%	1.22%	0	0	0	0	-	-	-	9	2.50	
11	1.24%	0.77%	0.84%	0	0	0	0	-	-	-			
12	2.44%	1.85%	1.41%	0	0	0	0	-	-	-			
13	2.71%	1.96%	1.89%	0	0	0	0	-	-	-			
14	3.53%	2.39%	1.77%	0	0	0	0	-	-	-			
15	4.75%	4.06%	3.02%	0	0	0	0	-	-	-			
16	1.75%	0.00%	1.75%	0	0	0	0	-	-	-			
17	2.14%	1.13%	1.38%	0	0	0	0	-	-	-			
18	5.63%	5.10%	5.99%	1	1	1	1	1.00	1.00	-			
19	3.16%	2.04%	1.16%	0	0	0	0	-	-	-			
20	3.59%	4.15%	2.44%	0	0	0	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	4.86%	3.05%	3.08%	0	0	0	0	-	-	-			
22	9.76%	4.32%	3.49%	2	0	0	0	1.00	1.00	-	2016	1,939,846	1,192
23	2.12%	1.27%	1.88%	0	0	0	0	-	-	-			
24	3.56%	0.43%	1.85%	0	0	0	0	-	-	-	2015	1,939,846	1,192
25	0.15%	1.68%	0.83%	0	0	0	0	-	-	-			
26	4.20%	3.21%	2.12%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.89%	0.72%	0.48%	0	0	0	0	-	-	-			
40	5.77%	2.78%	1.26%	1	0	0	0	1.00	1.00	-		-	-
41	7.29%	1.64%	1.51%	1	0	0	0	1.00	1.00	-			
42	2.50%	1.69%	1.29%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	3.03%	3.04%	2.07%	0	0	0	0	-	-	-		<u></u> _	
44	1.80%	2.70%	1.73%	0	0	0	0	-	-	-		0.0%	0.0%
45	4.86%	3.11%	2.34%	0	0	0	0	-	-	-			
99	1.96%	0.51%	0.66%	0	0	0	0	-	-	_			
Tot	1.72%	1.21%	0.97%										

- 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.

								2015 =			Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	4.03%	3.98%	5.35%	0	0	1	0	-	-	-	0	0.00	
2	5.82%	4.31%	4.05%	1	0	0	0	1.00	1.00	-	1	1.00	
3	7.69%	3.82%	4.45%	1	0	0	0	1.00	1.00	-	2	1.00	
4	5.70%	3.32%	2.72%	1	0	0	0	1.00	1.00	-	3	1.00	
5	7.89%	6.27%	5.24%	1	1	1	1	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.80%	2	1	1	1	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.16%	2	1	1	1	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.47%	3	1	1	1	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	5.98%	2	1	1	1	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	6.24%	3	1	1	1	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	4.73%	2	1	0	1	1.00	1.00	-			
12	12.77%	7.55%	6.58%	3	1	1	1	1.00	1.00	-			
13	11.99%	8.85%	8.43%	3	2	2	2	1.00	1.00	-			
14	15.28%	13.10%	11.05%	3	3	3	3	1.00	1.00	-			
15	21.15%	13.01%	13.27%	4	3	3	3	1.25	1.25	-			
16	26.59%	25.13%	19.78%	5	5	4	5	1.50	1.50	-			
17	19.61%	9.89%	10.30%	4	2	2	2	1.25	1.25	-			
18	20.86%	22.51%	13.75%	4	4	3	4	1.25	1.25	-			
19	15.29%	16.67%	15.09%	3	3	3	3	1.00	1.00	-			
20	24.66%	18.55%	21.63%	5	4	4	4	1.50	1.50	-	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	32.61%	23.95%	24.05%	6	5	5	5	1.75	1.75	-			
22	33.75%	22.17%	19.18%	6	4	4	4	1.75	1.75	-	2016	116,472,201	33,449
23	18.35%	10.83%	8.04%	4	2	2	2	1.25	1.25	-			
24	8.54%	5.71%	5.75%	2	1	1	1	1.00	1.00	-	2015	116,472,201	33,449
25	13.28%	13.16%	13.61%	3	3	3	3	1.00	1.00	-			
26	23.56%	13.76%	13.82%	5	3	3	3	1.50	1.50	-		<u>Difference:</u>	<u>Difference:</u>
27	5.26%	3.54%	2.29%	1	0	0	0	1.00	1.00	-			
40	24.85%	11.38%	12.36%	5	3	3	3	1.50	1.50	-		-	-
41	14.09%	9.23%	9.19%	3	2	2	2	1.00	1.00	-			
42	18.64%	12.38%	10.10%	4	3	2	3	1.25	1.25	-	<u>P</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	13.66%	4	3	3	3	1.25	1.25	-			
44	24.27%	16.44%	14.98%	5	3	3	3	1.50	1.50	-		0.0%	0.0%
45	20.07%	18.11%	15.95%	4	4	3	4	1.25	1.25	-			
99	2.48%	3.08%	0.21%	0	0	0	0	-	-	-			
Tot	12.86%	8.91%	8.18%										

^{*}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.

								2015 =			Residual	Keep	
	Residu	al Market		Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	<u>Aug-14</u>	May-15	<u>2014</u>	<u>2015</u>	2016	Range*	Credits	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.87%	1.52%	0.45%	0	0	0	0	-	-	-	0	0.00	
2	2.29%	1.29%	0.83%	0	0	0	0	-	-	-	1	1.00	
3	2.90%	1.82%	1.51%	0	0	0	0	-	-	-	2	1.00	
4	2.49%	2.11%	0.76%	0	0	0	0	-	-	-	3	1.00	
5	4.05%	2.57%	2.02%	0	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	1.82%	0	0	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.35%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	2.07%	0	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	2.12%	1	0	0	0	1.00	1.00	-	8	2.25	
10	9.63%	4.03%	4.10%	2	0	0	0	1.00	1.00	-	9	2.50	
11	3.08%	2.33%	1.49%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.32%	0	0	0	0	-	-	-			
13	10.29%	3.92%	4.73%	2	0	0	0	1.00	1.00	-			
14	5.89%	4.05%	3.82%	1	0	0	0	1.00	1.00	-			
15	10.82%	4.90%	2.14%	2	0	0	0	1.00	1.00	-			
16	13.13%	13.16%	6.89%	3	3	1	3	1.00	1.00	-			
17	5.11%	0.00%	0.68%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.94%	1	0	0	0	1.00	1.00	-			
19	5.62%	4.17%	0.72%	1	0	0	0	1.00	1.00	-			
20	11.09%	6.02%	4.59%	3	1	0	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	4.13%	2	0	0	0	1.00	1.00	-			
22	9.88%	2.86%	2.75%	2	0	0	0	1.00	1.00	-	2016	14,215,271	5,813
23	4.67%	4.48%	2.39%	0	0	0	0	-	-	-			
24	6.40%	2.76%	1.19%	1	0	0	0	1.00	1.00	-	2015	14,215,271	5,813
25	2.60%	0.00%	1.80%	0	0	0	0	-	-	-			
26	6.32%	1.47%	1.48%	1	0	0	0	1.00	1.00	-		Difference:	<u>Difference:</u>
27	2.55%	1.88%	1.39%	0	0	0	0	-	-	-			
40	13.69%	7.00%	5.37%	3	1	1	1	1.00	1.00	-		-	-
41	12.53%	5.33%	4.95%	3	1	0	1	1.00	1.00	-			
42	6.17%	3.86%	1.25%	1	0	0	0	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	2.67%	1	0	0	0	1.00	1.00	-		-	
44	8.43%	3.35%	3.47%	2	0	0	0	1.00	1.00	-		0.0%	0.0%
45	10.32%	2.31%	3.00%	2	0	0	0	1.00	1.00	-			
99	0.38%	0.00%	-6.54%	0	0	0	0	-	-	-			
Tot	5.15%	2.98%	2.33%										

- 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.

								2015 =			Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.88%	1.37%	1.40%	0	0	0	0	-	-	-	0	0.00	
2	1.61%	1.23%	1.30%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.26%	0.89%	0	0	0	0	-	-	-	2	1.00	
4	1.75%	1.27%	1.18%	0	0	0	0	-	-	-	3	1.00	
5	2.37%	2.09%	1.69%	0	0	0	0	-	-	-	4	1.25	
6	2.57%	1.99%	1.67%	0	0	0	0	-	-	-	5	1.50	
7	2.53%	1.92%	1.53%	0	0	0	0	-	-	-	6	1.75	
8	3.30%	2.48%	2.47%	0	0	0	0	-	-	-	7	2.00	
9	2.62%	2.15%	2.40%	0	0	0	0	-	-	-	8	2.25	
10	3.19%	3.31%	2.48%	0	0	0	0	-	-	-	9	2.50	
11	2.54%	1.31%	1.98%	0	0	0	0	-	-	-			
12	4.04%	3.41%	3.27%	0	0	0	0	-	-	-			
13	3.75%	3.40%	3.27%	0	0	0	0	-	-	-			
14	6.81%	5.30%	2.99%	1	1	0	1	1.00	1.00	-			
15	11.71%	4.46%	5.23%	3	0	1	1	1.00	1.00	-			
16	17.01%	4.90%	3.66%	4	0	0	0	1.00	1.00	-			
17	3.23%	3.64%	1.05%	0	0	0	0	-	-	-			
18	9.96%	5.00%	7.21%	2	1	1	1	1.00	1.00	-			
19	4.46%	11.43%	8.06%	0	3	2	2	-	-	-			
20	8.81%	5.74%	5.27%	2	1	1	1	1.00	1.00	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.41%	2	1	1	1	1.00	1.00	-			
22	10.69%	8.39%	3.58%	2	2	0	2	1.00	1.00	-	2016	14,864,458	3,973
23	6.30%	3.39%	1.52%	1	0	0	0	1.00	1.00	-			
24	5.30%	2.03%	1.15%	1	0	0	0	1.00	1.00	-	2015	14,864,458	3,973
25	8.64%	0.00%	2.18%	2	0	0	0	1.00	1.00	-			
26	9.20%	2.76%	2.08%	2	0	0	0	1.00	1.00	-		<u>Difference:</u>	<u>Difference:</u>
27	1.33%	0.88%	0.70%	0	0	0	0	-	-	-			
40	3.61%	3.64%	2.86%	0	0	0	0	-	-	-		-	-
41	4.94%	4.21%	4.76%	0	0	0	0	-	-	-			
42	4.47%	4.14%	2.87%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.06%	6.52%	4.05%	1	1	0	1	1.00	1.00	-			
44	10.75%	4.27%	4.46%	2	0	0	0	1.00	1.00	-		0.0%	0.0%
45	7.15%	5.62%	6.23%	1	1	1	1	1.00	1.00	-			
99	0.52%	0.40%	0.05%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.73%										

- 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.

	Dooidu	al Market	Chara	Indicator	d Mkt Shar	o Dongo	Selected	2015 = 2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	2015	2016	Range*	Credits	Credits	Change	Group	Credits	
1	0.85%	0.56%	0.42%	0	0	0	0	-	-	Onlange -	<u>огоар</u> 0	0.00	
2	0.52%	0.36%	0.41%	0	0	0	0	_	_	_	1	1.00	
3	0.84%	0.58%	0.48%	0	0	0	0	_	_	-	2	1.00	
4	0.67%	0.55%	0.48%	0	0	0	0	_	_	_	3	1.00	
5	0.93%	0.92%	0.57%	0	0	0	0	_	-	_	4	1.25	
6	0.81%	0.67%	0.71%	0	0	0	0	-	-	-	5	1.50	
7	0.92%	0.68%	0.47%	0	0	0	0	-	-	-	6	1.75	
8	0.95%	0.89%	0.59%	0	0	0	0	_	-	-	7	2.00	
9	0.93%	0.58%	0.52%	0	0	0	0	-	-	-	8	2.25	
10	1.56%	1.02%	1.16%	0	0	0	0	-	-	-	9	2.50	
11	0.67%	0.68%	0.74%	0	0	0	0	-	-	-			
12	1.75%	1.20%	0.91%	0	0	0	0	-	-	-			
13	2.28%	1.43%	1.17%	0	0	0	0	-	-	-			
14	1.87%	0.47%	0.64%	0	0	0	0	-	-	-			
15	3.62%	1.93%	0.52%	0	0	0	0	-	-	-			
16	0.76%	0.00%	2.11%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.36%	0	0	0	0	-	-	-			
18	3.56%	3.30%	2.01%	0	0	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	0.06%	0	0	0	0	-	-	-	Available	e Credit Prem:	Credit Eligible Exp:
21	1.76%	0.91%	0.99%	0	0	0	0	-	-	-			-
22	5.59%	0.00%	1.49%	1	0	0	0	1.00	1.00	-	2016	1,115,203	372
23	0.91%	1.55%	0.54%	0	0	0	0	-	-	-			
24	0.85%	0.96%	0.99%	0	0	0	0	-	-	-	2015	1,115,203	372
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	1.87%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.41%	0.35%	0.30%	0	0	0	0	-	-	-			
40	0.06%	1.47%	0.78%	0	0	0	0	-	-	-		-	-
41	3.25%	1.54%	1.79%	0	0	0	0	-	-	-			
42	1.58%	0.73%	0.99%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.42%	1.10%	0.97%	0	0	0	0	-	-	-		-	,
44	1.88%	2.14%	2.71%	0	0	0	0	-	-	-		0.0%	0.0%
45	5.87%	1.57%	1.81%	1	0	0	0	1.00	1.00	-			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.57%										

^{*}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.

	D	-1.8411	01	1	LML(Observe		0-141	2015 =	0045		Residual	Keep	
Torr	Aug-13	al Market Aug-14	May-15	2014	d Mkt Shar 2015	2016	Selected Range*	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
<u>Terr</u> 1	0.99%	0.64%	0.30%	<u>2014</u> 0	0	0	<u>Kange</u> 0	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Gтоир</u> 0	0.00	
2	0.86%	0.66%	0.64%	0	0	0	0	_	_	_	1	1.00	
3	0.87%	0.52%	0.57%	0	0	0	0	_	_	_	2	1.00	
4	0.81%	0.51%	0.50%	0	0	0	0	_	_	_	3	1.00	
5	0.97%	0.91%	0.85%	0	0	0	0	_	_	_	4	1.25	
6	1.01%	0.85%	0.90%	0	0	0	0	_	_	_	5	1.50	
7	1.54%	1.13%	0.86%	0	0	0	0	_	_	_	6	1.75	
8	0.93%	1.23%	1.07%	0	0	0	0	_	_	-	7	2.00	
9	1.27%	0.94%	0.62%	0	0	0	0	_	_	-	8	2.25	
10	2.29%	1.49%	1.75%	0	0	0	0	_	_	_	9	2.50	
11	0.97%	1.74%	1.39%	0	0	0	0	_	_	-	-		
12	1.86%	1.29%	1.42%	0	0	0	0	_	_	_			
13	2.05%	1.29%	1.44%	0	0	0	0	_	_	_			
14	3.24%	3.44%	3.39%	0	0	0	0	_	-	_			
15	5.81%	6.90%	2.62%	1	1	0	1	1.00	1.00	-			
16	7.84%	4.32%	2.46%	1	0	0	0	1.00	1.00	-			
17	1.39%	1.36%	1.85%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	2.08%	0	0	0	0	-	-	-			
20	1.68%	0.00%	0.72%	0	0	0	0	-	-	-	Availabl	e Credit Prem:	Credit Eligible Exp:
21	2.47%	2.39%	2.97%	0	0	0	0	-	-	-	'		
22	8.30%	1.27%	2.44%	2	0	0	0	1.00	1.00	-	2016	798,566	523
23	0.98%	1.55%	1.14%	0	0	0	0	-	-	-			
24	1.21%	1.06%	2.06%	0	0	0	0	-	-	-	2015	798,566	523
25	1.31%	0.80%	0.69%	0	0	0	0	-	-	-			
26	4.15%	4.92%	3.90%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.62%	0.61%	0.41%	0	0	0	0	-	-	-			
40	1.29%	0.97%	0.56%	0	0	0	0	-	-	-		-	-
41	1.68%	1.20%	1.22%	0	0	0	0	-	-	-			
42	2.10%	1.35%	1.47%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.31%	1.26%	1.64%	0	0	0	0	-	-	-			-
44	4.60%	2.87%	2.40%	0	0	0	0	-	-	-		0.0%	0.0%
45	2.31%	1.05%	0.66%	0	0	0	0	-	-	-			
99	0.00%	2.41%	0.65%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.87%										

^{*}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.

								2015 =			Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	Aug-14	May-15	2014	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	Credits	
1	1.51%	1.25%	1.04%	0	0	0	0	-	-	-	0	0.00	
2	1.50%	1.38%	1.23%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.63%	1.42%	0	0	0	0	-	-	-	2	1.00	
4	1.57%	1.52%	1.23%	0	0	0	0	-	-	-	3	1.00	
5	2.18%	1.81%	1.63%	0	0	0	0	-	-	-	4	1.25	
6	2.36%	1.97%	1.84%	0	0	0	0	-	-	-	5	1.50	
7	2.92%	2.44%	1.99%	0	0	0	0	-	-	-	6	1.75	
8	2.78%	2.60%	2.06%	0	0	0	0	-	-	-	7	2.00	
9	2.91%	2.44%	2.09%	0	0	0	0	-	-	-	8	2.25	
10	4.43%	2.95%	2.58%	0	0	0	0	-	-	-	9	2.50	
11	3.90%	2.96%	1.98%	0	0	0	0	-	-	-			
12	4.32%	3.68%	3.16%	0	0	0	0	-	-	-			
13	5.08%	4.33%	3.83%	1	0	0	0	1.00	1.00	-			
14	5.67%	4.70%	3.63%	1	0	0	0	1.00	1.00	-			
15	7.59%	7.08%	5.25%	1	1	1	1	1.00	1.00	-			
16	9.92%	8.70%	7.53%	2	2	1	2	1.00	1.00	-			
17	3.40%	3.38%	4.02%	0	0	0	0	-	-	-			
18	5.43%	5.25%	4.21%	1	1	0	1	1.00	1.00	-			
19	4.14%	3.33%	4.82%	0	0	0	0	-	-	-			
20	4.03%	4.17%	5.33%	0	0	1	0	-	-	-	Available	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	7.34%	2	2	1	2	1.00	1.00	-			-
22	10.99%	6.03%	3.14%	2	1	0	1	1.00	1.00	-	2016	4,231,745	19,116
23	6.85%	4.79%	4.19%	1	0	0	0	1.00	1.00	-			
24	5.22%	3.74%	1.74%	1	0	0	0	1.00	1.00	-	2015	4,231,745	19,116
25	3.76%	2.63%	2.34%	0	0	0	0	-	-	-			
26	8.28%	7.69%	4.50%	2	1	0	1	1.00	1.00	-		Difference:	<u>Difference:</u>
27	1.26%	1.21%	0.95%	0	0	0	0	-	-	-			
40	8.56%	6.78%	6.69%	2	1	1	1	1.00	1.00	-		-	-
41	5.70%	3.98%	3.52%	1	0	0	0	1.00	1.00	-			
42	8.14%	6.17%	5.10%	2	1	1	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	5.84%	4.22%	4.22%	1	0	0	0	1.00	1.00	-		-	-
44	7.90%	7.20%	6.69%	1	1	1	1	1.00	1.00	-		0.0%	0.0%
45	7.16%	5.59%	4.77%	1	1	0	1	1.00	1.00	-			
99	1.42%	0.43%	0.82%	0	0	0	0	-	-	-			
Tot	2.66%	2.26%	1.93%										

- 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.

2016 Proposed Credit Factors Freeze Methodology - Data Through May, 2015

	Rate Class	s Group								
Terr	10	15	17	18	20	21	25	26	30	MC/Misc.
1	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	1.00	-	-	-	-	-
3	-	-	-	-	1.00	-	-	-	-	-
4	-	-	-	-	1.00	-	-	-	-	-
5	-	-	-	-	1.00	-	-	-	-	-
6	-	-	-	-	1.00	-	-	-	-	-
7	-	-	1.00	-	1.00	-	-	-	-	-
8	-	-	1.00	-	1.00	-	-	-	-	-
9	-	-	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	4.00	-	-	-	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	4.00	-	1.00
45	1.00	-	1.00	-	1.25	1.00	1.00	1.00	-	1.00
99	-	-	-	-	-	-	-	-	-	-

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep
Mark Shr	Out
Group	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

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Average of the 2016 Indicated Credit Factors and the 2015 Approved Summary by Rate Class

4/1/2015 Credit Factors

4/1/16 Proposal (Avg of 2016 Indicated and 2015 Approved)

Rate <u>Class</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
10	3,070,466	293,247	437,702,290	293,247	0.0%	263,175,548	-39.9%
15	782,127	8,091	10,891,112	8,091	0.0%	6,759,746	-37.9%
17	144,383	60,950	115,233,840	60,950	0.0%	86,061,775	-25.3%
18	55,019	1,192	1,939,846	1,192	0.0%	1,120,257	-42.3%
20	34,282	33,449	116,472,201	33,449	0.0%	105,431,984	-9.5%
21	15,499	5,813	14,215,271	5,813	0.0%	7,923,154	-44.3%
25	74,621	3,973	14,864,458	4,043	1.7%	13,297,344	-10.5%
26	65,541	372	1,115,203	372	0.0%	557,601	-50.0%
30	62,038	523	798,566	523	0.0%	608,927	-23.7%
M/M	166,422	19,116	4,231,745	19,116	0.0%	2,985,780	-29.4%
Total	4,470,398	426,727	717,464,534	426,796	0.0%	487,922,118	-32.0%

% of Total Mkt. Exp.

9.5%

9.5%

Estimated Credits Used Credit Utilization	678,766,758 94.6%	Estimated Credits Used Credit Utilization	458,188,095 93.9%
		Residual	Keep
		Mark Share	Out
		Group	<u>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 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 Proposal (Avg of 2016 and 2015)

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	178,846	0	0	0	0.0%	0	0.0%
2	240.517	1,071	2,136,317	1,071	0.0%	1,068,159	-50.0%
3	516,709	2,389	4,958,166	2,389	0.0%	2,479,083	-50.0%
4	328,044	1,323	3,128,040	1,323	0.0%	1,564,020	-50.0%
5	503,612	2,979	6,640,413	2,979	0.0%	6,640,413	0.0%
6	337,265	1,686	4,381,658	1,686	0.0%	4,381,658	0.0%
7	346,203	13,242	21,955,577	13,242	0.0%	13,902,461	-36.7%
8	198,142	6,783	11,898,661	6,783	0.0%	7,495,655	-37.0%
9	197,535	8,959	16,771,593	8,959	0.0%	10,819,817	-35.5%
10	95,365	4,425	8,333,668	4,425	0.0%	5,192,668	-37.7%
11	72,051	622	2,067,094	622	0.0%	2,067,094	0.0%
12	193,543	7,214	14,969,401	7,214	0.0%	10,055,414	-32.8%
13	209,132	17,789	26,280,639	17,789	0.0%	24,575,038	-6.5%
14	71,888	6,624	14,066,453	6,624	0.0%	13,192,153	-6.2%
15	25,481	2,572	5,523,585	2,572	0.0%	5,161,698	-6.6%
16	13,716	12,349	19,409,286	12,349	0.0%	11,492,705	-40.8%
17	17,221	394	935,879	394	0.0%	895,964	-4.3%
18	16,024	13,819	20,313,141	13,819	0.0%	11,475,184	-43.5%
19	15,535	507	1,369,708	577	13.7%	1,398,923	2.1%
20	17,850	14,698	22,950,553	14,698	0.0%	13,254,622	-42.2%
21	47,126	45,990	92,918,729	45,990	0.0%	87,504,423	-5.8%
22	15,070	15,070	32,426,892	15,070	0.0%	31,271,465	-3.6%
23	44,947	2,840	7,306,664	2,840	0.0%	6,559,373	-10.2%
24	24,678	1,240	2,582,239	1,240	0.0%	2,095,105	-18.9%
25	16,489	501	1,420,658	501	0.0%	991,206	-30.2%
26	21,310	1,627	4,331,949	1,627	0.0%	3,561,164	-17.8%
27	410,054	1,599	2,794,681	1,599	0.0%	1,397,340	-50.0%
40	20,429	16,563	22,445,108	16,563	0.0%	12,707,184	-43.4%
41	58,493	50,381	59,922,425	50,381	0.0%	34,214,535	-42.9%
42	73,196	59,487	96,870,257	59,487	0.0%	51,472,948	-46.9%
43	47,219	39,711	65,489,722	39,711	0.0%	37,406,346	-42.9%
44	33,392	29,611	38,826,123	29,611	0.0%	22,867,157	-41.1%
45	50,680	42,661	82,039,256	42,661	0.0%	48,761,143	-40.6%
99	12,637	0	0	0	0.0%	0	0.0%
Total	4,470,398	426,727	717,464,534	426,796	0.0%	487,922,118	-32.0%
% of Total I	Mkt. Exp.	9.5%		9.5%			

Residual Mark Share <u>Group</u>	Keep Out <u>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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 10 Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

	Danidu	al Mauliat	Ohana	Ladianta	I MI + Ob a	- D	Colootod	2046	2045		Residual	Keep	
Terr	Aug-13	al Market Aug-14	May-15	2014	Mkt Shar 2015	2016	Selected <u>Range*</u>	2016 <u>Credits</u>	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
1	1.17%	0.90%	0.73%	0	0	0	0	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u> </u>	0.00	
2	1.19%	0.92%	0.79%	0	0	0	0	<u>-</u>	_	- -	1	1.00	
3	1.45%	1.06%	0.83%	0	0	0	0	_	_	-	2	1.00	
4	1.27%	0.98%	0.83%	0	0	0	0	_	_	_	3	1.00	
5	1.91%	1.44%	1.12%	0	0	0	0	_	_	_	4	1.25	
6	1.91%	1.46%	1.20%	0	0	0	0	_	_	-	5	1.50	
7	2.46%	1.81%	1.42%	0	0	0	0	_	_	-	6	1.75	
8	2.25%	1.64%	1.34%	0	0	0	0	_	_	-	7	2.00	
9	2.87%	2.03%	1.53%	0	0	0	0	_	_	-	8	2.25	
10	2.92%	2.18%	1.78%	0	0	0	0	_	_	-	9	2.50	
11	1.99%	1.51%	1.33%	0	0	0	0	-	_	-	-		
12	2.50%	1.93%	1.62%	0	0	0	0	-	_	-			
13	4.32%	3.11%	2.52%	0	0	0	0	-	_	-			
14	3.84%	2.79%	2.28%	0	0	0	0	-	-	-			
15	4.35%	2.67%	2.19%	0	0	0	0	-	-	-			
16	6.39%	4.97%	3.50%	1	0	0	0	0.50	1.00	(0.50)			
17	2.20%	1.81%	1.64%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.80%	1	0	0	0	0.50	1.00	(0.50)			
19	3.68%	3.20%	2.68%	0	0	0	0	-	-	-			
20	6.23%	4.87%	4.59%	1	0	0	0	0.50	1.00	(0.50)	Availab	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.08%	1	1	1	1	1.00	1.00	- ′		_	
22	9.85%	6.82%	5.90%	2	1	1	1	1.00	1.00	-	2016	263,175,548	293,247
23	3.63%	2.49%	1.85%	0	0	0	0	-	-	-			
24	2.15%	1.75%	1.41%	0	0	0	0	-	-	-	2015	437,702,290	293,247
25	2.15%	1.50%	1.24%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.06%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.93%	0.77%	0.64%	0	0	0	0	-	-	-			
40	7.63%	4.08%	2.87%	1	0	0	0	0.50	1.00	(0.50)		(174,526,742)	-
41	5.88%	3.11%	2.57%	1	0	0	0	0.50	1.00	(0.50)			
42	6.48%	4.37%	2.88%	1	0	0	0	0.50	1.00	(0.50)	<u>Pe</u>	ercent Change:	Percent Change:
43	5.28%	3.09%	2.51%	1	0	0	0	0.50	1.00	(0.50)			
44	7.95%	4.99%	4.33%	1	0	0	0	0.50	1.00	(0.50)		-39.9%	0.0%
45	6.64%	3.49%	2.91%	1	0	0	0	0.50	1.00	(0.50)			
99	0.70%	0.56%	0.64%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.43%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 15 Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

	Danidu	al Mauliat	Oh a sa	la dia ata a	l Mist Ob as	- D	Coloctod	2046	2015		Residual Mark Shr	Keep	
Terr	Aug-13	al Market Aug-14	May-15	2014	Mkt Shar 2015	2016	Selected Range*	2016 <u>Credits</u>	2015 Credits	Change	Group	Out <u>Credits</u>	
1	0.32%	0.27%	0.30%	0	0	0	0	-	Orcaits	-	<u>Стоар</u> 0	0.00	
2	0.29%	0.29%	0.28%	0	0	0	0	_	_	-	1	1.00	
3	0.38%	0.29%	0.26%	0	0	0	0	_	_	-	2	1.00	
4	0.30%	0.29%	0.27%	0	0	0	0	_	_	_	3	1.00	
5	0.44%	0.38%	0.31%	0	0	0	0	-	_	-	4	1.25	
6	0.58%	0.53%	0.43%	0	0	0	0	-	-	-	5	1.50	
7	0.56%	0.46%	0.43%	0	0	0	0	-	-	-	6	1.75	
8	0.78%	0.67%	0.63%	0	0	0	0	-	-	-	7	2.00	
9	0.78%	0.63%	0.52%	0	0	0	0	-	-	-	8	2.25	
10	0.71%	0.62%	0.52%	0	0	0	0	-	-	-	9	2.50	
11	1.12%	0.88%	0.77%	0	0	0	0	-	-	-			
12	0.88%	0.86%	0.75%	0	0	0	0	-	-	-			
13	1.46%	1.17%	0.94%	0	0	0	0	-	-	-			
14	1.65%	1.32%	1.18%	0	0	0	0	-	-	-			
15	1.42%	1.43%	1.25%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.14%	0	0	0	0	-	-	-			
17	0.79%	0.76%	0.89%	0	0	0	0	-	-	-			
18	2.45%	2.07%	2.02%	0	0	0	0	-	-	-			
19	2.18%	2.18%	1.81%	0	0	0	0	-	-	-			
20	2.70%	2.39%	2.41%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.25%	1	0	0	0	0.50	1.00	(0.50)			
22	8.10%	6.62%	5.91%	2	1	1	1	1.00	1.00	-	2016	6,759,746	8,091
23	2.82%	1.98%	1.48%	0	0	0	0	-	-	-			
24	2.99%	2.98%	2.44%	0	0	0	0	-	-	-	2015	10,891,112	8,091
25	1.73%	1.28%	1.20%	0	0	0	0	-	-	-			
26	1.99%	1.56%	1.38%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.26%	0.24%	0.20%	0	0	0	0	-	-	-			
40	2.44%	1.80%	1.20%	0	0	0	0	-	-	-		(4,131,365)	-
41	1.68%	1.28%	1.08%	0	0	0	0	-	-	-	_		
42	3.10%	3.10%	2.41%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	1.59%	1.06%	0.96%	0	0	0	0	-	-	-		0= 00/	• • • • • • • • • • • • • • • • • • • •
44	3.16%	2.11%	1.91%	0	0	0	0	-	-	-		-37.9%	0.0%
45	2.38%	1.83%	1.51%	0	0	0	0	-	-	-			
99 Tot	0.36% 0.73%	0.26% 0.62%	0.13% 0.54%	0	0	0	0	-	-	-			

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 17 Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

	Dooidu	al Markat	Chara	Indicator	Mut Cha	o Dongo	Colooted	2016	2015		Residual	Keep	
<u>Terr</u>	Aug-13	al Market Aug-14	May-15	2014	Mkt Shar 2015	2016	Selected Range*	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
1	3.25%	2.47%	2.09%	0	0	0	0	-	-	-	<u>0.10up</u> 0	0.00	
2	2.96%	2.03%	1.94%	0	0	0	0	_	-	_	1	1.00	
3	4.05%	2.61%	2.21%	0	0	0	0	-	-	_	2	1.00	
4	3.21%	2.63%	2.20%	0	0	0	0	-	-	_	3	1.00	
5	4.26%	3.06%	2.54%	0	0	0	0	-	-	_	4	1.25	
6	4.40%	3.57%	3.16%	0	0	0	0	-	-	-	5	1.50	
7	5.00%	3.57%	2.85%	1	0	0	0	0.50	1.00	(0.50)	6	1.75	
8	5.01%	3.58%	3.43%	1	0	0	0	0.50	1.00	(0.50)	7	2.00	
9	5.05%	3.56%	2.83%	1	0	0	0	0.50	1.00	(0.50)	8	2.25	
10	5.55%	3.98%	3.35%	1	0	0	0	0.50	1.00	(0.50)	9	2.50	
11	4.60%	3.99%	2.71%	0	0	0	0	-	-	-			
12	5.90%	4.74%	4.01%	1	0	0	0	0.50	1.00	(0.50)			
13	7.34%	5.15%	4.50%	1	1	0	1	1.00	1.00	-			
14	8.44%	5.78%	5.38%	2	1	1	1	1.00	1.00	-			
15	8.90%	6.45%	4.43%	2	1	0	1	1.00	1.00	-			
16	14.02%	9.76%	6.38%	3	2	1	2	1.00	1.00	-			
17	6.51%	5.57%	3.71%	1	1	0	1	1.00	1.00	-			
18	10.10%	7.78%	6.18%	2	1	1	1	1.00	1.00	-			
19	11.66%	7.72%	6.94%	3	1	1	1	1.00	1.00	-			
20	12.72%	10.84%	10.03%	3	2	2	2	1.00	1.00	-	<u>Availal</u>	ole Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	10.21%	3	3	2	3	1.00	1.00	-			
22	14.23%	10.75%	9.70%	3	2	2	2	1.00	1.00	-	2016	86,061,775	60,950
23	8.79%	6.11%	5.46%	2	1	1	1	1.00	1.00	-			
24	4.64%	3.61%	2.90%	0	0	0	0	-	-	-	2015	115,233,840	60,950
25	6.65%	4.56%	3.40%	1	0	0	0	0.50	1.00	(0.50)			
26	8.63%	5.64%	4.78%	2	1	0	1	1.00	1.00	-		<u>Difference:</u>	<u>Difference:</u>
27	2.51%	2.07%	1.52%	0	0	0	0	-	-	-			
40	12.55%	7.28%	5.44%	3	1	1	1	1.00	1.00	-		(29,172,065)	=
41	12.06%	6.14%	4.77%	3	1	0	1	1.00	1.00	-			
42	9.55%	4.71%	3.63%	2	0	0	0	0.50	1.00	(0.50)	<u> </u>	Percent Change:	Percent Change:
43	8.81%	5.59%	5.43%	2	1	1	1	1.00	1.00	-			
44	11.57%	6.62%	6.20%	3	1	1	1	1.00	1.00	-		-25.3%	0.0%
45	12.13%	6.63%	6.56%	3	1	1	1	1.00	1.00	-			
99	0.83%	0.39%	0.43%	0	0	0	0	-	-	-			
Tot	5.17%	3.64%	3.09%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 18 Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

Residual

Keen

											Residual	Keep	
	Residu	al Market		Indicated	d Mkt Shar	re Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	<u>Aug-14</u>	<u>May-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.12%	0.63%	0.61%	0	0	0	0	-	-	-	0	0.00	
2	0.84%	0.55%	0.44%	0	0	0	0	-	-	-	1	1.00	
3	1.34%	0.92%	0.77%	0	0	0	0	-	-	-	2	1.00	
4	1.14%	0.86%	0.53%	0	0	0	0	-	-	-	3	1.00	
5	1.75%	1.26%	1.01%	0	0	0	0	-	-	-	4	1.25	
6	1.10%	1.13%	0.71%	0	0	0	0	-	-	-	5	1.50	
7	1.98%	1.31%	0.84%	0	0	0	0	-	-	-	6	1.75	
8	1.08%	0.94%	1.05%	0	0	0	0	-	-	-	7	2.00	
9	2.17%	1.57%	1.02%	0	0	0	0	-	-	-	8	2.25	
10	1.83%	1.02%	1.22%	0	0	0	0	-	-	-	9	2.50	
11	1.24%	0.77%	0.84%	0	0	0	0	-	-	-			
12	2.44%	1.85%	1.41%	0	0	0	0	-	-	-			
13	2.71%	1.96%	1.89%	0	0	0	0	-	-	-			
14	3.53%	2.39%	1.77%	0	0	0	0	-	-	-			
15	4.75%	4.06%	3.02%	0	0	0	0	-	-	-			
16	1.75%	0.00%	1.75%	0	0	0	0	-	-	-			
17	2.14%	1.13%	1.38%	0	0	0	0	-	-	-			
18	5.63%	5.10%	5.99%	1	1	1	1	1.00	1.00	-			
19	3.16%	2.04%	1.16%	0	0	0	0	-	-	-			
20	3.59%	4.15%	2.44%	0	0	0	0	-	-	-	Availabl	e Credit Prem:	Credit Eligible Exp:
21	4.86%	3.05%	3.08%	0	0	0	0	-	-	-			
22	9.76%	4.32%	3.49%	2	0	0	0	0.50	1.00	(0.50)	2016	1,120,257	1,192
23	2.12%	1.27%	1.88%	0	0	0	0	-	-	-			
24	3.56%	0.43%	1.85%	0	0	0	0	-	-	-	2015	1,939,846	1,192
25	0.15%	1.68%	0.83%	0	0	0	0	-	-	-			
26	4.20%	3.21%	2.12%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.89%	0.72%	0.48%	0	0	0	0	-	-	-			
40	5.77%	2.78%	1.26%	1	0	0	0	0.50	1.00	(0.50)		(819,589)	-
41	7.29%	1.64%	1.51%	1	0	0	0	0.50	1.00	(0.50)			
42	2.50%	1.69%	1.29%	0	0	0	0	-	-	-	Pe	rcent Change:	Percent Change:
43	3.03%	3.04%	2.07%	0	0	0	0	-	-	-			
44	1.80%	2.70%	1.73%	0	0	0	0	-	-	-		-42.3%	0.0%
45	4.86%	3.11%	2.34%	0	0	0	0	-	-	-			
99	1.96%	0.51%	0.66%	0	0	0	0	-	-	-			
Tot	1.72%	1.21%											

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 20 Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

	Posidu	al Market	Shoro	Indicator	l Mkt Shar	o Panga	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	Aug-14	May-15	2014	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	4.03%	3.98%	5.35%	0	0	1	0	-	-	-	<u>0100p</u> 0	0.00	
2	5.82%	4.31%	4.05%	1	0	0	0	0.50	1.00	(0.50)	1	1.00	
3	7.69%	3.82%	4.45%	1	0	0	0	0.50	1.00	(0.50)	2	1.00	
4	5.70%	3.32%	2.72%	1	0	0	0	0.50	1.00	(0.50)	3	1.00	
5	7.89%	6.27%	5.24%	1	1	1	1	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.80%	2	1	1	1	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.16%	2	1	1	1	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.47%	3	1	1	1	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	5.98%	2	1	1	1	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	6.24%	3	1	1	1	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	4.73%	2	1	0	1	1.00	1.00	-			
12	12.77%	7.55%	6.58%	3	1	1	1	1.00	1.00	-			
13	11.99%	8.85%	8.43%	3	2	2	2	1.00	1.00	-			
14	15.28%	13.10%	11.05%	3	3	3	3	1.00	1.00	-			
15	21.15%	13.01%	13.27%	4	3	3	3	1.13	1.25	(0.13)			
16	26.59%	25.13%	19.78%	5	5	4	5	1.50	1.50	-			
17	19.61%	9.89%	10.30%	4	2	2	2	1.13	1.25	(0.13)			
18	20.86%	22.51%	13.75%	4	4	3	4	1.25	1.25	-			
19	15.29%	16.67%	15.09%	3	3	3	3	1.00	1.00	-			
20	24.66%	18.55%	21.63%	5	4	4	4	1.38	1.50	(0.13)	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	32.61%	23.95%	24.05%	6	5	5	5	1.63	1.75	(0.13)			
22	33.75%	22.17%	19.18%	6	4	4	4	1.50	1.75	(0.25)	2016	105,431,984	33,449
23	18.35%	10.83%	8.04%	4	2	2	2	1.13	1.25	(0.13)			
24	8.54%	5.71%	5.75%	2	1	1	1	1.00	1.00	-	2015	116,472,201	33,449
25	13.28%	13.16%	13.61%	3	3	3	3	1.00	1.00	-			
26	23.56%	13.76%	13.82%	5	3	3	3	1.25	1.50	(0.25)		<u>Difference:</u>	<u>Difference:</u>
27	5.26%	3.54%	2.29%	1	0	0	0	0.50	1.00	(0.50)			
40	24.85%	11.38%	12.36%	5	3	3	3	1.25	1.50	(0.25)		(11,040,217)	-
41	14.09%	9.23%	9.19%	3	2	2	2	1.00	1.00	-			
42	18.64%	12.38%	10.10%	4	3	2	3	1.13	1.25	(0.13)	<u>Pe</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	13.66%	4	3	3	3	1.13	1.25	(0.13)			
44	24.27%	16.44%	14.98%	5	3	3	3	1.25	1.50	(0.25)		-9.5%	0.0%
45	20.07%	18.11%	15.95%	4	4	3	4	1.25	1.25	-			
99	2.48%	3.08%	0.21%	0	0	0	0	-	-	-			
Tot	12.86%	8.91%	8.18%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 21 Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	<u>Aug-14</u>	May-15	<u>2014</u>	<u>2015</u>	2016	Range*	Credits	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.87%	1.52%	0.45%	0	0	0	0	-	-	-	0	0.00	
2	2.29%	1.29%	0.83%	0	0	0	0	-	-	-	1	1.00	
3	2.90%	1.82%	1.51%	0	0	0	0	-	-	-	2	1.00	
4	2.49%	2.11%	0.76%	0	0	0	0	-	-	-	3	1.00	
5	4.05%	2.57%	2.02%	0	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	1.82%	0	0	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.35%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	2.07%	0	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	2.12%	1	0	0	0	0.50	1.00	(0.50)	8	2.25	
10	9.63%	4.03%	4.10%	2	0	0	0	0.50	1.00	(0.50)	9	2.50	
11	3.08%	2.33%	1.49%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.32%	0	0	0	0	-	-	-			
13	10.29%	3.92%	4.73%	2	0	0	0	0.50	1.00	(0.50)			
14	5.89%	4.05%	3.82%	1	0	0	0	0.50	1.00	(0.50)			
15	10.82%	4.90%	2.14%	2	0	0	0	0.50	1.00	(0.50)			
16	13.13%	13.16%	6.89%	3	3	1	3	1.00	1.00	-			
17	5.11%	0.00%	0.68%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.94%	1	0	0	0	0.50	1.00	(0.50)			
19	5.62%	4.17%	0.72%	1	0	0	0	0.50	1.00	(0.50)			
20	11.09%	6.02%	4.59%	3	1	0	1	1.00	1.00	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	4.13%	2	0	0	0	0.50	1.00	(0.50)			
22	9.88%	2.86%	2.75%	2	0	0	0	0.50	1.00	(0.50)	2016	7,923,154	5,813
23	4.67%	4.48%	2.39%	0	0	0	0	-	-	-			
24	6.40%	2.76%	1.19%	1	0	0	0	0.50	1.00	(0.50)	2015	14,215,271	5,813
25	2.60%	0.00%	1.80%	0	0	0	0	-	-	-			
26	6.32%	1.47%	1.48%	1	0	0	0	0.50	1.00	(0.50)		<u>Difference:</u>	<u>Difference:</u>
27	2.55%	1.88%	1.39%	0	0	0	0	-	-	-			
40	13.69%	7.00%	5.37%	3	1	1	1	1.00	1.00	-		(6,292,117)	-
41	12.53%	5.33%	4.95%	3	1	0	1	1.00	1.00	-			
42	6.17%	3.86%	1.25%	1	0	0	0	0.50	1.00	(0.50)	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	2.67%	1	0	0	0	0.50	1.00	(0.50)			
44	8.43%	3.35%	3.47%	2	0	0	0	0.50	1.00	(0.50)		-44.3%	0.0%
45	10.32%	2.31%	3.00%	2	0	0	0	0.50	1.00	(0.50)			
99	0.38%	0.00%	-6.54%	0	0	0	0	-	-	-			
Tot	5.15%	2.98%	2.33%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 25 Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

	Deside	-1 M1 - 4	01	In dia atau	l Milet Ob a	- D	0-144	0040	0045		Residual	Keep	
Terr	Aug-13	al Market Aug-14	May-15	2014	Mkt Shar 2015	<u>2016</u>	Selected Range*	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
1	1.88%	1.37%	1.40%	0	0	0	0	-	-	<u>Change</u> -	<u> Огоар</u> 0	0.00	
2	1.61%	1.23%	1.30%	0	0	0	0	_	_	_	1	1.00	
3	1.84%	1.26%	0.89%	0	0	0	0	_	_	_	2	1.00	
4	1.75%	1.27%	1.18%	0	0	0	0	_	_	_	3	1.00	
5	2.37%	2.09%	1.69%	0	0	0	0	_	-	_	4	1.25	
6	2.57%	1.99%	1.67%	0	0	0	0	-	-	-	5	1.50	
7	2.53%	1.92%	1.53%	0	0	0	0	-	-	-	6	1.75	
8	3.30%	2.48%	2.47%	0	0	0	0	-	-	-	7	2.00	
9	2.62%	2.15%	2.40%	0	0	0	0	-	-	-	8	2.25	
10	3.19%	3.31%	2.48%	0	0	0	0	-	-	-	9	2.50	
11	2.54%	1.31%	1.98%	0	0	0	0	-	-	-			
12	4.04%	3.41%	3.27%	0	0	0	0	-	-	-			
13	3.75%	3.40%	3.27%	0	0	0	0	-	-	-			
14	6.81%	5.30%	2.99%	1	1	0	1	1.00	1.00	-			
15	11.71%	4.46%	5.23%	3	0	1	1	1.00	1.00	-			
16	17.01%	4.90%	3.66%	4	0	0	0	0.50	1.00	(0.50)			
17	3.23%	3.64%	1.05%	0	0	0	0	-	-	-			
18	9.96%	5.00%	7.21%	2	1	1	1	1.00	1.00	-			
19	4.46%	11.43%	8.06%	0	3	2	2	0.50	-	0.50			
20	8.81%	5.74%	5.27%	2	1	1	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.41%	2	1	1	1	1.00	1.00	-			
22	10.69%	8.39%	3.58%	2	2	0	2	1.00	1.00	-	2016	13,297,344	4,043
23	6.30%	3.39%	1.52%	1	0	0	0	0.50	1.00	(0.50)			
24	5.30%	2.03%	1.15%	1	0	0	0	0.50	1.00	(0.50)	2015	14,864,458	3,973
25	8.64%	0.00%	2.18%	2	0	0	0	0.50	1.00	(0.50)			
26	9.20%	2.76%	2.08%	2	0	0	0	0.50	1.00	(0.50)		<u>Difference:</u>	<u>Difference:</u>
27	1.33%	0.88%	0.70%	0	0	0	0	-	-	-			
40	3.61%	3.64%	2.86%	0	0	0	0	-	-	-		(1,567,115)	69
41	4.94%	4.21%	4.76%	0	0	0	0	-	-	-			
42	4.47%	4.14%	2.87%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.06%	6.52%	4.05%	1	1	0	1	1.00	1.00	-			
44	10.75%	4.27%	4.46%	2	0	0	0	0.50	1.00	(0.50)		-10.5%	1.7%
45	7.15%	5.62%	6.23%	1	1	1	1	1.00	1.00	-			
99	0.52%	0.40%	0.05%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.73%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 26 Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

	<u> </u>	-1.8411	01	1	L M L OL -	- D	Calaatad	2046	0045		Residual	Keep	
Torr	Aug-13	al Market Aug-14	Snare May-15	2014	Mkt Shar 2015	<u>2016</u>	Selected Range*	2016 <u>Credits</u>	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
<u>Terr</u> 1	0.85%	0.56%	0.42%	<u>2014</u> 0	<u>2015</u> 0	<u>2016</u> 0	<u>Range</u> 0	<u>Credits</u>	Credits	Change	<u>Group</u> 0	0.00	
2	0.52%	0.36%	0.42 %	0	0	0	0	_	_	-	1	1.00	
3	0.84%	0.58%	0.41%	0	0	0	0	_	_	- -	2	1.00	
4	0.67%	0.55%	0.48%	0	0	0	0	_	_	_	3	1.00	
5	0.93%	0.92%	0.57%	0	0	0	0	_	_	_	4	1.25	
6	0.81%	0.67%	0.71%	0	0	0	0	_	_	_	5	1.50	
7	0.92%	0.68%	0.47%	0	0	0	0	_	_	_	6	1.75	
8	0.95%	0.89%	0.59%	0	0	0	0	_	_	-	7	2.00	
9	0.93%	0.58%	0.52%	0	0	0	0	_	_	-	8	2.25	
10	1.56%	1.02%	1.16%	0	0	0	0	_	_	-	9	2.50	
11	0.67%	0.68%	0.74%	0	0	0	0	_	_	-	· ·		
12	1.75%	1.20%	0.91%	0	0	0	0	_	_	_			
13	2.28%	1.43%	1.17%	0	0	0	0	_	_	-			
14	1.87%	0.47%	0.64%	0	0	0	0	-	_	-			
15	3.62%	1.93%	0.52%	0	0	0	0	-	_	-			
16	0.76%	0.00%	2.11%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.36%	0	0	0	0	-	-	-			
18	3.56%	3.30%	2.01%	0	0	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	0.06%	0	0	0	0	-	-	-	Available	e Credit Prem:	Credit Eligible Exp:
21	1.76%	0.91%	0.99%	0	0	0	0	-	-	-			
22	5.59%	0.00%	1.49%	1	0	0	0	0.50	1.00	(0.50)	2016	557,601	372
23	0.91%	1.55%	0.54%	0	0	0	0	-	-	-			
24	0.85%	0.96%	0.99%	0	0	0	0	-	-	-	2015	1,115,203	372
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	1.87%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.41%	0.35%	0.30%	0	0	0	0	-	-	-			·
40	0.06%	1.47%	0.78%	0	0	0	0	-	-	-		(557,601)	-
41	3.25%	1.54%	1.79%	0	0	0	0	-	-	-		,	
42	1.58%	0.73%	0.99%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.42%	1.10%	0.97%	0	0	0	0	-	-	-		-	
44	1.88%	2.14%	2.71%	0	0	0	0	-	-	-		-50.0%	0.0%
45	5.87%	1.57%	1.81%	1	0	0	0	0.50	1.00	(0.50)			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.57%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 30 Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

	_ <u></u>	154 1 4	<u> </u>	T. P. 4	1.1.4.1.4.0.1		0-111	0040	0045		Residual	Keep	
Torr		al Market Aug-14	May-15		d Mkt Shar 2015		Selected <u>Range*</u>	2016 Credits	2015 Credits	Change	Mark Shr	Out	
<u>Terr</u> 1	Aug-13 0.99%	0.64%	0.30%	<u>2014</u> 0	<u>2015</u> 0	<u>2016</u> 0	<u>Range</u> 0	<u>Credits</u>	Credits	<u>Change</u>	<u>Group</u> 0	<u>Credits</u> 0.00	
2	0.86%	0.66%	0.64%	0	0	0	0	<u>-</u>	_	- -	1	1.00	
3	0.87%	0.52%	0.57%	0	0	0	0	_	_	_	2	1.00	
4	0.81%	0.51%	0.50%	0	0	0	0	_	_	_	3	1.00	
5	0.97%	0.91%	0.85%	0	0	0	0	_	_	-	4	1.25	
6	1.01%	0.85%	0.90%	0	0	0	0	_	_	_	5	1.50	
7	1.54%	1.13%	0.86%	0	0	0	0	_	-	_	6	1.75	
8	0.93%	1.23%	1.07%	0	0	0	0	-	-	-	7	2.00	
9	1.27%	0.94%	0.62%	0	0	0	0	-	-	-	8	2.25	
10	2.29%	1.49%	1.75%	0	0	0	0	-	-	-	9	2.50	
11	0.97%	1.74%	1.39%	0	0	0	0	-	-	-			
12	1.86%	1.29%	1.42%	0	0	0	0	-	-	-			
13	2.05%	1.29%	1.44%	0	0	0	0	-	-	-			
14	3.24%	3.44%	3.39%	0	0	0	0	-	-	-			
15	5.81%	6.90%	2.62%	1	1	0	1	1.00	1.00	-			
16	7.84%	4.32%	2.46%	1	0	0	0	0.50	1.00	(0.50)			
17	1.39%	1.36%	1.85%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	2.08%	0	0	0	0	-	-	-			
20	1.68%	0.00%	0.72%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	2.47%	2.39%	2.97%	0	0	0	0	-	-	-			
22	8.30%	1.27%	2.44%	2	0	0	0	0.50	1.00	(0.50)	2016	608,927	523
23	0.98%	1.55%	1.14%	0	0	0	0	-	-	-			
24	1.21%	1.06%	2.06%	0	0	0	0	-	-	-	2015	798,566	523
25	1.31%	0.80%	0.69%	0	0	0	0	-	-	-			
26	4.15%	4.92%	3.90%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.62%	0.61%	0.41%	0	0	0	0	-	-	-			
40	1.29%	0.97%	0.56%	0	0	0	0	-	-	-		(189,639)	-
41	1.68%	1.20%	1.22%	0	0	0	0	-	-	-			
42	2.10%	1.35%	1.47%	0	0	0	0	-	-	-	<u>Pe</u>	ercent Change:	Percent Change:
43	2.31%	1.26%	1.64%	0	0	0	0	-	-	-			
44	4.60%	2.87%	2.40%	0	0	0	0	-	-	-		-23.7%	0.0%
45	2.31%	1.05%	0.66%	0	0	0	0	-	-	-			
99	0.00%	2.41%	0.65%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.87%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class MM Average of 2016 Indicated Credit Factors and 2015 Approved Credit Factors

	Docidu	al Markat	Choro	la di a a ta a	I Mich Char	o Dongo	Colooted	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	al Market Aug-14	May-15	2014	Mkt Shar 2015	2016	Selected Range*	Credits	Credits	Change	Group	Credits	
1	1.51%	1.25%	1.04%	0	0	0	0	-	Orcaits	-	<u>Слоар</u> О	0.00	
2	1.50%	1.38%	1.23%	0	0	0	0	_	_	_	1	1.00	
3	1.84%	1.63%	1.42%	0	0	0	0	_	_	-	2	1.00	
4	1.57%	1.52%	1.23%	0	0	0	0	_	_	_	3	1.00	
5	2.18%	1.81%	1.63%	0	0	0	0	_	_	_	4	1.25	
6	2.36%	1.97%	1.84%	0	0	0	0	_	_	-	5	1.50	
7	2.92%	2.44%	1.99%	0	0	0	0	-	_	_	6	1.75	
8	2.78%	2.60%	2.06%	0	0	0	0	-	-	-	7	2.00	
9	2.91%	2.44%	2.09%	0	0	0	0	-	-	-	8	2.25	
10	4.43%	2.95%	2.58%	0	0	0	0	-	-	-	9	2.50	
11	3.90%	2.96%	1.98%	0	0	0	0	-	-	-			
12	4.32%	3.68%	3.16%	0	0	0	0	-	-	-			
13	5.08%	4.33%	3.83%	1	0	0	0	0.50	1.00	(0.50)			
14	5.67%	4.70%	3.63%	1	0	0	0	0.50	1.00	(0.50)			
15	7.59%	7.08%	5.25%	1	1	1	1	1.00	1.00	` -			
16	9.92%	8.70%	7.53%	2	2	1	2	1.00	1.00	-			
17	3.40%	3.38%	4.02%	0	0	0	0	-	-	-			
18	5.43%	5.25%	4.21%	1	1	0	1	1.00	1.00	-			
19	4.14%	3.33%	4.82%	0	0	0	0	-	-	-			
20	4.03%	4.17%	5.33%	0	0	1	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	7.34%	2	2	1	2	1.00	1.00	-			
22	10.99%	6.03%	3.14%	2	1	0	1	1.00	1.00	-	2016	2,985,780	19,116
23	6.85%	4.79%	4.19%	1	0	0	0	0.50	1.00	(0.50)			
24	5.22%	3.74%	1.74%	1	0	0	0	0.50	1.00	(0.50)	2015	4,231,745	19,116
25	3.76%	2.63%	2.34%	0	0	0	0	-	-	-			
26	8.28%	7.69%	4.50%	2	1	0	1	1.00	1.00	-		Difference:	<u>Difference:</u>
27	1.26%	1.21%	0.95%	0	0	0	0	-	-	-			
40	8.56%	6.78%	6.69%	2	1	1	1	1.00	1.00	-		(1,245,965)	-
41	5.70%	3.98%	3.52%	1	0	0	0	0.50	1.00	(0.50)			
42	8.14%	6.17%	5.10%	2	1	1	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	5.84%	4.22%	4.22%	1	0	0	0	0.50	1.00	(0.50)			
44	7.90%	7.20%	6.69%	1	1	1	1	1.00	1.00	-		-29.4%	0.0%
45	7.16%	5.59%	4.77%	1	1	0	1	1.00	1.00	-			
99	1.42%	0.43%	0.82%	0	0	0	0	-	-	-			
Tot	2.66%	2.26%	1.93%										

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.

2016 Proposed Credit Factors - Avg of 2015 Approved and 2016 Proposed - Data Through May, 2015

	Rate Class Group												
Terr	10	15	17	18	20	21	25	26	30	MC/Misc.			
1	-	-	-	-	-	-	-	-	-	-			
2	-	-	-	-	0.50	-	-	-	-	-			
3	-	-	-	-	0.50	-	-	-	-	-			
4	-	-	-	-	0.50	-	-	-	-	-			
5	-	-	-	-	1.00	-	-	-	-	-			
6	-	-	-	-	1.00	-	-	-	-	-			
7	-	-	0.50	-	1.00	-	-	-	-	-			
8	-	-	0.50	-	1.00	-	-	-	-	-			
9	-	-	0.50	-	1.00	0.50	-	-	-	-			
10	-	-	0.50	-	1.00	0.50	-	-	-	-			
11	-	-	-	-	1.00	-	-	-	-	-			
12	-	-	0.50	-	1.00	-	-	-	-	-			
13	-	-	1.00	-	1.00	0.50	-	-	-	0.50			
14	-	-	1.00	-	1.00	0.50	1.00	-	-	0.50			
15	-	-	1.00	-	1.13	0.50	1.00	-	1.00	1.00			
16	0.50	-	1.00	-	1.50	1.00	0.50	-	0.50	1.00			
17	-	-	1.00	-	1.13	-	-	-	-	-			
18	0.50	-	1.00	1.00	1.25	0.50	1.00	-	-	1.00			
19	-	-	1.00	-	1.00	0.50	0.50	-	-	-			
20	0.50	-	1.00	-	1.38	1.00	1.00	-	-	-			
21	1.00	0.50	1.00	-	1.63	0.50	1.00	-	-	1.00			
22	1.00	1.00	1.00	0.50	1.50	0.50	1.00	0.50	0.50	1.00			
23	-	-	1.00	-	1.13	-	0.50	-	-	0.50			
24	-	-	-	-	1.00	0.50	0.50	-	-	0.50			
25	-	-	0.50	-	1.00	-	0.50	-	-	-			
26	-	-	1.00	-	1.25	0.50	0.50	-	-	1.00			
27	-	-	-	-	0.50	-	-	-	-	-			
40	0.50	-	1.00	0.50	1.25	1.00	-	-	-	1.00			
41	0.50	-	1.00	0.50	1.00	1.00	-	-	-	0.50			
42	0.50	-	0.50	-	1.13	0.50	-	-	-	1.00			
43	0.50	-	1.00	-	1.13	0.50	1.00	-	-	0.50			
44	0.50	-	1.00	-	1.25	0.50	0.50	-	-	1.00			
45	0.50	-	1.00	-	1.25	0.50	1.00	0.50	-	1.00			
99	-	-	-	-	-	-	-	-	-	-			

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep
Mark Shr	Out
Group	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

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Relative Range Methodology Summary by Rate Class

4/1/2015 Credit Factors

4/1/16 Indicated - Relative Ranges

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
<u>Class</u>	Exposures	Exposures	Credit Premium	Exposures	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,070,466	293,247	437,702,290	177,060	-39.6%	268,921,714	-38.6%
15	782,127	8,091	10,891,112	8,091	0.0%	10,891,112	0.0%
17	144,383	60,950	115,233,840	74,161	21.7%	135,542,517	17.6%
18	55,019	1,192	1,939,846	837	-29.8%	1,483,660	-23.5%
20	34,282	33,449	116,472,201	32,840	-1.8%	107,306,845	-7.9%
21	15,499	5,813	14,215,271	5,223	-10.2%	12,527,213	-11.9%
25	74,621	3,973	14,864,458	5,294	33.2%	19,125,780	28.7%
26	65,541	372	1,115,203	0	-100.0%	0	-100.0%
30	62,038	523	798,566	683	30.6%	998,014	25.0%
M/M	166,422	19,116	4,231,745	25,097	31.3%	5,302,995	25.3%
Total	4,470,398	426,727	717,464,534	329,286	-22.8%	562,099,849	-21.7%

% of Total Mkt. Exp. 9.5% 7.4%

	Estimated Cred Credit Utilizatio		678,766,758 94.6%	Estimated Cred Credit Utilizatio		529,065,469 94.1%	
Original I	Ranges:			Relative Rang			
<u>Group</u>	<u>Lower</u>	<u>Upper</u>	<u>Factor</u>	<u>Group</u>	Lower	<u>Upper</u>	<u>Factor</u>
0	0	0.05	0	0	0	0.035	0
1	0.05	0.08	1	1	0.035	0.065	1
2	0.08	0.11	1	2	0.065	0.095	1
3	0.11	0.17	1	3	0.095	0.155	1
4	0.17	0.23	1.25	4	0.155	0.215	1.25
5	0.23	0.29	1.5	5	0.215	0.275	1.5
6	0.29	0.35	1.75	6	0.275	0.335	1.75
7	0.35	0.41	2	7	0.335	0.395	2
8	0.41	0.47	2.25	8	0.395	0.455	2.25
9	0.47	1	2.5	9	0.455	1	2.5

1.38%	Current Residual	Market Rate	Using Data	Through May.	2015
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^{2.0%} Target Cession Rate From 2012 Division of Insurance Decision (Bulletin 953)

Relative Range Calculation:

- 1. Divide the actual overall residual market share by the target (1.38 / 2.0) = .69
- 2. Round the result from 1. above to the nearest 10th = .7
- 3. Multiply the result from 2. above by the original average residual market share threshold $(.7 \times .05) = 3.5$
- 4. Use the same increment for bands as original methodology: .03 for first two bands, .06 for all remaining bands

^{5.0%} Residual Market rate Threshold Point, Credits were given for 5.0% and above (2012-2015)

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 - Relative Ranges

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	178,846	0	0	715	0.0%	1,332,259	0.0%
2	240,517	1,071	2,136,317	1,071	0.0%	2,136,317	0.0%
3	516,709	2,389	4,958,166	2,389	0.0%	4,958,166	0.0%
4	328,044	1,323	3,128,040	0	-100.0%	0	-100.0%
5	503,612	2,979	6,640,413	2,979	0.0%	6,640,413	0.0%
6	337,265	1,686	4,381,658	12,091	617.0%	18,961,893	332.8%
7	346,203	13,242	21,955,577	13,242	0.0%	21,955,577	0.0%
8	198,142	6,783	11,898,661	6,783	0.0%	11,898,661	0.0%
9	197,535	8,959	16,771,593	8,248	-7.9%	15,432,923	-8.0%
10	95,365	4,425	8,333,668	4,425	0.0%	8,333,668	0.0%
11	72,051	622	2,067,094	2,417	288.5%	5,708,737	176.2%
12	193,543	7,214	14,969,401	13,522	87.4%	17,914,144	19.7%
13	209,132	17,789	26,280,639	17,789	0.0%	26,280,639	0.0%
14	71,888	6,624	14,066,453	6,624	0.0%	14,066,453	0.0%
15	25,481	2,572	5,523,585	2,867	11.5%	5,688,474	3.0%
16	13,716	12,349	19,409,286	12,349	0.0%	19,409,286	0.0%
17	17,221	394	935,879	394	0.0%	856,049	-8.5%
18	16,024	13,819	20,313,141	13,819	0.0%	20,313,141	0.0%
19	15,535	507	1,369,708	882	74.0%	1,671,462	22.0%
20	17,850	14,698	22,950,553	15,231	3.6%	23,368,735	1.8%
21	47,126	45,990	92,918,729	45,990	0.0%	91,571,764	-1.4%
22	15,070	15,070	32,426,892	14,810	-1.7%	31,059,375	-4.2%
23	44,947	2,840	7,306,664	2,866	0.9%	6,486,093	-11.2%
24	24,678	1,240	2,582,239	1,943	56.7%	3,802,615	47.3%
25	16,489	501	1,420,658	455	-9.2%	1,274,253	-10.3%
26	21,310	1,627	4,331,949	1,576	-3.1%	3,137,029	-27.6%
27	410,054	1,599	2,794,681	1,599	0.0%	2,794,681	0.0%
40	20,429	16,563	22,445,108	16,623	0.4%	22,306,107	-0.6%
41	58,493	50,381	59,922,425	6,248	-87.6%	10,851,958	-81.9%
42	73,196	59,487	96,870,257	60,347	1.4%	98,704,558	1.9%
43	47,219	39,711	65,489,722	4,743	-88.1%	10,561,932	-83.9%
44	33,392	29,611	38,826,123	29,229	-1.3%	37,139,457	-4.3%
45	50,680	42,661	82,039,256	5,020	-88.2%	15,483,030	-81.1%
99 Total	12,637 4,470,398	0 426,727	0 717,464,534	0 329,286	0.0% -22.8%	0 562,099,849	0.0% -21.7%
	4,470,390	420,727	7 17,404,554	329,200	-ZZ.O 70	J02,099,049	-Z1.1 70

% of Total Mkt. Exp. 9.5% 7.4%

Original F	Ranges:						
Group	Lower	<u>Upper</u>	<u>Factor</u>	<u>Group</u>	Lower	<u>Upper</u>	<u>Factor</u>
0	0	0.05	0	0	0	0.035	0
1	0.05	0.08	1	1	0.035	0.065	1
2	0.08	0.11	1	2	0.065	0.095	1
3	0.11	0.17	1	3	0.095	0.155	1
4	0.17	0.23	1.25	4	0.155	0.215	1.25
5	0.23	0.29	1.5	5	0.215	0.275	1.5
6	0.29	0.35	1.75	6	0.275	0.335	1.75
7	0.35	0.41	2	7	0.335	0.395	2
8	0.41	0.47	2.25	8	0.395	0.455	2.25
9	0.47	1	2.5	9	0.455	1	2.5

Commonwealth Automobile Reinsurers - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 10 Relative Range Methodology

	Dooidu	al Market	Choro	Indicator	d Mid Char	ro Dongo	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	Aug-14	May-15	2014	d Mkt Shar 2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	1.17%	0.90%	0.73%	0	0	0	0	-	Orcaits	Onlange -	<u>Стоир</u> 0	0.00	
2	1.19%	0.92%	0.79%	0	0	0	0	_	_	<u>-</u>	1	1.00	
3	1.45%	1.06%	0.83%	0	0	0	0	_	_	<u>-</u>	2	1.00	
4	1.27%	0.98%	0.83%	0	0	0	0	_	_	_	3	1.00	
5	1.91%	1.44%	1.12%	0	0	0	0	_	_	_	4	1.25	
6	1.91%	1.46%	1.20%	0	0	0	0	_	_	_	5	1.50	
7	2.46%	1.81%	1.42%	0	0	0	0	-	-	_	6	1.75	
8	2.25%	1.64%	1.34%	0	0	0	0	-	-	-	7	2.00	
9	2.87%	2.03%	1.53%	0	0	0	0	-	-	-	8	2.25	
10	2.92%	2.18%	1.78%	0	0	0	0	-	-	-	9	2.50	
11	1.99%	1.51%	1.33%	0	0	0	0	-	-	-			
12	2.50%	1.93%	1.62%	0	0	0	0	-	-	-			
13	4.32%	3.11%	2.52%	1	0	0	0	-	-	-			
14	3.84%	2.79%	2.28%	1	0	0	0	-	-	-			
15	4.35%	2.67%	2.19%	1	0	0	0	-	-	-			
16	6.39%	4.97%	3.50%	1	1	1	1	1.00	1.00	-			
17	2.20%	1.81%	1.64%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.80%	1	1	1	1	1.00	1.00	-			
19	3.68%	3.20%	2.68%	1	0	0	0	-	-	-			
20	6.23%	4.87%	4.59%	1	1	1	1	1.00	1.00	-	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.08%	2	1	1	1	1.00	1.00	-			
22	9.85%	6.82%	5.90%	3	2	1	2	1.00	1.00	-	2016	268,921,714	177,060
23	3.63%	2.49%	1.85%	1	0	0	0	-	-	-			
24	2.15%	1.75%	1.41%	0	0	0	0	-	-	-	2015	437,702,290	293,247
25	2.15%	1.50%	1.24%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.06%	1	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.93%	0.77%	0.64%	0	0	0	0	-	-	-			
40	7.63%	4.08%	2.87%	2	1	0	1	1.00	1.00	-		(168,780,576)	(116,187)
41	5.88%	3.11%	2.57%	1	0	0	0	-	1.00	(1.00)			
42	6.48%	4.37%	2.88%	1	1	0	1	1.00	1.00	-	<u>P</u>	ercent Change:	Percent Change:
43	5.28%	3.09%	2.51%	1	0	0	0	-	1.00	(1.00)			
44	7.95%	4.99%	4.33%	2	1	1	1	1.00	1.00	-		-38.6%	-39.6%
45	6.64%	3.49%	2.91%	2	0	0	0	-	1.00	(1.00)			
99	0.70%	0.56%	0.64%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.43%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 15 Relative Range Methodology

Residual

Keen

			01	T	1.541.4.01		0-111	0040	0045		Residual	Кеер	
T		al Market			Mkt Shar		Selected	2016	2015	01	Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	Group	<u>Credits</u>	
1	0.32%	0.27%	0.30%	0	0	0	0	-	-	-	0	0.00	
2	0.29%	0.29%	0.28%	0	0	0	0	-	-	-	1	1.00	
3	0.38%	0.29%	0.26%	0	0	0	0	-	-	-	2	1.00	
4	0.30%	0.29%	0.27%	0	0	0	0	-	-	-	3	1.00	
5	0.44%	0.38%	0.31%	0	0	0	0	-	-	-	4	1.25	
6	0.58%	0.53%	0.43%	0	0	0	0	-	-	-	5	1.50	
7	0.56%	0.46%	0.43%	0	0	0	0	-	-	-	6	1.75	
8	0.78%	0.67%	0.63%	0	0	0	0	-	-	-	7	2.00	
9	0.78%	0.63%	0.52%	0	0	0	0	-	-	-	8	2.25	
10	0.71%	0.62%	0.52%	0	0	0	0	-	-	-	9	2.50	
11	1.12%	0.88%	0.77%	0	0	0	0	-	-	-			
12	0.88%	0.86%	0.75%	0	0	0	0	-	-	-			
13	1.46%	1.17%	0.94%	0	0	0	0	-	-	-			
14	1.65%	1.32%	1.18%	0	0	0	0	-	-	-			
15 16	1.42%	1.43%	1.25%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.14%	0	0	0	0	-	-	-			
17	0.79%	0.76%	0.89%	0	0	0	0	-	-	-			
18	2.45%	2.07%	2.02%	0	0	0	0	-	-	-			
19	2.18%	2.18%	1.81%	0	0	0	0	-	-	-	A !! - l l	- O	One did Elimible Erre
20	2.70%	2.39%	2.41%	0	0 1	0	0 1	-	4.00	-	Availabi	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.25%	1	•	1 1	•	1.00	1.00	-	2016	10 001 110	0.004
22	8.10% 2.82%	6.62%	5.91% 1.48%	2	2	' - '	2	1.00	1.00	-	2016	10,891,112	8,091
23		1.98%		0	0	0	0	-	-	-	0045	40 004 440	0.004
24	2.99%	2.98%	2.44%	0	0	0	0	-	-	-	2015	10,891,112	8,091
25	1.73%	1.28%	1.20%	0	0	0	0	-	-	-		Difference:	Difference
26 27	1.99%	1.56%	1.38%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
40	0.26% 2.44%	0.24% 1.80%	0.20%	0	0 0	0	0	-	-	-			
			1.20%	0	0	0	0 0	-	-	-		-	-
41	1.68%	1.28%	1.08%	0		0	-	-	-	-	Do	roont Change:	Darsont Change
42 43	3.10% 1.59%	3.10% 1.06%	2.41% 0.96%	0 0	0 0	0 0	0 0	-	-	-	<u> Pe</u>	rcent Change:	Percent Change:
							-	-	-	-		0.00/	0.00/
44 45	3.16% 2.38%	2.11% 1.83%	1.91%	0	0	0	0 0	-	-	-		0.0%	0.0%
45 99		0.26%	1.51% 0.13%	0 0	0 0	0 0	0	-	-	-			
	0.36%			U	U	U	U	-	-	-			
Tot	0.73%	0.62%	0.54%										

^{*}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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 17 Relative Range Methodology

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	re Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	<u>Aug-14</u>	May-15	<u>2014</u>	<u>2015</u>	2016	Range*	Credits	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	3.25%	2.47%	2.09%	0	0	0	0	-	-	-	0	0.00	
2	2.96%	2.03%	1.94%	0	0	0	0	-	-	-	1	1.00	
3	4.05%	2.61%	2.21%	1	0	0	0	-	-	-	2	1.00	
4	3.21%	2.63%	2.20%	0	0	0	0	-	-	-	3	1.00	
5	4.26%	3.06%	2.54%	1	0	0	0	-	-	-	4	1.25	
6	4.40%	3.57%	3.16%	1	1	0	1	1.00	-	1.00	5	1.50	
7	5.00%	3.57%	2.85%	1	1	0	1	1.00	1.00	-	6	1.75	
8	5.01%	3.58%	3.43%	1	1	0	1	1.00	1.00	-	7	2.00	
9	5.05%	3.56%	2.83%	1	1	0	1	1.00	1.00	-	8	2.25	
10	5.55%	3.98%	3.35%	1	1	0	1	1.00	1.00	-	9	2.50	
11	4.60%	3.99%	2.71%	1	1	0	1	1.00	-	1.00			
12	5.90%	4.74%	4.01%	1	1	1	1	1.00	1.00	-			
13	7.34%	5.15%	4.50%	2	1	1	1	1.00	1.00	-			
14	8.44%	5.78%	5.38%	2	1	1	1	1.00	1.00	-			
15	8.90%	6.45%	4.43%	2	1	1	1	1.00	1.00	-			
16	14.02%	9.76%	6.38%	3	3	1	3	1.00	1.00	-			
17	6.51%	5.57%	3.71%	2	1	1	1	1.00	1.00	-			
18	10.10%	7.78%	6.18%	3	2	1	2	1.00	1.00	-			
19	11.66%	7.72%	6.94%	3	2	2	2	1.00	1.00	-			
20	12.72%	10.84%	10.03%	3	3	3	3	1.00	1.00	-	<u>Availal</u>	ole Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	10.21%	3	3	3	3	1.00	1.00	-			
22	14.23%	10.75%	9.70%	3	3	3	3	1.00	1.00	-	2016	135,542,517	74,161
23	8.79%	6.11%	5.46%	2	1	1	1	1.00	1.00	-			
24	4.64%	3.61%	2.90%	1	1	0	1	1.00	-	1.00	2015	115,233,840	60,950
25	6.65%	4.56%	3.40%	2	1	0	1	1.00	1.00	-			
26	8.63%	5.64%	4.78%	2	1	1	1	1.00	1.00	-		Difference:	<u>Difference:</u>
27	2.51%	2.07%	1.52%	0	0	0	0	-	-	-			
40	12.55%	7.28%	5.44%	3	2	1	2	1.00	1.00	-		20,308,677	13,211
41	12.06%	6.14%	4.77%	3	1	1	1	1.00	1.00	-			
42	9.55%	4.71%	3.63%	3	1	1	1	1.00	1.00	-	<u> </u>	Percent Change:	Percent Change:
43	8.81%	5.59%	5.43%	2	1	1	1	1.00	1.00	-			
44	11.57%	6.62%	6.20%	3	2	1	2	1.00	1.00	-		17.6%	21.7%
45	12.13%	6.63%	6.56%	3	2	2	2	1.00	1.00	-			
99	0.83%	0.39%	0.43%	0	0	0	0	-	-	-			
Tot	5.17%	3.64%	3.09%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 18 Relative Range Methodology

	Docide	al Markat	Chora	Indicator	d Mid Char	o Dongo	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	al Market Aug-14	May-15	2014	d Mkt Shar 2015	2016	Range*	Credits	Credits	Change	Group	Credits	
1	1.12%	0.63%	0.61%	0	0	0	0	-	Orcaits	Onlange -	<u>Стоар</u> 0	0.00	
2	0.84%	0.55%	0.44%	0	0	0	0	_	_	_	1	1.00	
3	1.34%	0.92%	0.77%	0	0	0	0	_	_	_	2	1.00	
4	1.14%	0.86%	0.53%	0	0	0	0	_	_	_	3	1.00	
5	1.75%	1.26%	1.01%	0	0	0	0	_	_	_	4	1.25	
6	1.10%	1.13%	0.71%	0	0	0	0	_	_	_	5	1.50	
7	1.98%	1.31%	0.84%	0	0	0	0	-	_	_	6	1.75	
8	1.08%	0.94%	1.05%	0	0	0	0	-	-	-	7	2.00	
9	2.17%	1.57%	1.02%	0	0	0	0	-	-	-	8	2.25	
10	1.83%	1.02%	1.22%	0	0	0	0	-	-	-	9	2.50	
11	1.24%	0.77%	0.84%	0	0	0	0	-	-	-			
12	2.44%	1.85%	1.41%	0	0	0	0	-	-	-			
13	2.71%	1.96%	1.89%	0	0	0	0	-	-	-			
14	3.53%	2.39%	1.77%	1	0	0	0	-	-	-			
15	4.75%	4.06%	3.02%	1	1	0	1	1.00	-	1.00			
16	1.75%	0.00%	1.75%	0	0	0	0	-	-	-			
17	2.14%	1.13%	1.38%	0	0	0	0	-	-	-			
18	5.63%	5.10%	5.99%	1	1	1	1	1.00	1.00	-			
19	3.16%	2.04%	1.16%	0	0	0	0	-	-	-			
20	3.59%	4.15%	2.44%	1	1	0	1	1.00	-	1.00	Available	e Credit Prem:	Credit Eligible Exp:
21	4.86%	3.05%	3.08%	1	0	0	0	-	-	-			
22	9.76%	4.32%	3.49%	3	1	0	1	1.00	1.00	-	2016	1,483,660	837
23	2.12%	1.27%	1.88%	0	0	0	0	-	-	-			
24	3.56%	0.43%	1.85%	1	0	0	0	-	-	-	2015	1,939,846	1,192
25	0.15%	1.68%	0.83%	0	0	0	0	-	-	-			
26	4.20%	3.21%	2.12%	1	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.89%	0.72%	0.48%	0	0	0	0	-	-	-			
40	5.77%	2.78%	1.26%	1	0	0	0	-	1.00	(1.00)		(456,186)	(355)
41	7.29%	1.64%	1.51%	2	0	0	0	-	1.00	(1.00)			
42	2.50%	1.69%	1.29%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	3.03%	3.04%	2.07%	0	0	0	0	-	-	-			
44	1.80%	2.70%	1.73%	0	0	0	0	-	-	-		-23.5%	-29.8%
45	4.86%	3.11%	2.34%	1	0	0	0	-	-	-			
99	1.96%	0.51%	0.66%	0	0	0	0	-	-	-			
Tot	1.72%	1.21%	0.97%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 20 Relative Range Methodology

	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	2015	2016	Range*	Credits	Credits	<u>Change</u>	Group	<u>Credits</u>	
1	4.03%	3.98%	5.35%	1	1	1	1	1.00	-	1.00	0	0.00	
2	5.82%	4.31%	4.05%	1	1	1	1	1.00	1.00	-	1	1.00	
3	7.69%	3.82%	4.45%	2	1	1	1	1.00	1.00	-	2	1.00	
4	5.70%	3.32%	2.72%	1	0	0	0	-	1.00	(1.00)	3	1.00	
5	7.89%	6.27%	5.24%	2	1	1	1	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.80%	2	1	1	1	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.16%	2	1	1	1	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.47%	3	2	1	2	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	5.98%	2	2	1	2	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	6.24%	3	2	1	2	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	4.73%	3	1	1	1	1.00	1.00	-			
12	12.77%	7.55%	6.58%	3	2	2	2	1.00	1.00	-			
13	11.99%	8.85%	8.43%	3	2	2	2	1.00	1.00	-			
14	15.28%	13.10%	11.05%	3	3	3	3	1.00	1.00	-			
15	21.15%	13.01%	13.27%	4	3	3	3	1.00	1.25	(0.25)			
16	26.59%	25.13%	19.78%	5	5	4	5	1.50	1.50	-			
17	19.61%	9.89%	10.30%	4	3	3	3	1.00	1.25	(0.25)			
18	20.86%	22.51%	13.75%	4	5	3	4	1.25	1.25	-			
19	15.29%	16.67%	15.09%	3	4	3	3	1.00	1.00	-			
20	24.66%	18.55%	21.63%	5	4	5	5	1.50	1.50	-	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	32.61%	23.95%	24.05%	6	5	5	5	1.50	1.75	(0.25)			
22	33.75%	22.17%	19.18%	7	5	4	5	1.50	1.75	(0.25)	2016	107,306,845	32,840
23	18.35%	10.83%	8.04%	4	3	2	3	1.00	1.25	(0.25)			
24	8.54%	5.71%	5.75%	2	1	1	1	1.00	1.00	-	2015	116,472,201	33,449
25	13.28%	13.16%	13.61%	3	3	3	3	1.00	1.00	-			
26	23.56%	13.76%	13.82%	5	3	3	3	1.00	1.50	(0.50)		Difference:	<u>Difference:</u>
27	5.26%	3.54%	2.29%	1	1	0	1	1.00	1.00	-			
40	24.85%	11.38%	12.36%	5	3	3	3	1.00	1.50	(0.50)		(9,165,356)	(609)
41	14.09%	9.23%	9.19%	3	2	2	2	1.00	1.00	-			
42	18.64%	12.38%	10.10%	4	3	3	3	1.00	1.25	(0.25)	<u>Pe</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	13.66%	4	3	3	3	1.00	1.25	(0.25)			
44	24.27%	16.44%	14.98%	5	4	3	4	1.25	1.50	(0.25)		-7.9%	-1.8%
45	20.07%	18.11%	15.95%	4	4	4	4	1.25	1.25	-			
99	2.48%	3.08%	0.21%	0	0	0	0	-	-	-			
Tot	12.86%	8.91%	8.18%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 21 Relative Range Methodology

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	Aug-14	May-15	<u>2014</u>	<u>2015</u>	2016	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.87%	1.52%	0.45%	0	0	0	0	-	-	-	0	0.00	
2	2.29%	1.29%	0.83%	0	0	0	0	-	-	-	1	1.00	
3	2.90%	1.82%	1.51%	0	0	0	0	-	-	-	2	1.00	
4	2.49%	2.11%	0.76%	0	0	0	0	-	-	-	3	1.00	
5	4.05%	2.57%	2.02%	1	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	1.82%	1	0	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.35%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	2.07%	1	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	2.12%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	9.63%	4.03%	4.10%	3	1	1	1	1.00	1.00	-	9	2.50	
11	3.08%	2.33%	1.49%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.32%	1	1	0	1	1.00	-	1.00			
13	10.29%	3.92%	4.73%	3	1	1	1	1.00	1.00	-			
14	5.89%	4.05%	3.82%	1	1	1	1	1.00	1.00	-			
15	10.82%	4.90%	2.14%	3	1	0	1	1.00	1.00	-			
16	13.13%	13.16%	6.89%	3	3	2	3	1.00	1.00	-			
17	5.11%	0.00%	0.68%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.94%	1	1	1	1	1.00	1.00	-			
19	5.62%	4.17%	0.72%	1	1	0	1	1.00	1.00	-			
20	11.09%	6.02%	4.59%	3	1	1	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	4.13%	3	1	1	1	1.00	1.00	-			
22	9.88%	2.86%	2.75%	3	0	0	0	-	1.00	(1.00)	2016	12,527,213	5,223
23	4.67%	4.48%	2.39%	1	1	0	1	1.00	-	1.00			
24	6.40%	2.76%	1.19%	1	0	0	0	-	1.00	(1.00)	2015	14,215,271	5,813
25	2.60%	0.00%	1.80%	0	0	0	0	-	-	-			
26	6.32%	1.47%	1.48%	1	0	0	0	-	1.00	(1.00)		Difference:	<u>Difference:</u>
27	2.55%	1.88%	1.39%	0	0	0	0	-	-	-			
40	13.69%	7.00%	5.37%	3	2	1	2	1.00	1.00	-		(1,688,058)	(590)
41	12.53%	5.33%	4.95%	3	1	1	1	1.00	1.00	-			
42	6.17%	3.86%	1.25%	1	1	0	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	2.67%	2	1	0	1	1.00	1.00	-		-	-
44	8.43%	3.35%	3.47%	2	0	0	0	-	1.00	(1.00)		-11.9%	-10.2%
45	10.32%	2.31%	3.00%	3	0	0	0	-	1.00	(1.00)			
99	0.38%	0.00%	-6.54%	0	0	0	0	-	-	-			
Tot	5.15%	2.98%	2.33%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 25 Relative Range Methodology

											Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.88%	1.37%	1.40%	0	0	0	0	-	-	-	0	0.00	
2	1.61%	1.23%	1.30%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.26%	0.89%	0	0	0	0	-	-	-	2	1.00	
4	1.75%	1.27%	1.18%	0	0	0	0	-	-	-	3	1.00	
5	2.37%	2.09%	1.69%	0	0	0	0	-	-	-	4	1.25	
6	2.57%	1.99%	1.67%	0	0	0	0	-	-	-	5	1.50	
7	2.53%	1.92%	1.53%	0	0	0	0	-	-	-	6	1.75	
8	3.30%	2.48%	2.47%	0	0	0	0	-	-	-	7	2.00	
9	2.62%	2.15%	2.40%	0	0	0	0	-	-	-	8	2.25	
10	3.19%	3.31%	2.48%	0	0	0	0	-	-	-	9	2.50	
11	2.54%	1.31%	1.98%	0	0	0	0	-	-	-			
12	4.04%	3.41%	3.27%	1	0	0	0	-	-	-			
13	3.75%	3.40%	3.27%	1	0	0	0	-	-	-			
14	6.81%	5.30%	2.99%	2	1	0	1	1.00	1.00	-			
15	11.71%	4.46%	5.23%	3	1	1	1	1.00	1.00	-			
16	17.01%	4.90%	3.66%	4	1	1	1	1.00	1.00	-			
17	3.23%	3.64%	1.05%	0	1	0	0	-	-	-			
18	9.96%	5.00%	7.21%	3	1	2	2	1.00	1.00	-			
19	4.46%	11.43%	8.06%	1	3	2	2	1.00	-	1.00			
20	8.81%	5.74%	5.27%	2	1	1	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.41%	2	1	1	1	1.00	1.00	-			
22	10.69%	8.39%	3.58%	3	2	1	2	1.00	1.00	-	2016	19,125,780	5,294
23	6.30%	3.39%	1.52%	1	0	0	0	-	1.00	(1.00)			
24	5.30%	2.03%	1.15%	1	0	0	0	-	1.00	(1.00)	2015	14,864,458	3,973
25	8.64%	0.00%	2.18%	2	0	0	0	-	1.00	(1.00)			
26	9.20%	2.76%	2.08%	2	0	0	0	-	1.00	(1.00)		Difference:	<u>Difference:</u>
27	1.33%	0.88%	0.70%	0	0	0	0	-	-	-			
40	3.61%	3.64%	2.86%	1	1	0	1	1.00	-	1.00		4,261,321	1,321
41	4.94%	4.21%	4.76%	1	1	1	1	1.00	-	1.00			
42	4.47%	4.14%	2.87%	1	1	0	1	1.00	-	1.00	<u>Pe</u>	rcent Change:	Percent Change:
43	7.06%	6.52%	4.05%	2	2	1	2	1.00	1.00	-			
44	10.75%	4.27%	4.46%	3	1	1	1	1.00	1.00	-		28.7%	33.2%
45	7.15%	5.62%	6.23%	2	1	1	1	1.00	1.00	-			
99	0.52%	0.40%	0.05%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.73%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 26 Relative Range Methodology

	Docidu	al Markat	Choro	Indicator	Mat Char	o Dongo	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	al Market Aug-14	May-15	2014	Mkt Shar 2015	2016	Range*	Credits	Credits	Change	Group	Credits	
1	0.85%	0.56%	0.42%	0	0	0	0	-	Orcaits	Onlange -	<u>Стоар</u> 0	0.00	
2	0.52%	0.36%	0.41%	0	0	0	0	_	_	_	1	1.00	
3	0.84%	0.58%	0.48%	0	0	0	0	_	_	_	2	1.00	
4	0.67%	0.55%	0.48%	0	0	0	0	_	_	_	3	1.00	
5	0.93%	0.92%	0.57%	0	0	0	0	_	_	-	4	1.25	
6	0.81%	0.67%	0.71%	0	0	0	0	-	_	-	5	1.50	
7	0.92%	0.68%	0.47%	0	0	0	0	-	-	-	6	1.75	
8	0.95%	0.89%	0.59%	0	0	0	0	_	-	-	7	2.00	
9	0.93%	0.58%	0.52%	0	0	0	0	-	-	-	8	2.25	
10	1.56%	1.02%	1.16%	0	0	0	0	-	-	-	9	2.50	
11	0.67%	0.68%	0.74%	0	0	0	0	-	-	-			
12	1.75%	1.20%	0.91%	0	0	0	0	-	-	-			
13	2.28%	1.43%	1.17%	0	0	0	0	-	-	-			
14	1.87%	0.47%	0.64%	0	0	0	0	-	-	-			
15	3.62%	1.93%	0.52%	1	0	0	0	-	-	-			
16	0.76%	0.00%	2.11%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.36%	0	0	0	0	-	-	-			
18	3.56%	3.30%	2.01%	1	0	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	0.06%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	1.76%	0.91%	0.99%	0	0	0	0	-	-	-			
22	5.59%	0.00%	1.49%	1	0	0	0	-	1.00	(1.00)	2016	-	-
23	0.91%	1.55%	0.54%	0	0	0	0	-	-	-			
24	0.85%	0.96%	0.99%	0	0	0	0	-	-	-	2015	1,115,203	372
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	1.87%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.41%	0.35%	0.30%	0	0	0	0	-	-	-			
40	0.06%	1.47%	0.78%	0	0	0	0	-	-	-		(1,115,203)	(372)
41	3.25%	1.54%	1.79%	0	0	0	0	-	-	-			
42	1.58%	0.73%	0.99%	0	0	0	0	-	-	-	<u>Pe</u>	ercent Change:	Percent Change:
43	2.42%	1.10%	0.97%	0	0	0	0	-	-	-			
44	1.88%	2.14%	2.71%	0	0	0	0	-	-	-		-100.0%	-100.0%
45	5.87%	1.57%	1.81%	1	0	0	0	-	1.00	(1.00)			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.57%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 30 Relative Range Methodology

	Posidu	al Market	Shara	Indicator	d Mkt Shar	o Pango	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	2014	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	0.99%	0.64%	0.30%	0	0	0	0	-	-	-	<u>0,045</u> 0	0.00	
2	0.86%	0.66%	0.64%	0	0	0	0	_	_	_	1	1.00	
3	0.87%	0.52%	0.57%	0	0	0	0	_	-	_	2	1.00	
4	0.81%	0.51%	0.50%	0	0	0	0	-	-	-	3	1.00	
5	0.97%	0.91%	0.85%	0	0	0	0	-	-	-	4	1.25	
6	1.01%	0.85%	0.90%	0	0	0	0	-	-	-	5	1.50	
7	1.54%	1.13%	0.86%	0	0	0	0	-	-	-	6	1.75	
8	0.93%	1.23%	1.07%	0	0	0	0	-	-	-	7	2.00	
9	1.27%	0.94%	0.62%	0	0	0	0	-	-	-	8	2.25	
10	2.29%	1.49%	1.75%	0	0	0	0	-	-	-	9	2.50	
11	0.97%	1.74%	1.39%	0	0	0	0	-	-	-			
12	1.86%	1.29%	1.42%	0	0	0	0	-	-	-			
13	2.05%	1.29%	1.44%	0	0	0	0	-	-	-			
14	3.24%	3.44%	3.39%	0	0	0	0	-	-	-			
15	5.81%	6.90%	2.62%	1	2	0	1	1.00	1.00	-			
16	7.84%	4.32%	2.46%	2	1	0	1	1.00	1.00	-			
17	1.39%	1.36%	1.85%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	2.08%	0	0	0	0	-	-	-			
20	1.68%	0.00%	0.72%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	2.47%	2.39%	2.97%	0	0	0	0	-	-	-			
22	8.30%	1.27%	2.44%	2	0	0	0	-	1.00	(1.00)	2016	998,014	683
23	0.98%	1.55%	1.14%	0	0	0	0	-	-	-			
24	1.21%	1.06%	2.06%	0	0	0	0	-	-	-	2015	798,566	523
25	1.31%	0.80%	0.69%	0	0	0	0	-	-	-			
26	4.15%	4.92%	3.90%	1	1	1	1	1.00	-	1.00		Difference:	<u>Difference:</u>
27	0.62%	0.61%	0.41%	0	0	0	0	-	-	-			
40	1.29%	0.97%	0.56%	0	0	0	0	-	-	-		199,448	160
41	1.68%	1.20%	1.22%	0	0	0	0	-	-	-			
42	2.10%	1.35%	1.47%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.31%	1.26%	1.64%	0	0	0	0	-	-	-			
44	4.60%	2.87%	2.40%	1	0	0	0	-	-	-		25.0%	30.6%
45	2.31%	1.05%	0.66%	0	0	0	0	-	-	-			
99	0.00%	2.41%	0.65%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.87%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class MM Relative Range Methodology

	Danish	al Mauliat	Ch aua	la dia ata	d Mad Ob a	n Danas	Calaatad	2016	2045		Residual Mark Shr	Keep	
<u>Terr</u>	Aug-13	al Market Aug-14	May-15	2014	d Mkt Shar 2015	2016	Selected Range*	2016 Credits	2015 Credits	Change	Group	Out <u>Credits</u>	
1	1.51%	1.25%	1.04%	0	0	0	0	-	<u>Credits</u>	<u>Change</u>	<u>отоар</u> 0	0.00	
2	1.50%	1.38%	1.23%	0	0	0	0	_	_	_	1	1.00	
3	1.84%	1.63%	1.42%	0	0	0	0	_	_	_	2	1.00	
4	1.57%	1.52%	1.23%	0	0	0	0	_	_	_	3	1.00	
5	2.18%	1.81%	1.63%	0	0	0	0	_	_	-	4	1.25	
6	2.36%	1.97%	1.84%	0	0	0	0	_	_	_	5	1.50	
7	2.92%	2.44%	1.99%	0	0	0	0	_	_	_	6	1.75	
8	2.78%	2.60%	2.06%	0	0	0	0	_	-	-	7	2.00	
9	2.91%	2.44%	2.09%	0	0	0	0	_	-	-	8	2.25	
10	4.43%	2.95%	2.58%	1	0	0	0	-	-	-	9	2.50	
11	3.90%	2.96%	1.98%	1	0	0	0	-	-	-			
12	4.32%	3.68%	3.16%	1	1	0	1	1.00	-	1.00			
13	5.08%	4.33%	3.83%	1	1	1	1	1.00	1.00	-			
14	5.67%	4.70%	3.63%	1	1	1	1	1.00	1.00	-			
15	7.59%	7.08%	5.25%	2	2	1	2	1.00	1.00	-			
16	9.92%	8.70%	7.53%	3	2	2	2	1.00	1.00	-			
17	3.40%	3.38%	4.02%	0	0	1	0	-	-	-			
18	5.43%	5.25%	4.21%	1	1	1	1	1.00	1.00	-			
19	4.14%	3.33%	4.82%	1	0	1	1	1.00	-	1.00			
20	4.03%	4.17%	5.33%	1	1	1	1	1.00	-	1.00	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	7.34%	3	2	2	2	1.00	1.00	-			-
22	10.99%	6.03%	3.14%	3	1	0	1	1.00	1.00	-	2016	5,302,995	25,097
23	6.85%	4.79%	4.19%	2	1	1	1	1.00	1.00	-			
24	5.22%	3.74%	1.74%	1	1	0	1	1.00	1.00	-	2015	4,231,745	19,116
25	3.76%	2.63%	2.34%	1	0	0	0	-	-	-			
26	8.28%	7.69%	4.50%	2	2	1	2	1.00	1.00	-		Difference:	<u>Difference:</u>
27	1.26%	1.21%	0.95%	0	0	0	0	-	-	-			
40	8.56%	6.78%	6.69%	2	2	2	2	1.00	1.00	-		1,071,249	5,981
41	5.70%	3.98%	3.52%	1	1	1	1	1.00	1.00	-			
42	8.14%	6.17%	5.10%	2	1	1	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	5.84%	4.22%	4.22%	1	1	1	1	1.00	1.00	-			
44	7.90%	7.20%	6.69%	2	2	2	2	1.00	1.00	-		25.3%	31.3%
45	7.16%	5.59%	4.77%	2	1	1	1	1.00	1.00	-			
99	1.42%	0.43%	0.82%	0	0	0	0	-	-	-			
Tot	2.66%	2.26%	1.93%										

- 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.

2016 Proposed Credit Factors Relative Range Methodology - Data Through May, 2015

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

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep		
Mark Shr	Out		
Group	Credits	Lower	<u>Upper</u>
0	0.00	0	0.035
1	1.00	0.035	0.065
2	1.00	0.065	0.095
3	1.00	0.095	0.155
4	1.25	0.155	0.215
5	1.50	0.215	0.275
6	1.75	0.275	0.335
7	2.00	0.335	0.395
8	2.25	0.395	0.455
9	2.50	0.455	1

Commonwealth Automobile Reinsurers MAIP 3 Year Loss Ratio (CAR ID 9)

Data through March, 2015

	Rate Class	Group									
Territory	10	15	17	18	20	21	25	26	30	MC/Misc.	Total
1	75.17%	152.42%	110.97%	86.80%	126.81%	44.10%	37.42%	25.13%	85.81%	163.66%	83.16%
2	82.08%	84.63%	80.29%	30.06%	50.07%	33.46%	111.05%	8.85%	64.62%	93.76%	80.69%
3	86.46%	139.37%	86.88%	105.48%	57.50%	95.27%	84.00%	48.40%	53.25%	120.40%	87.55%
4	92.66%	92.36%	67.54%	37.56%	57.74%	92.22%	68.01%	59.31%	144.95%	103.85%	87.24%
5	84.32%	144.85%	65.25%	65.66%	63.46%	118.35%	78.42%	69.87%	115.30%	66.82%	83.03%
6	81.24%	99.67%	74.64%	97.19%	73.09%	29.28%	54.97%	79.57%	65.75%	78.65%	79.36%
7	86.43%	115.57%	66.44%	65.89%	68.65%	63.06%	67.87%	48.60%	80.05%	171.83%	84.71%
8	86.45%	97.10%	87.20%	47.67%	74.94%	59.82%	63.74%	83.42%	112.13%	80.18%	85.10%
9	83.99%	81.25%	75.94%	103.88%	97.07%	87.97%	30.32%	86.96%	34.84%	94.26%	82.05%
10	78.84%	41.04%	65.48%	25.81%	61.92%	116.58%	63.51%	170.07%	102.10%	125.56%	76.83%
11	94.06%	55.22%	70.91%	115.33%	93.45%	67.59%	46.39%	15.76%	77.42%	79.54%	87.13%
12	85.02%	81.91%	85.50%	125.45%	67.20%	56.20%	110.53%	91.45%	148.17%	95.79%	85.57%
13	83.40%	115.07%	73.24%	93.88%	68.01%	63.79%	67.35%	58.73%	46.65%	88.22%	81.99%
14	84.23%	80.92%	82.98%	60.42%	72.73%	85.80%	73.00%	11.68%	91.96%	148.41%	82.93%
15	85.37%	86.52%	51.20%	31.19%	58.93%	104.94%	42.86%	63.91%	96.69%	95.39%	78.53%
16	81.96%	45.35%	43.96%	0.00%	44.18%	40.23%	156.60%	0.00%	25.37%	116.65%	70.85%
17	80.85%	93.53%	148.97%	160.47%	28.20%	41.55%	31.47%	22.55%	157.44%	93.37%	86.14%
18	113.47%	97.52%	76.08%	54.48%	69.65%	3.62%	35.71%	48.30%	39.63%	375.36%	104.04%
19	102.18%	69.48%	61.47%	13.32%	156.82%	6.33%	55.99%	0.00%	14.73%	115.47%	97.99%
20	109.12%	206.07%	102.25%	236.25%	78.39%	54.12%	85.80%	93.24%	119.00%	72.05%	109.65%
21	90.26%	94.27%	90.25%	87.31%	86.99%	104.47%	118.33%	24.30%	41.69%	191.06%	90.90%
22	85.13%	96.66%	89.32%	118.20%	103.84%	149.58%	43.60%	346.44%	16.30%	64.11%	88.77%
23	104.50%	127.54%	39.82%	329.52%	69.66%	186.47%	57.90%	33.41%	124.19%	216.51%	98.91%
24	93.14%	110.46%	56.27%	11.42%	55.31%	85.15%	189.63%	84.14%	82.05%	261.89%	90.34%
25	70.55%	67.70%	108.59%	74.85%	96.55%	62.33%	8.03%	0.00%	0.00%	270.79%	75.28%
26	68.82%	207.86%	56.09%	140.64%	76.38%	6.07%	133.40%	37.65%	339.15%	82.75%	77.74%
27	75.93%	94.01%	92.17%	106.70%	84.37%	154.17%	61.69%	64.87%	96.34%	49.11%	78.82%
40	68.55%	104.34%	57.66%	9.23%	75.36%	20.96%	37.99%	401.38%	74.41%	80.56%	69.46%
41	68.09%	148.35%	44.75%	67.00%	57.93%	65.93%	106.51%	72.76%	10.82%	104.59%	67.54%
42	86.96%	134.01%	61.70%	66.85%	96.32%	17.84%	55.64%	208.66%	97.54%	155.28%	88.93%
43	87.26%	181.69%	48.34%	34.02%	77.42%	86.34%	101.28%	38.13%	0.00%	200.35%	86.30%
44	65.43%	92.65%	49.82%	129.30%	72.77%	49.57%	86.29%	66.25%	1.09%	157.52%	66.91%
45	109.14%	104.07%	128.08%	126.30%	144.44%	153.27%	95.53%	159.07%	86.24%	103.88%	115.18%
99	151.58%	255.30%	36.54%	549.70%	0.00%	0.00%	63.79%	0.00%	76.82%	0.00%	111.99%
Total	85.64%	107.59%	75.53%	88.00%	78.75%	77.84%	72.91%	70.60%	88.58%	113.15%	84.98%

Notes:

Residual Market Share is >= 2 and < 3 times of statewide average
Residual Market Share is >= 3 and < 4 times of statewide average
Residual Market Share is >= 4 and < 5 times of statewide average
Residual Market Share is > 5 times of statewide average
2014 Credit Eligible

- (1) Earned Premium: reflects policies effective April 2012 March 2015 valued at March, 2015
- (2) Reported Incurred Losses: reflects policies effective April 2012 March 2015 valued at March, 2015
- (3) Credit Factors: use approved 4/1/2014 credits
- (4) <u>Residual Market Share</u>: based on exposure data reflecting policies effective April 2014 March 2015 valued at March, 2015

Commonwealth Automobile Reinsurers Voluntary 3 Year Loss Ratio (CAR ID 1,8) Data through March, 2015

	Rate Class C										
Territory	10	15	17	18	20	21	25	26	30	MC/Misc.	Total
1	56.33%	69.36%	68.77%	54.83%	56.45%	271.32%	64.68%	58.55%	60.51%	31.70%	59.37%
2	56.87%	70.81%	69.85%	51.73%	58.76%	232.79%	58.48%	60.48%	62.38%	28.86%	59.72%
3	58.23%	66.45%	62.55%	60.09%	61.13%	249.31%	59.34%	66.80%	61.68%	31.25%	60.07%
4	59.45%	68.81%	59.99%	53.75%	63.61%	278.23%	61.83%	63.61%	59.03%	33.92%	61.31%
5	59.94%	66.31%	66.27%	64.99%	48.78%	288.99%	59.70%	72.36%	64.88%	34.28%	61.76%
6	58.21%	70.81%	63.00%	64.90%	54.98%	214.71%	55.93%	60.98%	61.04%	33.98%	60.34%
7	57.97%	67.54%	63.14%	54.31%	52.86%	259.22%	60.32%	76.34%	61.82%	29.15%	60.26%
8	59.56%	70.32%	60.90%	54.07%	57.77%	254.70%	63.78%	70.15%	63.58%	33.66%	62.06%
9	59.27%	64.98%	61.52%	67.25%	55.06%	282.36%	61.89%	75.40%	66.97%	28.95%	61.21%
10	59.70%	72.22%	57.61%	54.00%	66.85%	267.07%	65.08%	64.99%	55.90%	28.01%	61.87%
11	53.98%	80.76%	52.24%	58.00%	49.40%	271.19%	47.46%	58.11%	53.07%	28.98%	58.37%
12	58.78%	69.78%	57.56%	57.76%	55.87%	207.88%	60.30%	70.28%	63.27%	37.62%	61.08%
13	64.18%	75.43%	60.07%	59.24%	59.83%	272.33%	66.45%	95.96%	68.48%	29.03%	66.44%
14	64.23%	70.00%	60.98%	57.70%	65.19%	214.95%	70.71%	75.25%	59.35%	53.59%	66.45%
15	62.30%	67.40%	57.39%	52.35%	71.56%	311.44%	77.35%	101.66%	72.25%	42.73%	65.56%
16	62.93%	61.83%	55.99%	58.85%	55.40%	294.14%	60.32%	127.37%	70.57%	18.86%	64.04%
17	60.76%	76.17%	67.03%	52.59%	103.79%	157.63%	68.09%	61.38%	87.81%	22.22%	63.97%
18	65.24%	72.02%	58.24%	80.26%	101.84%	293.08%	76.48%	94.75%	65.78%	34.16%	68.60%
19	47.63%	63.87%	58.18%	86.51%	71.15%	241.58%	58.07%	76.61%	25.92%	23.61%	51.54%
20	70.53%	76.29%	59.98%	86.51%	105.37%	325.82%	73.57%	88.47%	68.62%	34.84%	74.26%
21	69.20%	71.73%	74.01%	63.29%	73.93%	330.32%	73.69%	115.77%	52.54%	44.68%	72.81%
22	69.96%	76.63%	61.96%	84.34%	72.64%	418.15%	77.31%	120.94%	30.45%	37.47%	74.32%
23	51.01%	73.57%	65.75%	54.33%	66.67%	248.35%	52.94%	77.92%	44.04%	21.20%	55.33%
24	51.40%	75.76%	49.02%	57.47%	37.59%	256.78%	60.05%	118.08%	68.93%	17.54%	54.34%
25	44.65%	60.83%	71.17%	46.39%	73.16%	327.58%	37.53%	106.54%	57.01%	22.79%	48.28%
26	53.50%	78.76%	65.84%	65.92%	57.23%	216.23%	85.88%	104.39%	53.39%	26.13%	58.12%
27	58.33%	63.45%	63.16%	60.37%	56.68%	252.74%	61.03%	67.61%	57.49%	23.89%	59.49%
40	53.99%	63.31%	51.23%	54.09%	48.91%	226.76%	69.52%	71.86%	47.90%	28.81%	56.17%
41	55.60%	63.49%	56.39%	57.71%	60.58%	198.65%	56.83%	78.23%	81.60%	26.02%	58.04%
42	61.60%	68.14%	61.34%	65.47%	70.70%	319.49%	71.02%	116.82%	54.00%	28.68%	64.92%
43	65.52%	63.11%	69.75%	57.21%	57.64%	289.62%	56.62%	86.23%	70.35%	22.93%	66.66%
44	67.36%	80.90%	59.10%	72.95%	65.30%	160.94%	65.73%	91.45%	44.18%	21.09%	68.50%
45	75.65%	73.03%	81.36%	73.33%	113.45%	316.77%	86.04%	109.17%	50.37%	26.41%	78.36%
99	73.01%	64.71%	52.83%	63.99%	25.55%	419.52%	43.65%	60.94%	54.37%	65.11%	62.88%
Total	59.59%	68.78%	62.65%	59.62%	61.10%	258.95%	61.03%	70.17%	61.16%	31.30%	61.80%

Notes:

- (1) Earned Premium: reflects policies effective April 2012 March 2015 valued at March, 2015
- (2) Reported Incurred Losses: reflects policies effective April 2012 March 2015 valued at March, 2015

Commonwealth Automobile Reinsurers Actuarial Committee Summary by Residual Market Share By Policy Effective Month - Rate Class

F					r					r				
		April - N	lay, 2014				April - N	lay, 2015		l		9	6 ∆	
Rate <u>Class</u>	Credit Eligible	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio	Rate <u>Class</u>	Credit <u>Eligible</u>	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio	Rate <u>Class</u>	Credit <u>Eligible</u>	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio
10	4.3%	1.5%	1.8%	2.9	10	3.5%	1.2%	1.4%	3.0	10	-18.6%	-22.1%	-22.5%	4.5%
15	5.6%	0.7%	0.7%	8.4	15	4.1%	0.5%	0.6%	7.6	15	-27.0%	-19.5%	-20.2%	-9.3%
17	5.1%	2.6%	3.7%	1.9	17	4.6%	2.2%	3.2%	2.1	17	-9.6%	-15.0%	-12.6%	6.7%
18	3.0%	1.1%	1.2%	2.7	18	2.5%	0.9%	0.9%	2.9	18	-14.5%	-20.1%	-25.2%	7.0%
20	10.1%	4.8%	10.1%	2.1	20	10.3%	0.0%	10.1%	0.0	20	2.1%	-100.0%	0.2%	-100.0%
21	3.8%	2.2%	3.2%	1.8	21	3.6%	1.7%	2.4%	2.2	21	-6.5%	-23.5%	-25.6%	22.2%
25	4.8%	1.8%	2.0%	2.7	25	3.9%	1.7%	1.8%	2.3	25	-18.0%	-3.6%	-7.9%	-14.6%
26	0.0%	0.6%	0.6%	0.0	26	0.0%	0.5%	0.5%	0.0	26	0.0%	-21.2%	-21.3%	0.0%
30	5.0%	0.8%	0.9%	5.9	30	0.0%	0.8%	0.8%	0.0	30	-100.0%	-8.2%	-14.3%	-100.0%
M/M	6.6%	2.3%	2.8%	2.9	M/M	5.5%	1.9%	2.4%	2.8	M/M	-16.3%	-15.5%	-15.1%	-1.0%
Total	5.0%	1.4%	1.8%	3.5	Total	4.4%	1.1%	1.5%	3.9	Total	-12.8%	-20.4%	-19.6%	9.6%
ID 9 Exp	4,419 87,961	10,056 706,617	14,475		ID 9 Exp Tot Exp	3,595 82,077	8,190 723,044	11,785 805,120		ID 9 Exp Tot Exp	-18.6% -6.7%	-18.6% 2.3%	-18.6% 1.3%	
Tot Exp	5.0%	1.4%	794,578 1.8%		TOL EXP	62,077 4.4%	1.1%	1.5%		TOLEXP	-0.7% -12.8%	2.3% -20.4%	-19.6%	
	5.0%	1.470	1.070			4.470	1.170	1.5%			-12.0%	-20.4%	-19.0%	
[May, 2014	Rolling 12		[May, 2015	Rolling 12		[9	% ∆	
Rate Class	Credit Eligible	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio	Rate Class	Credit Eligible	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio	Rate <u>Class</u>	Credit Eligible	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio
10	4.5%	1.6%	1.9%	2.8	10	3.3%	1.2%	1.4%	2.7	10	-27.1%	-25.7%	-26.1%	-2.2%
15	5.0%	0.6%	0.7%	8.2	15	4.6%	0.5%	0.5%	9.3	15	-7.3%	-18.0%	-17.1%	13.0%
17	5.4%	2.8%	3.9%	1.9	17	4.3%	2.2%	3.1%	2.0	17	-20.9%	-21.8%	-21.4%	1.6%
18	3.0%	1.1%	1.3%	2.6	18	2.4%	0.9%	1.0%	2.7	18	-19.7%	-22.2%	-26.6%	3.1%
20	9.6%	4.8%	9.6%	2.0	20	8.2%	0.9%	8.2%	9.4	20	-14.2%	-81.6%	-14.8%	365.8%
21	4.0%	2.1%	3.3%	1.9	21	3.0%	1.5%	2.3%	2.0	21	-25.4%	-30.9%	-29.7%	8.0%
25	4.6%	1.8%	2.1%	2.6	25	4.1%	1.5%	1.7%	2.7	25	-11.0%	-13.4%	-18.9%	3.1%
26	0.6%	0.7%	0.7%	0.8	26	1.8%	0.6%	0.6%	3.1	26	187.7%	-24.1%	-23.1%	277.1%
30	2.4%	1.0%	1.0%	2.4	30	2.1%	0.9%	0.9%	2.4	30	-13.9%	-14.1%	-15.4%	0.0%
M/M	5.4%	1.9%	2.3%	2.8	M/M	3.3%	1.5%	1.7%	2.2	M/M	-38.2%	-22.7%	-26.6%	-19.9%
Total	5.0%	1.4%	1.8%	3.5	Total	3.8%	1.1%	1.4%	3.5	Total	-23.9%	-24.5%	-24.7%	0.9%
ı otal														
	23.566	57.175	80.741		ID 9 Exp	17.755	43.685	61.439		ID 9 Exp	-24.7%	-23.6%	-23.9%	
ID 9 Exp	23,566 469,659	57,175 3,956,563	80,741 4,426,222		ID 9 Exp Tot Exp	17,755 464,855	43,685 4,005,166	61,439 4,470,022		ID 9 Exp Tot Exp	-24.7% -1.0%	-23.6% 1.2%	-23.9% 1.0%	

Commonwealth Automobile Reinsurers Actuarial Committee Summary by Residual Market Share By Policy Effective Month - Territory

		April - Ma	ay, 2014			April - May, 2015				% ∆				
<u>Terr</u>	Credit Eligible	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio	<u>Terr</u>	Credit <u>Eligible</u>	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio	<u>Terr</u>	Credit Eligible	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio
1	3.5%	0.9%	0.9%	4.0	1		0.7%	0.7%		1		-17.9%	-19.0%	
2	4.8%	0.9%	0.9%	5.5	2	4.3%	0.7%	0.8%	5.8	2	-9.1%	-14.2%	-14.0%	5.9%
3	4.1%	1.1%	1.1%	3.8	3	7.0%	0.8%	0.8%	9.0	3	72.6%	-27.9%	-26.2%	139.7%
4	6.2%	0.9%	1.0%	6.7	4	2.8%	0.8%	0.8%	3.6	4	-54.6%	-15.7%	-17.0%	-46.2%
5	5.2%	1.4%	1.4%	3.8	5	6.6%	1.1%	1.1%	6.2	5	28.6%	-21.9%	-21.3%	64.7%
6	6.7%	1.5%	1.5%	4.4	6	6.9%	1.3%	1.3%	5.5	6	2.9%	-17.7%	-17.1%	25.0%
7	4.2%	1.7%	1.8%	2.5	7	3.8%	1.3%	1.4%	3.0	7	-8.9%	-25.0%	-23.7%	21.4%
8	5.0%	1.5%	1.7%	3.3	8	5.0%	1.2%	1.4%	4.0	8	-0.5%	-19.1%	-16.7%	23.2%
9	3.4%	2.0%	2.1%	1.7	9	3.6%	1.5%	1.6%	2.5	9	4.5%	-27.9%	-25.4%	45.0%
10	5.2%	2.1%	2.2%	2.5	10	4.4%	1.7%	1.9%	2.5	10	-14.5%	-15.5%	-14.9%	1.2%
11	4.6%	1.4%	1.6%	3.2	11	11.1%	1.3%	1.4%	8.5	11	143.3%	-9.6%	-11.9%	168.8%
12	5.4%	1.9%	2.1%	2.8	12	5.5%	1.5%	1.7%	3.6	12	1.0%	-22.0%	-20.0%	29.9%
13	5.4%	2.7%	3.0%	2.0	13	5.1%	2.2%	2.5%	2.3	13	-5.8%	-17.6%	-14.6%	13.9%
14	6.4%	2.8%	3.2%	2.3	14	5.3%	2.0%	2.4%	2.6	14	-17.1%	-26.6%	-23.9%	12.9%
15	4.3%	1.6%	3.8%	2.8	15	5.7%	2.5%	2.9%	2.3	15	32.7%	61.8%	-23.8%	-18.1%
16	7.4%	4.2%	7.1%	1.8	16	5.1%	3.4%	4.9%	1.5	16	-31.3%	-17.4%	-31.0%	-16.9%
17	9.0%	1.7%	1.9%	5.4	17	4.7%	1.7%	1.8%	2.8	17	-47.9%	0.7%	-6.8%	-48.2%
18	4.8%	4.0%	4.7%	1.2	18	4.5%	1.7%	4.2%	2.6	18	-6.1%	-57.0%	-11.1%	118.3%
19	8.1%	2.6%	2.9%	3.1	19	13.3%	2.1%	2.5%	6.2	19	64.6%	-17.4%	-11.5%	99.4%
20	5.3%	3.4%	5.0%	1.5	20	5.6%	2.7%	5.1%	2.1	20	6.7%	-22.7%	2.2%	38.6%
21	6.5%	2.4%	6.5%	2.7	21	6.2%	1.5%	6.1%	4.1	21	-5.1%	-37.3%	-5.9%	51.3%
22	7.6%		7.6%	0.0	22	6.3%		6.3%	0.0	22	-17.4%		-17.4%	0.0%
23	6.1%	2.7%	2.9%	2.3	23	6.8%	1.7%	2.1%	4.0	23	11.3%	-35.5%	-28.6%	72.9%
24	4.2%	1.8%	2.0%	2.4	24	3.1%	1.5%	1.7%	2.0	24	-25.6%	-13.5%	-18.6%	-14.0%
25	2.6%	1.5%	1.5%	1.8	25	5.9%	1.0%	1.1%	6.2	25	130.1%	-34.3%	-25.6%	250.0%
26	3.5%	2.3%	3.3%	1.5	26	7.1%	2.5%	2.9%	2.9	26	104.7%	8.7%	-12.6%	87.6%
27	4.7%	0.8%	0.8%	6.0	27	2.1%	0.6%	0.6%	3.5	27	-56.2%	-23.7%	-24.5%	-42.8%
40	5.1%	2.0%	4.7%	2.5	40	3.0%	1.2%	2.7%	2.5	40	-41.7%	-40.6%	-42.2%	-2.0%
41	4.2%	1.0%	3.8%	4.2	41	3.0%	1.4%	2.8%	2.2	41	-28.6%	36.4%	-27.7%	-47.6%
42	5.1%	3.0%	4.8%	1.7	42	3.2%	1.9%	3.0%	1.7	42	-36.6%	-35.2%	-37.2%	-1.8%
43	3.2%	1.4%	3.0%	2.3	43	3.4%	1.4%	3.1%	2.5	43	4.7%	-2.7%	4.2%	7.9%
44	6.3%	2.5%	5.9%	2.5	44	5.2%	2.2%	4.9%	2.4	44	-17.6%	-14.7%	-17.5%	-3.6%
45	4.4%	2.8%	4.2%	1.6	45	3.8%	2.2%	3.6%	1.7	45	-14.2%	-23.1%	-15.4%	11.5%
99	,0	0.5%	0.5%		99	0.070	0.4%	0.4%	•••	99	0	-18.9%	-18.9%	
Total	5.0%	1.4%	1.8%	3.5	Total	4.4%	1.1%	1.5%	3.9	Total	-12.8%	-20.4%	-19.6%	9.6%

Commonwealth Automobile Reinsurers Actuarial Committee Summary by Residual Market Share By Policy Effective Month - Territory

		May, 2014	Rolling 12	2	May, 2015 Rolling 12					%	% ∆			
<u>Terr</u>	Credit <u>Eligible</u>	Non-Credit Eligible	<u>Total</u>	Credit/Non- Credit Ratio	<u>Terr</u>	Credit Eligible	Non-Credit Eligible	<u>Total</u>	Credit/No n-Credit	<u>Terr</u>	Credit Eligible	Non-Credit Eligible	<u>Total</u>	Credit/No n-Credit
1	3.9%	0.9%	0.9%	4.4	1	6.3%	0.7%	0.7%	9.0	1	60.4%	-22.5%	-21.5%	106.9%
2	4.0%	0.9%	0.9%	4.5	2	4.0%	0.7%	0.8%	5.5	2	0.9%	-17.2%	-16.8%	21.9%
3	4.3%	1.1%	1.1%	4.1	3	4.5%	0.8%	0.8%	5.7	3	2.7%	-27.1%	-26.6%	40.9%
4	3.9%	1.0%	1.0%	4.1	4	2.7%	0.8%	0.8%	3.6	4	-30.2%	-20.3%	-20.4%	-12.4%
5	5.4%	1.4%	1.5%	3.8	5	4.3%	1.0%	1.1%	4.2	5	-20.2%	-26.9%	-26.8%	9.2%
6	6.6%	1.5%	1.5%	4.5	6	5.8%	1.1%	1.2%	5.1	6	-12.3%	-22.7%	-22.4%	13.3%
7	4.2%	1.7%	1.8%	2.5	7	3.2%	1.2%	1.3%	2.6	7	-23.6%	-27.5%	-27.1%	5.7%
8	4.6%	1.6%	1.7%	2.9	8	4.0%	1.2%	1.3%	3.2	8	-14.5%	-22.9%	-22.3%	10.7%
9	4.3%	1.9%	2.1%	2.2	9	3.3%	1.3%	1.4%	2.5	9	-22.4%	-30.8%	-29.9%	11.7%
10	4.7%	2.1%	2.2%	2.2	10	3.9%	1.6%	1.7%	2.5	10	-17.8%	-25.5%	-24.6%	10.3%
11	4.3%	1.5%	1.6%	2.8	11	3.2%	1.2%	1.3%	2.6	11	-25.7%	-18.5%	-19.8%	-8.9%
12	5.1%	1.9%	2.1%	2.6	12	4.3%	1.5%	1.6%	2.8	12	-14.7%	-20.9%	-21.2%	8.0%
13	5.1%	3.0%	3.2%	1.7	13	4.8%	2.2%	2.5%	2.2	13	-4.4%	-25.6%	-23.4%	27.8%
14	7.0%	2.8%	3.2%	2.5	14	5.4%	2.1%	2.4%	2.6	14	-22.4%	-25.3%	-24.7%	4.0%
15	3.6%	2.0%	3.3%	1.8	15	2.6%	1.9%	2.4%	1.3	15	-28.1%	-2.8%	-27.9%	-26.0%
16	6.2%	2.2%	5.8%	2.8	16	4.2%	2.1%	4.0%	2.0	16	-32.1%	-5.5%	-31.2%	-28.3%
17	5.7%	1.6%	1.8%	3.5	17	4.6%	1.5%	1.6%	3.1	17	-19.4%	-8.5%	-9.9%	-12.1%
18	4.6%	2.5%	4.3%	1.8	18	4.0%	2.2%	3.8%	1.9	18	-12.7%	-13.8%	-12.9%	1.1%
19	8.0%	3.2%	3.4%	2.5	19	7.2%	2.6%	2.8%	2.8	19	-9.9%	-19.4%	-19.2%	11.6%
20	5.6%	2.5%	5.2%	2.3	20	5.1%	2.3%	4.6%	2.2	20	-9.9%	-7.2%	-11.1%	-3.1%
21	6.7%	1.6%	6.6%	4.2	21	5.6%	2.1%	5.5%	2.6	21	-16.4%	35.8%	-16.8%	-38.5%
22	7.9%	1.070	7.9%	0.0	22	6.3%	2.170	6.3%	0.0	22	-20.5%	00.070	-20.5%	0.0%
23	7.3%	2.6%	2.9%	2.8	23	5.0%	1.8%	2.0%	2.8	23	-31.2%	-31.8%	-31.7%	1.1%
24	4.2%	2.1%	2.2%	2.1	24	2.9%	1.5%	1.6%	1.9	24	-31.2%	-25.9%	-26.1%	-7.3%
25	5.6%	1.6%	1.7%	3.6	25	6.5%	1.2%	1.4%	5.3	25	14.7%	-23.3%	-20.7%	49.4%
26	3.2%	1.8%	3.0%	1.7	26	2.4%	2.2%	2.3%	1.1	26	-25.3%	16.9%	-23.1%	-36.3%
27	3.9%	0.8%	0.8%	5.1	27	2.3%	0.6%	0.6%	4.1	27	-41.9%	-26.6%	-26.9%	-20.7%
40	5.2%	1.9%	4.6%	2.8	40	3.2%	1.2%	2.8%	2.8	40	-38.7%	-38.1%	-38.8%	-1.1%
41	3.9%	1.4%	3.6%	2.7	41	2.8%	1.2%	2.6%	2.4	41	-27.3%	-17.6%	-27.0%	-11.8%
42	5.3%	3.2%	4.9%	1.7	42	3.0%	2.3%	2.9%	1.3	42	-42.4%	-27.4%	-40.9%	-20.4%
43	4.1%	1.2%	3.6%	3.4	43	2.9%	1.1%	2.6%	2.8	43	-28.0%	-12.1%	-27.2%	-17.9%
44	6.0%	2.5%	5.6%	2.4	44	4.8%	2.0%	4.5%	2.5	44	-19.0%	-21.9%	-20.0%	3.8%
4 4 45	4.5%	2.0%	4.1%	2.4	45	3.4%	1.5%	3.1%	2.3	45	-19.0%	-21.9% -27.5%	-20.0 <i>%</i> -24.5%	4.9%
99	1.8%	0.5%	0.5%	3.4	99	J. 4 /0	0.5%	0.5%	2.5	99	-24.070	-27.5% -12.1%	-24.5 <i>%</i> -13.9%	4.3/0
Total	5.0%	1.4%	1.8%	3.5	Total	3.8%	1.1%	1.4%	3.5	Total	-23.9%	-12.176 - 24.5%	-13.9% - 24.7%	0.9%

Commonwealth Automobile Reinsurers Take Out Credit Premium Rolling 12 Month Data Through March, 2015

	Rate Class Group										
Territory	10	15	17	18	20	21	25	26	30	MC/Misc.	Total
1	106,935	4,239	10,346	1,730	10,973	4,720	8,207	6,343	707	726	154,925
2	147,670	6,401	23,012	5,041	8,933	4,156		5,333	3,185	852	204,582
3	492,530	24,161	58,387	7,354	20,249	706	12,759	6,456	4,415	2,276	629,293
4	268,034	17,242	21,841	2,178	12,063	1,427	11,065	964	6,506	1,232	342,550
5	652,353	26,590	99,097	10,754	31,935	10,332	20,956	6,238	7,398	4,567	870,221
6	425,823	19,470	45,336	8,006	33,722	6,473	20,433	7,877	7,120	1,914	576,174
7	560,753	33,258	74,886	6,323	29,726	8,724	26,425	4,383	10,999	4,328	759,805
8	321,191	24,828	49,576	1,060	16,529	(557)	17,444	1,503	4,290	1,922	437,786
9	415,224	15,720	62,095	4,567	28,716	7,550	22,382	2,176	13,682	3,763	575,873
10	197,136	8,546	26,177	1,864	10,549	2,723	5,132		2,520	1,373	256,019
11	116,848	20,520	12,854	1,828	9,077	4,645	8,595	1,931	2,601	652	179,551
12	400,834	22,335	39,834	12,494	38,131	6,495	15,103	2,000	10,314	1,966	549,507
13	678,972	35,493	66,988	6,936	86,405	12,180	51,342	2,756	7,393	2,195	950,661
14	257,870	18,513	30,969	3,653	78,901	3,299	21,461	1,484	4,215	864	421,230
15	156,715	8,344	18,692	4,404	21,154			2,240	2,199	2,069	215,818
16	127,458	6,026	10,765	2,241	51,338	1,622	779			1,223	201,452
17	30,417		1,684		3,151				4,359	297	39,908
18	81,588	4,217	8,927	1,773	25,013			2,237		-	123,756
19	54,957	779	13,307		4,401	911	3,171		1,079	-	78,606
20	131,881	7,156	8,298		32,599	1,035			1,023	73	182,065
21	612,423	42,893	73,060	14,272	118,228	4,453	19,475	454	1,486	292	887,035
22	181,667	14,313	49,970		35,466	3,205	4,623			316	289,559
23	110,536	5,073	12,869	3,267	13,147	2,413	1,732			396	149,432
24	59,859	7,465	7,311		10,946	4,696	398			812	91,487
25	20,806	3,504	2,548	1,980	10,570	2,149	3,076			-	44,633
26	143,145	1,832	11,438		30,398	2,447	798		7,060	71	197,189
27	207,651	12,165	13,587	3,161	13,416	1,119	5,562	3,214	4,255	1,418	265,549
40	168,007	7,745	2,002		16,741	5,885				32	200,412
41	509,771	10,252	56,559	6,159	29,085	7,405	7,040	5,373		1,427	633,071
42	634,000	32,267	37,103	4,163	37,691	3,219	4,687			3,657	756,788
43	503,983	11,193	44,746	3,170	69,184	5,804	19,340	5,976	6,129	420	669,945
44	170,873	9,439	20,126	1,499	24,858	9,863	8,483	1,777		810	247,726
45	564,107	24,416	62,606	10,047	111,553	7,110	19,173		2,512	1,249	802,773
99	7,672	633	3,865		478		3,015			-	15,663
Total	9,519,691	487,028	1,080,859	129,924	1,075,329	136,207	342,655	70,713	115,446	43,192	13,001,044

Commonwealth Automobile Reinsurers Take Out Credit Premium - Market Share (% of Total) Rolling 12 Month Data Through March, 2015

	Rate Class Gro	oup									
Territory	10	15	17	18	20	21	25	26	30	MC/Misc.	Tota
1	0.82%	0.03%	0.08%	0.01%	0.08%	0.04%	0.06%	0.05%	0.01%	0.01%	1.19%
2	1.14%	0.05%	0.18%	0.04%	0.07%	0.03%	0.00%	0.04%	0.02%	0.01%	1.57%
3	3.79%	0.19%	0.45%	0.06%	0.16%	0.01%	0.10%	0.05%	0.03%	0.02%	4.84%
4	2.06%	0.13%	0.17%	0.02%	0.09%	0.01%	0.09%	0.01%	0.05%	0.01%	2.63%
5	5.02%	0.20%	0.76%	0.08%	0.25%	0.08%	0.16%	0.05%	0.06%	0.04%	6.69%
6	3.28%	0.15%	0.35%	0.06%	0.26%	0.05%	0.16%	0.06%	0.05%	0.01%	4.43%
7	4.31%	0.26%	0.58%	0.05%	0.23%	0.07%	0.20%	0.03%	0.08%	0.03%	5.84%
8	2.47%	0.19%	0.38%	0.01%	0.13%	0.00%	0.13%	0.01%	0.03%	0.01%	3.37%
9	3.19%	0.12%	0.48%	0.04%	0.22%	0.06%	0.17%	0.02%	0.11%	0.03%	4.43%
10	1.52%	0.07%	0.20%	0.01%	0.08%	0.02%	0.04%	0.00%	0.02%	0.01%	1.97%
11	0.90%	0.16%	0.10%	0.01%	0.07%	0.04%	0.07%	0.01%	0.02%	0.01%	1.38%
12	3.08%	0.17%	0.31%	0.10%	0.29%	0.05%	0.12%	0.02%	0.08%	0.02%	4.23%
13	5.22%	0.27%	0.52%	0.05%	0.66%	0.09%	0.39%	0.02%	0.06%	0.02%	7.31%
14	1.98%	0.14%	0.24%	0.03%	0.61%	0.03%	0.17%	0.01%	0.03%	0.01%	3.24%
15	1.21%	0.06%	0.14%	0.03%	0.16%	0.00%	0.00%	0.02%	0.02%	0.02%	1.66%
16	0.98%	0.05%	0.08%	0.02%	0.39%	0.01%	0.01%	0.00%	0.00%	0.01%	1.55%
17	0.23%	0.00%	0.01%	0.00%	0.02%	0.00%	0.00%	0.00%	0.03%	0.00%	0.31%
18	0.63%	0.03%	0.07%	0.01%	0.19%	0.00%	0.00%	0.02%	0.00%	0.00%	0.95%
19	0.42%	0.01%	0.10%	0.00%	0.03%	0.01%	0.02%	0.00%	0.01%	0.00%	0.60%
20	1.01%	0.06%	0.06%	0.00%	0.25%	0.01%	0.00%	0.00%	0.01%	0.00%	1.40%
21	4.71%	0.33%	0.56%	0.11%	0.91%	0.03%	0.15%	0.00%	0.01%	0.00%	6.82%
22	1.40%	0.11%	0.38%	0.00%	0.27%	0.02%	0.04%	0.00%	0.00%	0.00%	2.23%
23	0.85%	0.04%	0.10%	0.03%	0.10%	0.02%	0.01%	0.00%	0.00%	0.00%	1.15%
24	0.46%	0.06%	0.06%	0.00%	0.08%	0.04%	0.00%	0.00%	0.00%	0.01%	0.70%
25	0.16%	0.03%	0.02%	0.02%	0.08%	0.02%	0.02%	0.00%	0.00%	0.00%	0.34%
26	1.10%	0.01%	0.09%	0.00%	0.23%	0.02%	0.01%	0.00%	0.05%	0.00%	1.52%
27	1.60%	0.09%	0.10%	0.02%	0.10%	0.01%	0.04%	0.02%	0.03%	0.01%	2.04%
40	1.29%	0.06%	0.02%	0.00%	0.13%	0.05%	0.00%	0.00%	0.00%	0.00%	1.54%
41	3.92%	0.08%	0.44%	0.05%	0.22%	0.06%	0.05%	0.04%	0.00%	0.01%	4.87%
42	4.88%	0.25%	0.29%	0.03%	0.29%	0.02%	0.04%	0.00%	0.00%	0.03%	5.82%
43	3.88%	0.09%	0.34%	0.02%	0.53%	0.04%	0.15%	0.05%	0.05%	0.00%	5.15%
44	1.31%	0.07%	0.15%	0.01%	0.19%	0.08%	0.07%	0.01%	0.00%	0.01%	1.91%
45	4.34%	0.19%	0.48%	0.08%	0.86%	0.05%	0.15%	0.00%	0.02%	0.01%	6.17%
99	0.06%	0.00%	0.03%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.12%
Total	73.22%	3.75%	8.31%	1.00%	8.27%	1.05%	2.64%	0.54%	0.89%	0.33%	100.00%

Commonwealth Automobile Reinsurers Take Out Exposures Rolling 12 Month Data Through March, 2015

Territory	10	15	17	18	20	21	25	26	30	MC/Misc.	Total
1	137	7	9	2	5	4	5	6	0	6	180
2	168	9	18	5	4	3		5	3	10	226
3	527	32	41	6	10	1	7	5	4	24	657
4	247	18	14	2	5	1	5	1	5	7	306
5	628	32	65	10	14	6	10	5	7	32	810
6	370	25	28	7	11	4	8	5	5	18	480
7	523	39	45	4	11	5	12	3	10	30	682
8	287	30	29	1	6	(0)	8	1	3	12	377
9	346	16	34	3	10	4	7	1	9	14	445
10	172	9	15	1	3	1	2		1	8	213
11	83	17	6	1	3	2	3	1	2	4	122
12	295	20	21	8	12	3	5	1	6	10	381
13	528	37	34	4	26	5	18	1	6	14	674
14	156	15	13	2	20	1	6	1	4	4	223
15	99	7	7	3	6			1	1	4	128
16	87	5	5	1	14	1	0			4	116
17	22		1		1				1	1	25
18	50	4	3	1	6			1		-	66
19	36	1	6		1	0	1		1	-	46
20	85	6	3		7	0			1	0	102
21	282	27	24	5	22	1	4	0	0	1	367
22	82	9	17		6	1	1			1	117
23	68	4	5	2	3	1	1			1	84
24	38	8	3		3	2	0			2	56
25	15	2	1	1	3	1	1			-	23
26	84	2	5		8	1	0		4	0	104
27	249	19	12	4	8	1	3	3	6	14	318
40	126	8	1		5	3				0	142
41	391	11	31	4	10	4	3	3		6	462
42	402	27	14	2	9	1	1			10	468
43	277	9	18	2	17	2	5	2	3	2	336
44	133	8	10	1	9	5	2	1		3	173
45	282	16	22	5	21	2	4		1	4	357
99	5	1	2		0		1			-	10
Total	7,281	479	563	88	301	67	124	46	84	247	9,279

Commonwealth Automobile Reinsurers Take Out Exposure Market Share (% of Total) Rolling 12 Month Data Through March, 2015

	Rate Class Gro	oup									
Territory	10	15	17	18	20	21	25	26	30	MC/Misc.	Total
1	1.47%	0.07%	0.10%	0.03%	0.06%	0.04%	0.05%	0.06%	0.00%	0.06%	1.95%
2	1.81%	0.10%	0.19%	0.06%	0.05%	0.03%	0.00%	0.05%	0.03%	0.11%	2.44%
3	5.68%	0.35%	0.44%	0.07%	0.11%	0.01%	0.07%	0.05%	0.04%	0.26%	7.08%
4	2.67%	0.20%	0.16%	0.02%	0.05%	0.01%	0.06%	0.01%	0.05%	0.07%	3.29%
5	6.77%	0.34%	0.71%	0.10%	0.15%	0.07%	0.11%	0.05%	0.08%	0.35%	8.73%
6	3.99%	0.27%	0.30%	0.07%	0.12%	0.04%	0.08%	0.06%	0.05%	0.19%	5.17%
7	5.64%	0.42%	0.49%	0.05%	0.12%	0.05%	0.12%	0.03%	0.11%	0.32%	7.35%
8	3.09%	0.32%	0.31%	0.01%	0.07%	0.00%	0.08%	0.01%	0.03%	0.13%	4.06%
9	3.72%	0.18%	0.37%	0.04%	0.11%	0.04%	0.08%	0.01%	0.10%	0.15%	4.80%
10	1.85%	0.10%	0.16%	0.02%	0.04%	0.01%	0.02%	0.00%	0.01%	0.09%	2.30%
11	0.89%	0.18%	0.06%	0.01%	0.03%	0.02%	0.03%	0.01%	0.02%	0.04%	1.31%
12	3.18%	0.21%	0.23%	0.08%	0.13%	0.03%	0.06%	0.01%	0.07%	0.11%	4.11%
13	5.70%	0.40%	0.37%	0.04%	0.28%	0.06%	0.19%	0.01%	0.06%	0.16%	7.26%
14	1.68%	0.16%	0.14%	0.02%	0.22%	0.01%	0.07%	0.01%	0.04%	0.05%	2.40%
15	1.07%	0.07%	0.08%	0.03%	0.06%	0.00%	0.00%	0.01%	0.02%	0.04%	1.38%
16	0.93%	0.05%	0.05%	0.01%	0.15%	0.01%	0.00%	0.00%	0.00%	0.04%	1.25%
17	0.24%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%	0.01%	0.01%	0.27%
18	0.54%	0.04%	0.04%	0.01%	0.07%	0.00%	0.00%	0.01%	0.00%	0.00%	0.71%
19	0.39%	0.01%	0.06%	0.00%	0.01%	0.00%	0.01%	0.00%	0.01%	0.00%	0.50%
20	0.91%	0.06%	0.03%	0.00%	0.08%	0.00%	0.00%	0.00%	0.01%	0.00%	1.10%
21	3.04%	0.29%	0.26%	0.06%	0.24%	0.01%	0.04%	0.00%	0.00%	0.01%	3.96%
22	0.89%	0.10%	0.18%	0.00%	0.06%	0.01%	0.01%	0.00%	0.00%	0.01%	1.26%
23	0.73%	0.04%	0.05%	0.02%	0.04%	0.01%	0.01%	0.00%	0.00%	0.01%	0.91%
24	0.41%	0.09%	0.03%	0.00%	0.03%	0.02%	0.00%	0.00%	0.00%	0.02%	0.61%
25	0.16%	0.02%	0.01%	0.01%	0.03%	0.01%	0.01%	0.00%	0.00%	0.00%	0.25%
26	0.90%	0.02%	0.05%	0.00%	0.09%	0.01%	0.00%	0.00%	0.04%	0.00%	1.12%
27	2.68%	0.20%	0.13%	0.04%	0.09%	0.01%	0.03%	0.03%	0.06%	0.15%	3.43%
40	1.35%	0.09%	0.01%	0.00%	0.05%	0.03%	0.00%	0.00%	0.00%	0.00%	1.53%
41	4.21%	0.12%	0.33%	0.04%	0.11%	0.04%	0.03%	0.03%	0.00%	0.06%	4.98%
42	4.34%	0.30%	0.15%	0.02%	0.10%	0.01%	0.01%	0.00%	0.00%	0.11%	5.04%
43	2.99%	0.09%	0.19%	0.02%	0.18%	0.02%	0.06%	0.02%	0.03%	0.02%	3.62%
44	1.44%	0.09%	0.11%	0.01%	0.09%	0.05%	0.03%	0.01%	0.00%	0.04%	1.87%
45	3.04%	0.18%	0.23%	0.05%	0.23%	0.02%	0.04%	0.00%	0.01%	0.04%	3.84%
99	0.06%	0.01%	0.03%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.11%
Total	78.47%	5.16%	6.06%	0.95%	3.24%	0.72%	1.33%	0.50%	0.91%	2.67%	100.00%

0.335

0.395

0.455

0.395

0.455

1

7

8

2

2.25

Commonwealth Automobile Reinsurers Actuarial Committee Summary of Credit Indications for April 1, 2016

April 1, 2016 Credit	Offer	<u>"Freeze" 2015 F</u>	actors	Avg 2016 and :	<u>2015</u>		Relative Ran	ges Target	
PY 8/13 8/14 5/15	Res Mkt <u>Share</u> 2.29% 1.68% 1.38%	<u>PY</u> 8/13 8/14 5/15	Res Mkt <u>Share</u> 2.29% 1.68% 1.38%	<u>PY</u> 8/13 8/14 5/15	Res Mkt <u>Share</u> 2.29% 1.68% 1.38%		<u>PY</u> 8/13 8/14 5/15	Res Mkt <u>Share</u> 2.29% 1.68% 1.38%	
ID 9 Tot Mkt	Expos 61,816 4,470,398	ID 9 Tot Mkt	Expos 61,816 4,470,398	ID 9 Tot Mkt	Expos 61,816 4,470,398		ID 9 Tot Mkt	Expos 61,816 4,470,398	
Potential Cred Eligible Exp % Total	112,815 2.5%	Potential Cred Eligible Exp % Total	426,727 9.5%	Potential Cred Eligible Exp % Total	426,796 9.5%		Potential Cred Eligible Exp % Total	329,286 7.4%	
Potential Prem	258.4 M	Potential Prem	717.5	Potential Prem	487.9 M		Potential Prem	562.1 M	
$\begin{array}{c} \underline{\textbf{Indicated } \Delta:} \\ \Delta \text{ Exposures} \\ \Delta \text{ Premium} \end{array}$	-73.6% -64.0%	$\begin{array}{c} \underline{\textbf{Indicated } \Delta:} \\ \Delta \text{ Exposures} \\ \Delta \text{ Premium} \end{array}$	0.0% 0.0%	$\frac{\textbf{Indicated }\Delta\textbf{:}}{\Delta \text{ Exposures}}\\ \Delta \text{ Premium}$	0.0% -32.0%		Indicated Δ: Δ Exposures Δ Premium	-22.8% -21.7%	
# Cells With Credit	73	# Cells With Credit	127	# Cells With Credit	128	# Ce	ells With Credit	124	
						Factor 0 1 1 1 1.25 1.5	Lower 0 0.035 0.065 0.095 0.155 0.215 0.275	Upper 0.035 0.065 0.095 0.155 0.215 0.275 0.335	Group 0 1 2 3 4 5 6

Commonwealth Automobile Reinsurers Actuarial Committee Summary of Prior Rule 29 Credit Decisions (Proposed vs. Approved)

Residual Market Share Group Methodology

		April 2010*	<u>April 2011</u>	April 2012**	<u>April 2013</u>	<u>April 2014</u>	April 2015
Residual Mark Rolling 12 Policy E	et Share % Effective Month as of :	2.6%	2.7%	2.8%	2.5%	1.9%	1.4%
Dranacad	Exposures	-26.4%	-5.5%	-0.6%	-3.9%	-1.8%	-9.9%
Proposed:	Premiums	-43.3%	-3.4%	-6.6%	-5.0%	-3.5%	-10.7%
Approved	Exposures	-11.0%	-5.5%	4.1%	-3.9%	-1.8%	-9.9%
Approved:	Premiums	-4.6%	-3.4%	37.2%	-5.0%	-3.5%	-10.7%

^{*} Proposed credit factors were disapproved and remanded back to CAR for consideration of specific constraints. Refer to Bulletin No. 918.

^{**} Proposed credit factors were disapproved and Residual Market Share Group Methodology was implemented. Refer to Bulletin No. 953.

Commonwealth Automobile Reinsurers Actuarial Committee Historical Summary of Credit Offers 2012-2015

April 1, 2012 Cre	edit Offer	April 1, 2013 Cre	edit Offer	April 1, 2014 Cre	edit Offer	April 1, 2015 Cre	edit Offer
PY 10 11 12	Res Mkt <u>Share</u> 2.65% 2.57% 2.74%	<u>PY</u> 8/10 8/11 8/12	Res Mkt <u>Share</u> 2.60% 2.73% 2.71%	PY 8/11 8/12 8/13	Res Mkt <u>Share</u> 2.73% 2.71% 2.29%	<u>PY</u> 8/12 8/13 8/14	Res Mkt <u>Share</u> 2.71% 2.29% 1.68%
ID 9 Tot Mkt	Expos 117,738 4,299,558	ID 9 Tot Mkt	Expos 117,579 4,344,170	ID 9 Tot Mkt	Expos 100,549 4,394,788	ID 9 Tot Mkt	Expos 74,608 4,446,849
Potential Cred Eligible Exp % Total	471,307 11.0%	Potential Cred Eligible Exp % Total	453,846 10.4%	Potential Cred Eligible Exp % Total	450,416 10.2%	Potential Cred Eligible Exp % Total	419,049 9.4%
Potential Prem	832.8 M	Potential Prem	794.5 M	Potential Prem	757.9 M	Potential Prem	705.8 M
Approved Δ : Δ Exposures Δ Premium	4.1% 37.2%	Approved Δ : Δ Exposures Δ Premium	-3.9% -5.0%	Approved Δ: Δ Exposures Δ Premium	-1.8% -3.5%	Approved Δ: Δ Exposures Δ Premium	-9.9% -10.7%
# Cells With Credit	162	# Cells With Credit	159	# Cells With Credit	148	# Cells With Credit	127

AR COMMONWEALTH AUTOMOBILE REINSURERS

225 Franklin Street Boston, Massachusetts 02110

www.commauto.com

617-338-4000

RALPH A. IANNACO PRESIDENT

December 18, 2009

BULLETIN NO. 918

DECISION

PROPOSED CHANGES TO RULES OF OPERATION

Rule 28 – Application Process Rule 29 – Assignment Process

Proposed changes to the Rules of Operation amending Rule 28 – Application Process and Rule 29 – Assignment Process were filed with the Commissioner of Insurance on November 18, 2009. The proposed changes were furnished to all Members and interested parties as Bulletin No. 915, dated November 18, 2009.

Under the provisions of Article X of the Plan of Operation, the Commissioner has approved the amendment to Rule 29.F. and disapproved proposed amendments to Rules 28.C.1. and 29.E. Additionally, these Rules have been remanded to CAR for further consideration. Attached is the Commissioner's correspondence on the proposed amendments.

Please bring this information to the attention of all interested parties. The Rules of Operation, including the approved change, is available on CAR's website.

RALPH A. IANNACO President

Attachment



COMMONWEALTH OF MASSACHUSETTS Office of Consumer Affairs and Business Regulation DIVISION OF INSURANCE

One South Station • Boston, MA 02110-2208 (617) 521-7794 • FAX (617) 521-7475 TTY/TDD (617) 521-7490 http://www.mass.gov/doi

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

GREGORY BIALECKI SECRETARY OF HOUSING AND ECONOMIC DEVELOPMENT

BARBARA ANTHONY
UNDERSECRETARY

JOSEPH G. MURPHY ACTING COMMISSIONER OF INSURANCE

December 18, 2009

VIA ELECTRONIC AND REGULAR MAIL

Ralph A. Iannaco, President Commonwealth Automobile Reinsurers 225 Franklin Street Boston, Massachusetts 02110

Re: Proposed Amendments to Rules 28 and 29 of the Massachusetts Automobile Insurance Plan

Dear Mr. Iannaco:

On November 18, 2009, the Governing Committee of the Commonwealth Automobile Reinsurers ("CAR") voted to amend Rules 28.C.1 and 29. E and F of the Massachusetts Automobile Insurance Plan ("MAIP"). The proposed amendments address the following issues: 1) premium deposits (Rule 28.C.1); 2) new credit factors for policies with effective dates from April 1, 2010 through March 31, 2011 (Rule 29.E); and 3) the household procedure rule (Rule 29.F.2). The proposed amendments were distributed to CAR members and submitted to me for my review. I have carefully reviewed them and am disapproving CAR's proposals for Rule 28.C.1 and Rule 29.E, for the reasons stated below, and approving the proposed amendment to Rule 29.F.2.

Rule 28.C.1

Rule 28.C.1 relates to the deposit premium requirements for MAIP applicants who qualify as Eligible Risks. CAR's proposals require revision to ensure that the MAIP rules are consistent with the statutory requirements for residual market eligibility in G.L. c. 175, §113H ("§113H") and for deposits on motor vehicle insurance policies in G.L. c. 175, §113E ("§113E"). The first paragraph that CAR proposes to add to Rule 28.C.1.a relates not to the calculation of a deposit premium but instead to a condition of eligibility for the MAIP; specifically the satisfaction of any obligation to pay premium owed. For that reason, it should be deleted. ¹

¹ MAIP Rule 26.A.3 sets out the conditions for MAIP eligibility, including the requirement that the "applicant, or any person who usually drives the motor vehicle has failed to pay an insurance company any

As support for its proposal to amend Rule 28.C.1, CAR expresses concern that an ARC who receives a MAIP assignment cannot cancel a policy if an applicant has failed to pay premium owed, apparently to a previous insurer. The proposed amendment seeks to require an ARP to collect such unpaid premium and to forward it to the Member to which it is owed. CAR's proposal would expand an ARP's responsibilities and require it to collect unpaid premium for a company with which it does not do business. We believe it is inappropriate to require an ARP to do more than verify that the applicant and any other person who usually drives the motor vehicle do not owe premium for a policy that was in effect during the preceding 12 months, as required by Rule 31.B.3.e., unless the ARP places other business with the company to which the premium is owed.² In other circumstances, although an ARP may choose to assist an applicant in removing non-payment of premium as an impediment to MAIP eligibility, he or she should not be required to serve as a collector for a previous insurer.

The second paragraph in CAR's proposed amendment to Rule 28.C.1.a, and its proposed amendment to Rule 28.C.1.b, relate to determining the deposit premium for, respectively, new and renewal MAIP business. Both sections permit collection of a higher deposit premium from an Eligible Risk if the applicant has had an automobile insurance policy cancelled for non-payment of premium during the preceding 24 months.³ Section 113E sets a maximum limit of 30 percent on motor vehicle insurance deposit premiums, but allows higher deposits if the applicant for insurance "has been in default" for payment of such premium within the past 24 months. Non-payment of premium is a permissible reason for an insurer to cancel a motor vehicle policy, but an ARC's issuance of a notice of cancellation for non-payment will not result in an actual cancellation if the insured pays the overdue premium and any related service charges before the cancellation date in the notice. The text of Rules 28.C.1. a and b requires amendment to clarify that the rules relating to a higher deposit premium apply only if the applicant had a prior motor vehicle policy actually cancelled for non-payment within the past 24 months.

CAR's proposed amendments relating to the permissible higher deposit premium differ depending on whether the policy is new or renewal business. For new business, Rule 28.C.1 now requires an Eligible Risk who has had a policy cancelled for non-payment within the past 24 months, and therefore does not qualify for a payment plan, to make a deposit of the full premium generated using the MAIP rates. Because of the Lane-Bolling Amendment, for most applicants the actual premium charged by the ARC is significantly less than the MAIP premium. Calculating the deposit premium on the

motor vehicle insurance premiums due or contracted during the preceding twelve months." CAR's proposed first paragraph incorrectly states the process for determining eligibility.

In the event that the insurer to which money is owed has entered into a Limited Assignment Distribution Agreement ("LADA") under which another company handles some of its motor vehicle insurance business, for purposes of collecting owed premium the LADA would be considered a company with which the ARP places business.

³ Eligible Risks who qualify for a payment plan are now required to make a premium deposit of 25 percent on new business or 20 percent on renewal business. CAR's proposed amendments do not change those percentages.

The identical requirement is in the current CAR Rules and the proposed amendment. The amendment moves the text from Rule 28.C.1.b to 28.C.1.a.

MAIP rate for the purpose of determining the 100 percent down payment frequently generates deposit premiums in excess of the ultimate premium. The current rules on deposit premiums burden consumers and we urge CAR to amend Rule 28.C.1.a to alleviate that burden. To improve the accuracy of the deposit premium, we recommend that the rule require a down payment for new business of no more than 80 percent of the estimated MAIP premium rather than the current 100 percent of that premium. The ARC shall send the applicant a notice of any upward or downward adjustments to the deposit premium with the final coverage selections page. The applicant may be required to pay any additional deposit premium within 30 days of the date on the coverage selections page. During that 30-day period an insurer may not cancel a policy for non-payment of premium. The ARC shall return any downward deposit premium adjustment to the applicant within 30 days.

The amendment to Rule 28.C.1.b states that the ARC may elect to require payment of 100 percent of the renewal premium if the policyholder has had a policy cancelled within the past 24 months. The statutory reference incorrectly reflects §113E and should therefore be removed from CAR's proposal.⁶ Each ARC may determine what it will accept as a deposit premium on renewal policies.

I am therefore remanding Rule 28 back to CAR for changes to Rule 28.C.1. that address the above issues.

Rule 29. E.

Rule 29.E requires CAR to review credits for each rate year and to submit them to the Commissioner for approval. MAIP credits are intended to control the size of the residual market and to provide an incentive for companies to voluntarily write private passenger auto insurance in those territories and classifications that would otherwise be disproportionately represented in the MAIP. CAR proposes new credit factors for policies with effective dates from April 1, 2010 through March 31, 2011. It points out that the selected factors represent a 26.4 percent decrease in credit-eligible exposures and a 43.3 percent decrease in available credit premium. CAR states that the new factors reflect residual market share data representing actual MAIP results, and, unlike prior credit year indications, are not heavily weighted by ceded market results. It notes that it selected separate credit factors for experienced and inexperienced drivers, to address the difference in average MAIP premium and concerns about the need for a higher weight on territorial credits to provide an incentive to depopulate urban areas more highly represented in the residual market.

The measurement of the MAIP's volume and of the proportionate representation within it is complicated somewhat by the transition both to the MAIP and competitive rating. The percentage of vehicles insured through the residual market has declined slightly between the nine-month period from January 1, 2008 through September 30, 2008 and the nine-month period beginning January 1, 2009 and ending September 30,

⁵ Based on CAR data through December 14, 2009, approximately 93 percent of policies issued through the MAIP since April 1, 2009 are charged a premium that is lower than the MAIP premium quoted at the time of application.

⁶ Section 113E neither imposes nor prohibits a 100 percent requirement for a renewal premium.

2009. All else equal, this reduction suggests that it may be appropriate to reduce the number of vehicles that are eligible for the MAIP credit.

The Division has examined market data and considered the effect that CAR's proposed credits will have on operator groups and territories that are disproportionately represented in the residual market. Based on the most recently available proportion of vehicles insured through the residual market, principal operators licensed six years or less and risks in Chelsea, Hyde Park, Dorchester, Roxbury, East Boston, Holyoke, Lowell, Springfield, Lynn, Lawrence, and Brockton continue to be disproportionately represented in the residual market.⁸ The proportion of principal operators licensed six years or less in the residual market is 3.66 times higher than the statewide average; that ratio has changed little since 2005, when it was 3.45. The proportion of risks from the above territories written in the MAIP, as a group, is approximately three times higher than the statewide average: for each individual community the ratio of MAIP policies is at least 2.5 times higher than the statewide average. As with inexperienced operators, since 2005 the relative representation of this group of communities in the residual market is virtually unchanged. The appreciable decline in the proportion of risks insured through the residual market in Hyde Park, Dorchester, Roxbury, East Boston, Charlestown, Lowell and Lawrence, is offset by increases in the relative representation of Lynn and Brockton. Therefore there appears to be a significant and continued need for credits for those operator classes and territories.

The Division's analysis of CAR's proposed changes to Rule 29 finds that its proposal will not serve to reduce the disproportionate share of the above risk class and territories in the MAIP. The Division estimates that CAR's proposal will reduce the credit premium for principal operators licensed six years or less by 67 percent and also reduce the credit premium available in the above communities by 14 percent. Since MAIP quota share and credits are measured on the basis of premium, CAR's proposal is unlikely to increase the voluntary writing of vehicles in these areas.

Transition to the MAIP will not be complete on April 1, 2010. To avoid growth of that market, the credit system must strongly encourage insurers to develop the operations necessary to serve the high risk private passenger motor vehicle insurance markets. Because such competency takes time to acquire, stable market expectations facilitate insurers' willingness to insure high risks voluntarily. While reduction in the overall size of the residual market may warrant some adjustment to the number of credit eligible vehicles, the lack of progress in achieving proportional balance of risk by operator class and territory indicates that the overall level of credit premium should remain relatively stable for the foreseeable future. I am therefore remanding Rule 29 back to CAR for changes to Rule 29.E.2 that satisfy the following criteria:

1. The overall MAIP premium credits shall not decline by more than five percent from the current credits.

⁷ Cession Volume Report, CAR Website.

⁸ Operator classes 17, 20 and 25 comprise principal operators licensed for six years or less; each class continues to be disproportionately represented in the residual market.

- 2. Credit premium available for the 11 territories noted above, as a group, shall increase by at least 25 percent, and no individual territory in the group shall have a reduction in credit premium of more than 15 percent.
- 3. Credit premium for principal operators licensed six years or less shall not be reduced by more than 20 percent for that operator group as whole.

In summary, pursuant to my authority under Article X of the CAR Plan of Operation, I am approving CAR's proposed amendment to Rule 29.F and disapproving CAR's proposed amendments to Rule 28.C.1 and to Rule 29.E. Rules 28.C.1 and 29.E are remanded to CAR for revisions that address the Division's concerns and are consistent with its suggestions. CAR is to submit its revisions within thirty days.

Sincerely,

oseph G. Murphy

Acting Commissioner of Insurance

PRESIDENT

COMMONWEALTH AUTOMOBILE REINSURERS

225 Franklin Street Boston, Massachusetts 02110
www.commauto.com 617-338-4000

December 20, 2011

BULLETIN NO. 953

DECISION

PROPOSED CHANGES TO THE RULES OF OPERATION

Rule 21 – General Provisions
Rule 26 – Policyholder Rights and Responsibilities
Rule 29 – Assignment Process
Rule 36 – Limited Assignment Distribution Agreements

Proposed changes to the Rules of Operation amending Rules 21, 26, 29 and 36 were filed with the Commissioner of Insurance on November 18, 2011. The proposed changes were furnished to all members and interested parties as Bulletin No. 950, dated November 18, 2011.

Under the provisions of Article X of the Plan of Operation, a proposed Rule of Operation becomes effective either upon approval by the Commissioner of Insurance, or upon expiration of 30 days from the time of submission, provided that no public hearing was requested within 5 days by an interested party and the Commissioner has not otherwise disapproved the Rule change within the 30-day period.

The Commissioner of Insurance has, in correspondence dated December 19, 2011, issued his decision disapproving the proposed amendments to Rules 21.D., 29.E.2., 29.E.3., 36.C.iii, 36.D.1. and 36.D.2. The remainder of the proposed amendments to Rules 21, 26, 29 and 36 are approved as filed. A copy of the decision is attached.

Please bring these changes to the attention of all interested parties. The Rules of Operation, including all approved changes, are available on CAR's website.

DANIEL R. JUDSON President

Attachment

CAR DOCKET #AC15.03 EXHIBIT #14 PAGE 2 OF 29



COMMONWEALTH OF MASSACHUSETTS Office of Consumer Affairs and Business Regulation DIVISION OF INSURANCE

1000 Washington Street, Suite 810 • Boston, MA 02118-6200 (617) 521-7794 • FAX (617) 521-7475 TTY/TDD (617) 521-7490 http://www.state.ma.us/doi

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

GREGORY BIALECKI SECRETARY OF HOUSING AND ECONOMIC DEVELOPMENT

BARBARA ANTHONY
UNDERSECRETARY

JOSEPH G. MURPHY COMMISSIONER OF INSURANCE

December 19, 2011

VIA ELECTRONIC AND REGULAR MAIL

Daniel R. Judson, President Commonwealth Automobile Reinsurers 225 Franklin Street Boston, MA 02110

Re:

Proposed Amendments to Rules 21, 26, 29, and 36 of the Massachusetts Automobile

Insurance Plan

Dear Mr. Judson:

On November 18, 2011, the Governing Committee of the Commonwealth Automobile Reinsurers ("CAR") voted to amend Rules 21, 26, 29, and 36 of the Massachusetts Automobile Insurance Plan ("MAIP"). The proposed amendments address the following issues: (1) restrictions on the non-renewal of clean-in-three risks (Rules 21.D., 21.F., and 29.H.); (2) update references to the Assigned Risk Company Procedures Manual and other edits (Rule 26); (3) voluntary credits (Rules 29.E.1. and 29.E.2); (4) take-out credits (Rule 29.E.3); and (5) miscellaneous editorial changes (Rule 36). The proposed amendments were distributed to CAR members and submitted to me for review. I have carefully reviewed CAR's proposed amendments and, for all the reasons set forth below, I am approving such proposed changes with exception of CAR's proposed amendments to Rules 21.D, 29.E.2, 29.E.3, 36.C.iii, 36.D.1 and 36.D.2.

Letter to Daniel R. Judson, President Commonwealth Automobile Reinsurers December 19, 2011 Page 2 of 8

Rule 21.D

CAR's proposed amendments to Rule 21.D concern additional protections for clean-in-three ("CIT") drivers. The proposal sets forth a new end date for the period within which Members may not non-renew most CIT risks. The proposal also sets forth limited reasons under which a CIT risk may be non-renewed between certain time periods.

Rule 21.D currently provides that CIT risks with renewal dates from April 1, 2008 through *March 31, 2012* cannot be non-renewed by a Member unless: (1) the CIT risk chooses, at their own initiative, to not renew their policy with such Member; (2) the producer terminates their relationship with a Member and transfers their book of business, including the CIT risk, to a new Member; or (3) the Member terminates its relationship with a producer and the producer transfers their book of business, including the CIT risk, to a new Member. CAR now proposes to extend the date during which CIT risks may not be non-renewed to the period of April 1, 2008 through *March 31, 2014*. For the reasons set forth below, this change is unnecessary and is therefore disapproved.

Proposed Rules 21.D.3, 21.D.4 and 21 D.5 phase out the prohibition on a Member non-renewing CIT risks written by producers without voluntary contracts. Rule 21.D.3 states that policies effective April 1, 2012 through March 31, 2013 may not be non-renewed by a Member if the producer does not have a voluntary contract with a Member as of April 1, 2009. Similarly, Rule 21.D.4 states that policies effective April 1, 2013 through March 31, 2014 may not be non-renewed by a Member if the producer does not have a voluntary contract with a Member as of April 1, 2010. Finally, Rule 21.D.5 states that, for policies effective April 1, 2014 and subsequent, the restriction on non-renewing a CIT risk no longer applies. The rule further provides that CAR must confirm that end date no later than December 13, 2013.

The Division notes that if CAR's intention is to phase out the prohibition on non-renewals of CIT risks over an additional two year period (i.e. until March 31, 2014), then extending the prohibition on such non-renewals through March 31, 2014 in proposed Rule 21.D.1 is at best contradictory with proposed Rules 21.D.3 and 21.D.4, and at worst subsumes those rules such that no CIT risk that has a renewal date prior to March 31, 2014 may be non-renewed, regardless of the status of the producer of that policy. The Division does not object to CAR proposal to phase out the prohibition on non-renewals of CIT risks, however, such intention must be unambiguously articulated in the rules. For these reasons, Proposed Rules 21.D.1 21.D.3, 21 D.4 and 21.D.5 are disapproved.

Proposed Rule 21.D.2 provides that for polices effective prior to April 1, 2012, a CIT risk cannot be non-renewed by a Member. This proposal appears to be a blanket prohibition on non-renewing *any* CIT risk through April 1, 2012, which is inconsistent with other portions of Rule 21.D.1. For this reason, proposed Rule 21.D.2 is disapproved.

The Division further notes that to the extent proposed Rules 21.D.3 and 21.D.4 refer to whether a producer had a voluntary contract on a past date, these rules should read "...if the member *did* not have a voluntary contract...", rather than "if the member does not have a voluntary contract...".

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Rule 29.E.2

Rule 29.E requires CAR to review credits annually and to submit them to the Commissioner for approval. MAIP voluntary credits are intended to control the size of the residual market and to provide an incentive for companies to voluntarily write private passenger automobile insurance in those territories and classifications that would otherwise be disproportionately represented in the MAIP. CAR proposes new credit factors for policies with effective dates from April 1, 2012 through March 31, 2013. It points out that the selected factors represent essentially no change to credit eligible exposures and a 10.2% decrease in available credit premium.

The statutory purpose of residual market credits is to control the size of the residual market. For the purpose of keep-out credits, this means that the percentage of the total private passenger automobile insurance market that is eligible for credit will increase as the size of the residual market increases, and decrease as the size of the residual market decreases. If keep-out credits are to effectively control the size of the residual market, the criteria for determining whether a market segment is eligible for keep-out credit must include a target residual market size and a well-defined process that allows a market segment's credit eligibility to adjust with changes in residual market share. Residual market share, defined as the ratio of vehicles insured through the residual market over total insured vehicles, effectively communicates the industry's ability and willingness to provide coverage in all market segments.

CAR's 2010 and 2011 credit offers determined market segments to be "credit eligible" (i.e. disproportionately represented in the residual market) if the twelve-month moving residual market share was more than 5.0%. I have accepted this standard for determining credit eligibility in the past because it reflects a reasonable variance around a target residual market share. I believe a total residual market share target of 2.0% is reasonable for Massachusetts because of its very small uninsured vehicle population. While the size of the residual market has declined since the introduction of the MAIP, data indicate that the residual market still is a considerable distance from the 2.0% target.

<u>Year</u>	Residual Market Share
2007	4.3%
2008	3.5%
2009	2.7%
2010	2.6%
2011 through September 30	2.8%

Source: CAR residual market volume report

The Division's analysis of the variance in residual market share across rating territory and operator class consistently indicates a standard deviation about the average of approximately 3.0%. A 5.0% residual market share standard for identifying market segments as credit eligible means their actual residual market share must be higher than one standard deviation above the target residual market share. Based on the residual market share data considered by CAR in the development of its 2012 credit program, approximately 89.0% of all vehicles have a residual market share less than 5.0%. This means that approximately 11.0% of the market is currently eligible for keep-out credit.

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The consistent application of the 5.0% residual market share standard over time will allow the credit structure to rationally respond to changes in actual residual market share. If the observed standard deviation across residual market share declines with an attendant decrease in average residual market share, use of the 5% standard will indicate a greater proportion of the total market as ineligible for residual market credit. If the observed standard deviation across residual market share declines over time with an attendant increase in average residual market share, the use of the 5.0% standard will indicate a smaller portion of the total market as ineligible for residual market credit. This sort of data driven process is essential to the fair application of a credit program.

CAR's proposed credit values to be effective on April 1, 2012 are partially based on a 7.5% residual market share standard for credit eligibility, and partially based on a "halfway" proposal. Without a clear and consistent standard for determining credit eligibility in the face of residual market share changes over time, I am not confident that CAR's 2012 proposed credits will operate to control the size of the residual market or enhance the prospects that no market segment is disproportionately insured through the residual market.

The 2010 credit offer was the industry's first attempt at developing a credit program with a fully implemented MAIP in the context of a competitive market. The program developed was designed to meet certain conditions outlined in my order to CAR dated December 18, 2009. The method used to develop the 2010 credits was updated to produce the 2011 credit program without adjustment.

It appears from the results that the method underlying the 2010 credit program has done little to reduce the size of the residual market towards the 2.0% goal. Additional inspection of the residual market shares since the introduction of the 2010 credit program indicate that, while the program was reasonably successful in reducing the disproportionate residual market share of principal operators licensed less than six years, it was not at all successful in reducing the disproportionate residual market share of certain cities. Since the 2010 credit program was implemented, the residual market share for principal operators licensed less than six years dropped from being 3.66 times higher than the statewide average to being 2.46 times higher. Yet, despite this progress, the residual market share for the communities of Chelsea, Hyde Park, Dorchester, Roxbury, East Boston, Holyoke, Lowell, Springfield, Lynn, Lawrence, and Brockton as group increased from being three times higher than the statewide average to 3.4 times higher. The individual residual market shares for each of these communities continue to be at least 2.5 times higher than the statewide average.

The reason for this outcome likely is due to the fact that the current keep-out credit program, on average, has a lower value than a take-out credit or an assignment through the MAIP. The Division's analysis of the 2010 and 2011 credit programs indicate that the average credit adjusted MAIP liability rate under each program was considerably less than the average MAIP liability rate that would otherwise be used to adjust quota share when an assignment is made as shown in the table below.

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	Credit Eligible*	Credit Adjusted	Credit Adjusted/
<u>Year</u>	Average MAIP Rate	Average MAIP Rate	Credit Eligible
2010	\$914.30	\$716.92	78.4%
2011	\$1,146.98	\$905.32	78.9%

^{&#}x27;*MAIP rates are the base rates in effect when the credit offer was prepared and include 20/40 bodily injury liability (Parts 1 & 5), \$5,000 property damage liability, \$0 deductible personal injury protection, and 20/40 uninsured vehicle. MAIP rates used to compute each average are those in effect at the time the credit program was developed.

A keep-out credit program that has a smaller effect on quota share than the effect of a MAIP assignment is not likely to encourage insurers to voluntarily begin or expand operations in otherwise costly or high risk market segments. Such an incentive is necessary to controlling the size of the residual market.

The source of this undervaluation is clearly in the credit values offered for operators licensed more than six years. Based on a 5.0% residual market share standard for credit eligibility, this group of operators constitutes 70.0% of all credit eligible operators. All credit values for this operator class currently are less than 1.0. Keep-out credits for this class only are available in the communities of Chelsea, Roslindale, Hyde Park, Dorchester, Roxbury, East Boston, Holyoke, Lowell, Springfield, Lynn, Lawrence, and Brockton.

Based on the 2011 meeting notices and records of the CAR Actuarial Committee, the 2010 method for calculating credits again was updated for consideration in the preparation of the 2012 credit program. Based on CAR's update, the number of credit eligible risks would increase by 3.1%, and the average MAIP premium credit would decline by about 12.0% relative to the 2011 credit program. Based on the Division's review of the results of this update, continuation of the credit program established in 2010 would only make matters worse. The expected relationship between the average credit adjusted MAIP rate and the average credit eligible MAIP rate would drop from roughly 78.0% to 70.0% if the 2012 credits were based on an update of the 2010 credit program. The results of that update would not improve the likelihood that residual market shares would decline in certain communities, and, moreover, likely would undo some of the progress made with respect to depopulating the MAIP in connection with principal operators licensed less than six years. The actual 2012 credit program proposed by CAR produces similarly unacceptable results.

The process that CAR has used for establishing credits since 2009 lacks foundation and objectivity. I am not able to conclude that any of the so-called credit programs considered by CAR with regard to the proposed keep out credits will facilitate further reductions in residual market share, or that they will result in a fair allocation of residual market obligations. The current process fails in the following ways:

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- 1. The process has no established basis for determining which market segments qualify for keep-out credit over time that is strictly based on changes in residual market share.
- 2. The process applies inconsistent values of credits based on common residual market share results. As a result, the credit value for a particular market segment is not based on actual levels or changes in the residual market share for that segment. This is contrary to the statutory goals of residual market credits.
- 3. The process does not contain a formal method for determining an "indicated" residual market share group from which a credit value can be assigned that is based on the recent changes in the residual market share for each market segment.

For all of these reasons, I cannot approve the proposed changes to Rule 29.E.2.

Because there are many reasons individual insurers may pursue or withdraw from certain market segments in any given year, all of which will affect residual market share, the process for determining credit eligibility and values must consistently recognize changes over time. The process must be able to accommodate market segments where residual market share is increasing as well as decreasing.

Changes in residual market share often are triggered by changes in rate adequacy. Under competitive rating, rates now change on the basis of need, rather than on a date specified in a statute, and the annual credit update does not need to be anything more than an update of each market segments' credit eligibility status based on actual residual market share results.

The process for determining credit eligibility and values must be based on principles of fairness and balance. Changes in both measures should be triggered directly by changes in market conditions as measured by changes in residual market share. The process must be transparent and predictable so that individual insurers can compete on a level playing field in the voluntary market. To that end, the specific criteria for determining credit eligibility and a fixed scale of credit values based on residual market share should be specified in Rule 29.E.2, in addition to the actual tables of credit factors associated with each year.

I am remanding Rule 29.E.2 back to CAR to correct the deficiencies I have noted with the current process. I will approve revisions to Rule 29.E.2. that include substantially all of the features in the attachment to this letter. I will disapprove any proposal that produces a keep out credit program that offers an average credit adjusted MAIP liability premium that is less than the average MAIP liability premium that would be used to adjust quota share had the risk been assigned through the MAIP.

Rule 29.E.3

Rule 29.E.3 outlines the eligibility requirements for a policy to be eligible for take- out credit. The current rule allows take-out credit for policies with effective dates on or after April 1, 2009 that were previously insured through the MAIP or that had been ceded to CAR (CAR ID Codes 4 and 5) that it writes voluntarily at the expiration of that policy. A Member may receive a

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credit for the first year in which an Eligible Risk is written voluntarily after the expiration of the policy previously issued through the residual market.

CAR proposes two changes to Rule 29.E.3. The first change is to amend the current rule language described above to apply only to policies with effective dates of April 1, 2008 through March 31, 2009. The second change is to add a new paragraph that applies to policies with effective dates on or after April 1, 2009. Under the new language, take-out credit only will be available if the policy previously was insured through the MAIP and a Member offers to write the policy voluntarily at the end of the initial term of the policy or its first renewal. CAR points out that the reason for the proposed changes is due to recently approved procedures outlined in Rule 29.D.2. Rule 29.D.2 describes a process that will be followed if the assigned risk company intends to non-renew the policy at the end of an assigned policy's three year assignment period.

The procedures outlined in Rule 29.D.2 apply only if the Assigned Risk Carrier intends to non-renew the policy at the end of its three year assignment period. The fact that the Assigned Risk Carrier has the option to non-renew the policy at that point does not mean the carrier will necessarily choose to non-renew the policy at that time. The eligibility for take-out credit is not now, nor was it ever intended to be, an option limited to the designated Assigned Risk Carrier. For this reason, and the fact that the proposed changes retroactively change the value of take out credits that have already been granted, I am disapproving CAR's proposed changes to Rule 29.E.3.

Rule 36.C.iii, D.1, and D.2

CAR has recommended that Rule 36.C.iii be eliminated. Rule 36.C.iii is an example that explains the rule regarding how the limitation of assignment volume under Limited Assignment Distribution Agreements should be calculated. I believe that example is useful as a tool to companies and to CAR, therefore, I am disapproving the proposed removal of the example in Rule 36.C.iii.

CAR also proposes editorial changes to Rule 36.D.1. CAR proposes to remove language and instead reference "market share pursuant to Rule 29.B." Rule 29.B makes no direct reference to the term "market share". The current language is consistent with the language in Rule 29.B. Further, because quota share is a premium based measure and "market share" is an exposure based measure that can also be premium based, it is important not to confuse the concepts. Therefore, I am disapproving the proposed changes to Rule 36.D.1 with the exception of the proposed removal of the term "non-fleet".

CAR additionally proposes editorial changes to Rule 36.D.2. I am disapproving these proposed changes for the same reasons noted above in connection with Rule 36.D.1, with the exception of the proposed removal of the term "non-fleet".

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In summary, pursuant to my authority under Article X of the CAR Plan of Operation, I am approving CAR's proposed amendments to Rules 21, 26, 29, and 36 with the exception of the proposed amendments to Rules 21.D, 29.E.2, 29.E.3, 36.C.iii, 36.D.1, and 36.D.2. Rules 21.D and 29.E.2 are remanded to CAR for revisions that address the Division's concerns and are consistent with its suggestions. CAR shall submit its revisions to the Division within thirty days of its receipt of this letter.

Sincerely,

oseph G. Murphy

Commissioner of Insurance

Attachment

Determining Eligibility for Keep Out Credit

The statutory purpose of residual market credits is to control the size of the residual market. This implies that there is a tolerable proportion of the total market that will find coverage through the residual market, and that any market segment that exceeds that proportion is disproportionately represented in the residual market.

If keep out credits are to effectively control the size of the residual market, the criteria for determining whether a market segment is credit eligible must include a target residual market size and a well defined process that allows credit eligibility to adjust with changes in market behavior. Residual market share, defined as the ratio of vehicles insured through the residual market over total insured vehicles, effectively communicates the industry's ability and willingness to provide coverage in all market segments.

The 2010 and 2011 credit offers determined market segments to be "credit eligible" (i.e. disproportionately represented in the residual market) if the twelve month moving residual market share was more than 5%. This is based on a 2.0% target residual market share plus on standard deviation of 3.0%. While the size of the residual market has declined since the introduction of the MAIP, data indicate that the residual market is still a considerable distance from the 2.0% target.

<u>Year</u>	Residual Market Share
2007	4.3%
2008	3.5%
2009	2.7%
2010	2.6%
2011 through September 30	2.8%

Source: CAR residual market volume report

Based on the residual market share data considered by CAR in the development of its 2012 credit offer, approximately 89% of all vehicles have a residual market share less than 5%. This means that approximately 11% of the market is currently eligible for keep out credit.

Consistent application of the 5% residual market share threshold for credit eligibility would have produced the following expected volume of credit eligible exposures over the past four years.

Effective Date of Credit Offer	Credit Eligible Exposures*	Percentage Change Over Prior Year
April 1, 2009	834,738	
April 1, 2010	451,362	-45.9%
April 2, 2011	422,868	-6.3%
April 1, 2012	449,173	+6.2%

^{*} Excludes motorcycles and miscellaneous vehicles; 2009 estimated.

The consistent application of the 5% residual market share threshold over time will rationally respond to changes in actual residual market share. If the observed standard deviation across residual market share declines with an attendant reduction in average residual market share, use of the 5% standard will indicate a smaller proportion of the total market as eligible for residual market credit. If the observed standard deviation across residual market share declines over time with an attendant increase in average residual market, the use of the 5% standard will indicate a larger portion of the total market as eligible for residual market credit. This sort of data driven process is essential to the fair application of any credit program.

Defining Residual Market Share Groups

If a keep out credit program is to align credit values with actual residual market results, the program must recognize the full range of residual market shares within the credit eligible group. Residual market shares between the first and second standard deviations of the target mean encompasses a significant proportion of the credit eligible market, and should be recognized as its own group. For market segments with residual market share results that are higher than the target average plus two standard deviations, the volume of credit eligible exposure underlying the residual market share results is smaller which in turn allows for wider fluctuation in results from year to year. Wider bands for defining residual market share groups at this level limits the degree to which abrupt changes in annual residual market share resulting from random variations affect the residual market share group assignment in any given year.

6% residual market share groups were selected as being broad enough to accommodate random fluctuations in residual market share, but also narrow enough to evaluate whether true changes in the underlying residual market share have occurred. A summary of the residual market share groups is shown below.

Credit Eligible Market Segments

Residual Market Group	Residual Market Share Range
0.	[0.0%, 5.0%)
1	[5.0%, 8.0%)
2 .	[8.0%, 11.0%)
3	[11.0%, 17.0%)
4	[17.0%, 23.0%)
5	[23.0%, 29.0%)
6	[29.0%, 35.0%)
7	[35.0%, 41.0%)
. 8	[41.0%, 47.0%)
9	[47.0%, 100.0%]

Establishing Credit Values

The purpose of the MAIP quota share and credit options is to fairly allocate the costs of the residual market across the industry. The process of determining an insurer's residual market quota share is based on the MAIP premium for the risk¹. Premium most accurately reflects the relative risk associated with the policy. Each residual market risk assigned to an insurer reduces the insurer's quota share by the amount of the MAIP premium for that risk.

When an insurer voluntarily insures a risk that is eligible for keep out credit, the same principle should apply. The insurer's quota share of residual market risk is reduced by the MAIP premium that would have applied to that risk if had it obtained insurance through the MAIP. In other words, the credit factor for a keep out credit is 1.0. Without such balance, the credit program is not likely to encourage insurers to voluntarily begin or expand operations in otherwise costly or high risk market segments which is necessary to controlling the size of the residual market.

Using the 5% residual market share standard to determine credit eligibility, the average MAIP rate can be computed at successive levels of residual market share. This provides an overview of the relative risk associated with credit eligible residual market share values. Using the MAIP base rates effective April 1, 2011 for liability², the average MAIP rate for successive levels of residual market share are calculated below³.

	2011 Credit Eligible*	4/1/11 Average MAIF
Residual Market Share Range	<u>Exposures</u>	Liability Base Rate**
[0.0%, 5.0%)	N/A	\$710.08
[5.0%, 8.0%)	150,401	\$1,159.88
[8.0%, 11.0%)	233,358	\$1,192.04
[11.0%, 17.0%)	49,387	\$1,591.99
[17.0%, 23.0%)	10,511	\$2,230.27
[23.0%, 29.0%)	1,403	\$2,618.86
[29.0%, 35.0%)	3,872	\$2,654.03 .
[35.0%, 41.0%)	0	N/A
(41.0%, 47.0%)	216	\$2,616.00
[47.0%, 100.0%]	0	N/A

^{*}Excludes motorcycles and miscellaneous vehicles

^{**} Average merit rating factors were not available for this illustration

¹ See CAR Rule 29.B

² Liability is 20/40 bodily injury liability (coverage parts 1 and 5), \$5,000 property damage liability, \$0 deductible personal injury protection, and 20/40 uninsured vehicle.

³ Based on data underlying residual market shares in CAR Docket #AC11.03, Exhibit 11, page 9.

When the value of a keep out credit is equal to the MAIP premium, equity with the value of the quota share adjustment for a comparable MAIP assignment is easy to obtain. While the use of the otherwise applicable MAIP premium as the value of a keep out credit recognizes relative risk reasonably well, G.L. c. 175, §113H permits the use of higher multiples of MAIP premium as the basis for valuing credits if it enhances the prospect that insurers would voluntarily write certain market segments. Such adjustments are appropriate when certain classifications continue to demonstrate disproportionate representation after being identified as credit eligible.

Measuring the average residual market share for credit eligible risks by operator class provides an indicator as to whether or not there is value in enhancing the credit factor beyond 1.0 in order to encourage insurers to voluntarily write the risk. Assuming the 5% residual market share standard for credit eligibility had been used since 2009, the residual market shares used to develop the MAIP credit offer effective April 1, 2009 and the proposed credit offer effective April 1, 2012 produce the average residual market shares for credit eligible risks shown below⁴.

	Residual Market Share	for Credit Eligible Risk
Operator Classification	Sept. 2008 - Aug. 2009	Sept. 2010-Aug. 2011
Licensed 6+ Years, Under Age 65	7.7%	8.9%
Licensed 6+ Years, Age 65 and over	7.9%	6.9%
Licensed 4-6 Years, Principal Operator	10.7%	8.9%
Licensed 4-6 Years, Occasional Operator	9.0%	7.9%
Licensed 1-3 Years, Principal Operator	15.1%	14.7%
Licensed 1-3 Years, Occasional Operator	8.7%	8.6%
Business Use	9.1%	6.1%
Total (excl. M/M)	9.0%	9.3%

The above chart indicates that the most recent average residual market shares within the credit eligible market are reasonably uniform across operator class, with the notable exception of principal operators licensed less than three years.

This situation seems to indicate that a credit factor greater than 1.0 might be appropriate for market segments where the residual market share exceeds the highest average residual market share for any one operator class⁵. If such a factor was applied, the degree to which the average credit adjusted MAIP

⁴ Both estimates are based on the total market exposure data underlying the market share in CAR Docket #AC11.03, Exhibit 11, page 9. The residual market share used for the April 1, 2009 credit offer is from in CAR Docket #AC08.06, Exhibit 7, page 7.

⁵ While it may seem reasonable to specifically adjust credits for the operator class with the highest residual market share among credit eligible risks, there is a range of residual market share surrounding the averages for all classes.

premium exceeds the value of the average MAIP premium adjustment that would apply in the event of an assignment is the value of the "enhancement" to reduce the disproportionate representation of certain market segments in the residual market. The following table provides an illustration of this concept.

	2011 Credit	•	Incentive	4/1/11 Credit Adjusted
Residual Market	Eligible*	4/1/11 Average MAIP	Credit	Average MAIP
Share Range	Exposures	Liability Base Rate**	<u>Value</u>	<u>Liability Base Rate**</u>
1-[5.0%, 8.0%)	150,401	\$1,159.88	1.00	\$869.91
2-[8.0%, 11.0%)	233,358	\$1,192.04	1.00	\$1,192.04
3-[11.0%, 17.0%)	49,387	\$1,591.99	1.00	\$1,591.99
4-[17.0%, 23.0%)	10,511	\$2,230.27	1.25	\$2,78 7.8 4
5-[23.0%, 29.0%)	1,403	\$2,618.86	1.50	\$3,928.29
6-[29.0%, 35.0%)	3,872	\$2,654.03	1 <i>.</i> 75	\$4,644.55
7-[35.0%, 41.0%)	0	N/A	2.00	N/A
8-[41.0%, 47.0%)	216	\$2616.00	2.25	\$5,886.00
9-[47.0%, 100.0%]	0	N/A	2.50	N/A
Total Credit Eligible	449,147	\$1,267.29		\$1,303.16

^{*}Excludes motorcycles and miscellaneous vehicles

The assignment of the credit values above was based on the following principles:

- 1. A credit factor greater than 1.0 was selected for residual market share groups whose lower bound exceeds the average highest average residual market share by operator class for credit eligible risks.
- 2. The incremental increase in credit factor is the same for each incremental change in residual market share group.

Based on these criteria, the resulting average credit adjusted MAIP liability rate is 102.8% of the actual average MAIP liability rate for credit eligible risks. This provides a starting point for determining the indicated residual market share group for all market segments.

^{**} Not adjusted for average merit rating factor

It is difficult to know in advance what market segments the industry will pursue in any given year. In the interests of fairness, any credit offering should return the same credit value for the same residual market share.

Determining Indicated Residual Market Groups Over Time

Since there many reasons individual insurers may pursue or withdraw from certain market segments in any given year, all of which will affect residual market share, the process for determining credit eligibility and values must consistently recognize changes over time. The process must be able to accommodate market segments where residual market share is increasing as well as decreasing.

One method for doing this is to develop decision logic for determining a market segment's residual market share group using the residual market shares underlying each of the two most recent credit programs in addition to the most recent residual market share data. This exercise will reveal whether or not the residual market share of a particular market segment is changing enough to warrant a change in residual market share group, and possibly a change in credit factor.

For example, the "indicated" residual market share group for operators licensed more than six years who are under the age of 65⁶ in Revere could be determined as follows:

- 1. The residual market share in Revere underlying the 2010 credit program was 5.04%⁷. Based on the previously defined residual market share groups, the residual market share group would be 1.
- 2. The residual market share in Revere underlying the 2011 credit program was 4.89%. Based on the previously defined residual market share groups, the residual market share group would be 0.
- 3. The residual market share in Revere underlying the proposed 2012 credit program was 5.78%. Based on the previously defined residual market share groups, the residual market share group would be 1.

This market segment presents an interesting situation when it comes to determining residual market share group. The residual market share for this segment has fluctuated around a boundary for residual market credit values. In two of the past three years, it was eligible for credit in residual market group 1. Variation about a residual market share boundary should not automatically change a market segment's eligibility for credit, or the value of the credit. In this case, since two of the three years indicate the same residual market share group, the proposed residual market share group for 2012 should be set

⁶ Operators licensed more than six years who are under the age of 65 currently constitute approximately 70% of all credit eligible risks.

⁷ See CAR Docket #AC09.09, Exhibit 4, page 10.

⁸ See CAR Docket #AC10.06, Exhibit 1, page 6

⁹ See CAR Docket #AC11.03, Exhibit 11, page 9

equal to 1. CAR's proposed 2012 credit offer does not include this market segment because the segment was not credit eligible in the prior year.

As another example, consider the "indicated" residual market share group for operators licensed more than six years who are under the age of 65¹⁰ in Lowell:

- The residual market share in Lowell underlying the 2010 credit program was 6.91%¹¹. Based on the previously defined residual market share groups, the residual market share group would be 1.
- The residual market share in Lowell underlying the 2011 credit program was 7.07%¹². Based on the previously defined residual market share groups, the residual market share group would be 1.
- The residual market share in Lowell underlying the proposed 2012 credit program was 7.31%¹³. Based on the previously defined residual market share groups, the residual market share group would be 1.

In this case, the residual market share group for this market segment has not changed in the last three years, thus strongly indicating that the 2012 residual market share group should remain unchanged along with the credit value associated with that group. CAR's 2012 credit offer proposes to reduce the current credit factor in this market segment by almost 50%.

Finally, consider an example of the "indicated" residual market share groups for principal operators licensed less than three years who have no formal driver training in Brockton:

- 1. The residual market share in Brockton underlying the 2010 credit program was 49.5%¹⁴. Based on the previously defined residual market share groups, the residual market share group would be 9.
- 2. The residual market share in Brockton underlying the 2011 credit program was 40.75%¹⁵. Based on the previously defined residual market share groups, the residual market share group would be 7.

¹⁰ Operators licensed more than six years who are under the age of 65 currently constitute approximately 70% of all credit eligible risks.

¹¹ See CAR Docket #AC09.09, Exhibit 4, page 10.

¹² See CAR Docket #AC10.06, Exhibit 1, page 6

¹³ See CAR Docket #AC11.03, Exhibit 11, page 9

¹⁴ See CAR Docket #AC09.09, Exhibit 4, page 10.

¹⁵ See CAR Docket #AC10.06, Exhibit 1, page 6

3. The residual market share in Brockton underlying the proposed 2012 credit program was 34.43%¹⁶. Based on the previously defined residual market share groups, the residual market share group would be 6.

The residual market share of this market segment has steadily declined over the last three years indicating increased market willingness to voluntarily insure inexperienced operators. While this is certainly good news, fully reflecting the improvement in 2012 should be delayed until it is confirmed by next year's experience. In the instance where the indicated residual market share groups are different in each of the three years considered, the proposed 2012 residual market share group should be the median value of the three. This limits the likelihood that the residual market share group is reassigned in response to random variation in residual market results rather than a true signal of the industry's willingness to voluntarily insure this market segment. Using this decision logic, the proposed residual market share group should be 6 which is assigned a credit factor of 2.0. CAR's 2012 credit offer proposes to reduce the current credit factor in this market segment from 2.5 to 2.0.

A complete summary of the results of this decision logic and the selected residual market share groups is contained in Exhibit A of this attachment.

¹⁶ See CAR Docket #AC11.03, Exhibit 11, page 9

Reasonability Check on the Level of Credit Enhancement

Once final credit values are assigned based on a market segment's selected residual market share group, the average credit adjusted MAIP liability premium that results from the credit program needs to be checked relative to the average MAIP liability premium for that would apply had all such risk been assigned.

Based on the credit program outlined above, the expected average credit eligible MAIP liability rates for credit eligible risk is as follows:

	2011 Credit		Incentive	4/1/11 Credit Adjusted
Residual Market	Eligible*	4/1/11 Average MAIP	Credit	Average MAIP
Share Group	<u>Exposures</u>	Liability Base Rate**	<u>Value</u>	<u>Liability Base Rate**</u>
1-[5.0%, 8.0%)	151,750	\$1,166.95	1.00	\$875.21
2-[8.0%, 11.0%)	232,550	\$1,190.44	1.00	\$1,190.44
3-[11.0%, 17.0%)	38,873	\$1,418.83	1.00	\$1,418.83
4-[17.0%, 23.0%)	16,937	\$2,144.48	1.25	\$2,680.60
5-[23.0%, 29.0%)	3,631	\$2,561.90	1.50	\$3,842.84
6-[29.0%, 35.0%)	1,881	\$2,667.59	1.75	\$4,668.29
7-[35.0%, 41.0%)	3,499	\$2,670.34	2.00	\$5,340.69
8-[41.0%, 47.0%)	292	\$2,598.00	2.25	\$5,845.50
9-[47.0%, 100.0%]	216	\$2,616.00	2.50	\$6,540.00
Total Credit	449,147	\$1,267.29		\$1,332.25
Eligible	<u> </u>		<u>L</u>	

^{*}Excludes motorcycles and miscellaneous vehicles

After making adjustments for changes in residual market share, the credit value scale produces a credit adjusted average MAIP liability rate that is 105.1% of the non-credit adjusted average MAIP liability rate for credit eligible risks. This appears reasonable in light of the fact that the average residual market share for credit eligible principal operators that have less than three years of experience is approximately 5.0% more than the statewide average residual market share for all credit eligible operators.

^{**} Average merit rating factors were not available for the purposes of this illustration

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	Resid	Residual Market Share	hare	Indicated M	Market Sha	larket Share Range	Selected Market	2012	2011	·		Resi	Residual Market Share Ke	Keep O
Territory	2010	2011	2012	2010	2011	2012	Share Range*	Credit	Credit	Change		Gro		Credi
∺	0.85%	0.91%	1.21%	0	0	0	. 0	00.0	0.00			~	۱_	0.0
2	0.98%	0.98%	1.21%	0	0	0	0	0.00	0.00				_	1.00
د	1.23%	1.27%	1.56%	0	0	0	0	0.00	0.00					1.00
4	1.12%	1.16%	1.34%	0	0	0	0	0.00	0.00	•			~	1.0
Ŋ	1.71%	1.68%	1.99%	0	0	0	0	0.00	0.00	,		7	_	1.25
9	1.62%	1.70%	2.02%	0	0	0	0	0.00	0.00	•			10	1.50
7	2.18%	2.27%	2.74%	0	0	. 0	0	0.00	0.00	ı	-	J	"	1.75
80	1.97%	2.08%	2.39%	0	0	0	0	00:0	0.00	į				2.00
6	3.14%	3.31%	3.88%	0	0	 0	0	00.0	0.00					2.25
10	2.63%	2.77%	3.10%	0	0	0	0	0.00	0.00				•	2.50
11	2.10%	2.13%	2.44%	0	0	0	0	00:0	0.00	Ì				
12	2.47%	2.63%	2.94%	0	0	0	0	00:0	0.00	ţ				
13	4.47%	4.39%	4.94%	Ō	0	0	0	0.00	0.00					
14	4.29%	4.29%	4.86%	0	. 0	0	0	00.0	0.00	,	٠			
15	5.04%	4.89%	5.78%		0	,	1	1.00	0.00	1.00				
16	10.13%	899.6	9.10%	. 7	.2	2	2	1.00	0.75	0.25		-		
17	2.12%	2.42%	2.38%	0	0	0	0	00.0	0.00	,				
18	6.02%	6.73%	6.60%	Н	-	1		1.00	0.35	0.65				
19	3.87%	4.41%	4.67%	0	0	0	0	0.00	0.00					
20	6.90%	8.11%	8.22%	ᆏ	7	. 2	. 2	1.00	0.75	0.25				
21	9.24%	10.27%	10.21%	. 2	7	2	2 .	1.00	0.85	0.15				
22	11.76%	11.59%	12.49%	æ	က	en	æ	1.00	0.85	0.15				
23	3.69%	4.10%	4.40%	Ö	Ö	0	0	0.00	0.00					
24	3.04%	3.21%	3.40%	0	0	0	0	0.00	0.00	ı				
. 25	2.63%	2.75%	2.81%	0	0	0	0	0.00	0.00	,				.—
56	5.01%	5.59%	800'9	ਜੰ	\leftarrow	Ħ.	1	1.00	0.35	0.65				
27	0.75%	0.76%	0.95%	0	0	0	0	0.00	0.00	1				
40	11.28%	13.30%	13.34%	m	m	6 0	m	1.00	0.85	0.15				
41	6.91%	7.07%	7.31%	ᆏ	-	1	.	1.00	0.35	0.65				
42	10.84%	11.66%	9.77%	2	m	. 5	2	1.00	0.85	0.15				
43	800.6	8.67%	8.34%	2	2	2	. 2	1.00	0.75	0.25				
44	9:36%	8.38%	9.18%	. 2	2	2	2	1.00	0.75	0.25				•
45	8.24%	8.19%	9.19%	2	2	2	2	1.00	0.75	0.25				
			:											-

a. If all 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

If all three years indicate a different residual market share group, select the median residual market share group

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Residual	Market Share Keep Out	Group Credit	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								-															F
		Change		ı		. 1					1	1	ı	1	1		1		1	t	•		0.65	0.25		ı	ı	3	1.		-1		1	ı	
	2011	Credit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.75	0.00	0.00	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2012	Credit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Selected Market	Share Range*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
a	e Range	2012		0	0	0	0	0	0	0	0	0	0	0	O	0	0	0	0	0	0	0		. 2	0	0	0	0	0	0	0	0	0	0	0
	Indicated Market Share Range	2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	П	2	0	0	0	0	0	0	0	0	0	0	0
	Indicated	2010	. 0	0	0	0	0	0	.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
	are	2012	0.26%	0.25%	0.31%	0.27%	0.35%	0.50%	0.47%	0.60%	0.72%	0.55%	1.08%	0.81%	1.25%	1.26%	1.38%	3.17%	0.86%	3.12%	3.04%	2.86%	6.45%	8.32%	3.17%	3.72%	1.54%	1.37%	0.20%	7.86%	1.72%	3.18%	1.45%	2.76%	2.87%
	Residual Market Share	2011	0.19%	0.21%	2.20%	0.23%	0.28%	0.41%	0.43%	0.49%	0.54%	0.40%	0.90%	0.54%	0.99%	1.02%	0.79%	2.24%	0.66%	2.71%	2.74%	2.40%	5.67%	8.52%	2.93%	2.97%	1.07%	1.10%	0.15%	3.18%	1.36%	3.43%	1.18%	1.97%	2.25%
. •	Residu	2010	0.28%	0.17%	0.25%	0.28%	0.38%	0.54%	0.41%	0.59%	0.51%	0.52%	1.35%	0.56%	1.43%	1.11%	0.79%	2.91%	0.59%	1.70%	2.99%	2.68%	5.32%	8.26%	2.94%	3.39%	1.44%	1.64%	0.16%	2.76%	1.75%	3.96%	2.18%	2.21%	2.43%
		Territory	1	2	m	4	2	9	7	∞	6	10	11	12	. 13	14	. 15	16	17	18	19	20	21	22	23	24	25	26	27	40	41	42	43	4	45

- a. If all 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

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	Credit	0.00	1.00	1.00	1.00	1.25	1.50	1.75	2.00	2.25	2.50							•				•												
Residual Market Chare		0	н	2	E	4	S	9		∞	6																					:		
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	Change		,	, I		0.75		0.75	0.75	0.30	0.75	0.30	0:30	0:30	0.30	0.20	-0.25	0.30	-0.25	-0.50	-0.50	-0.25	-0.25	0.20	0:30	0.20	0.20	,	-0.25	-0.50	-0.25	0.20	0.20	-0.25
2011	Credit	0.00	0.00	0.00	0.00	0.25	00'0	0.25	0.25	0.70	0.25	0.70	0.70	0.70	0.70	0.80	1.50	0.70	1.50	1.50	1.50	1.50	1.50	0.80	0.70	0.80	0.80	0.00	1.50	1.50	1.50	0.80	0.80	1.50
2012	Credit	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.00	1.25	1.00	1.00	1.25	1.25	1.00	1.00	1.00	1.00	0.00	1.25	1.00	1.25	1.00	1.00	1.25
Selected Market	Share Range*	0	0	0	0	1	0	1		2	.	2		. 2	2 .	3	4	2	4	m,	£0	4	4	£	2	က	æ	0	4	E	4	ώ.	m m	4
	, . : _									٠.									÷				٠.										:	
re Range	2012	0	0	0	0	.1	0	1,	1	2	1	7	1	2	2	m	æ	1	4	က	æ	4	æ	m	. 2	7	7	0	4	m	m,	m.	E,	4
Indicated Market Share Range	2011	0	0	0	0	1	0	-		2	1	7	Н,	2	2	£	4	7	4	æ	3	4	4	m	5	ო	33	0	2	က	4	m	ന	4
Indicated	2010	0	0	0		1	0	П	, ,	⊣	⊣	. 	ᆏ	7	7	7	4	7	æ	æ	4	4	4	4	7	ĸ	4	<u>o</u>	4	ന	4	ന	m	4
9.7	2012	3.79%	3.30%	4.01%	3.56%	5.01%	4.87%	6.16%	6.37%	8.16%	7.28%	8.67%	7.17%	. 9.02%	10.29%	13.32%	15.58%	6.16%	18.20%	13.66%	14.02%	17.41%	14.84%	13.63%	8.01%	10.74%	10.91%	2.68%	22.66%	14.13%	15.06%	11.91%	14.18%	19.75%
Residual Market Share	2011	3.40%	3.27%	3.88%	3.60%	5.13%	4.69%	6.27%	6.27%	8.00%	7.06%	8.34%	7.88%	9.75%	9.57%	11.55%	17.85%	9.30%	17.64%	16.56%	16.96%	20.13%	20.29%	14.61%	8.91%	14.89%	13.82%	2.88%	26.36%	15.67%	20.02%	13.91%	14.67%	20.51%
Residus	2010	3.04%	3.27%	3.90%	3.70%	2.28%	4.40%	6.21%	2.20%	7.93%	6.12%	6.80%	7.07%	10.00%	9.91%	896.6	18.41%	8.98%	12.75%	15.68%	17.53%	18.94%	18.25%	19.48%	8.18%	11.06%	17.47%	3.11%	22.48%	16.79%	21.16%	13.95%	14.40%	17.34%
	Territory L	1	. 7	Э	4		9	7	8	ق	10	11	12	13	14	15	16	17	18	19	50	21	22	23	24	25	26	27	40	41	42	43	44	45

- a. If all 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

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	Resid	Residual Market Share	hare	Indicated M.	Market Sha	arket Share Range	Selected Market	rket	2012	2011			Market Share	Keep Out
Territory	2010	2011	2012	2010	2011	2012	Share Range*	*a	Credit	Credit	Change		Group	Credit
H	%69.0	0.86%	1.04%	0	0	0	0		0.00	0.00	. 1		0	0.00
2	0.79%	0.69%	0.72%	0	0	0	0		0.00	0.00	1		Н	1.00
÷	0.97%	0.93%	1.21%	0	0	0	0		0.00	0.00			2	1.00
4	0.87%	1.02%	1.07%	0	0	0	0		0.00	0.00			က	1.00
5	1.49%	1.41%	1.73%	0	0	0	0		0.00	0.00	1		4	1.25
9	1.24%	1.64%	1.76%	0	0	0	0		0.00	0.00	1 .		2	1.50
7	1.47%	2.38%	2.53%	0	0	0	0		0.00	0.00			9	1.75
8	1.79%	1.84%	2.10%		0	0	0		0.00	0.00			7	2.00
б	2.92%	3.01%	3.36%	0	0	Ó	0	-	0.00	0.00		. •	∞	2.25
10	2.98%	2.56%	1.80%	0	0	0	0		0.00	0.00	1		6	2.50
11	1.84%	1.96%	1.75%	0	0	0	0		0.00	0.00	,			
12	2.17%	2.52%	2.26%	0	0	0	0		0.00	0.00	4			
. 13	3.42%	4.56%	4.95%	0	0	0	0		0.00	0.00	ı			
14	2.12%	3.72%	4.12%	0	0	0	0		0.00	0.00	i			
15	7.14%	7.44%	4.35%	H	1	0			1.00	0.35	0.65	,		•
16	12.30%	11.36%	10.97%	ED.	m	2	33		1.00	0.85	0.15			
17	1.75%	2.16%	4.39%	0	0	0	0		0.00	0.00	,		•	
18	4.52%	2.99%	5.36%		0	₽,	0		0.00	0.00				
19	2.60%	5.84%	5.99%	0	Н	1	н		1.00	0.35	0.65			
20	6.84%	5.88%	8.17%	. ⊢	1	. 2		,	1.00	0.35	0.65			
21	8.59%	10.18%	9.42%	2.	7	2	2		1.00	0.85	0.15			
22	6.15%	5.48%	9.93%	⊣	1	2.	1		1.00	0.35	0.65			
23	2.91%	3.86%	4.91%	0	0	0	0		0.00	0.00				
24	2.79%	4.77%	3.23%	0	0	0			0.00	0.00	ı			
25	3.41%	2.80%	3.24%	0	0	0	0		0.00	0.00	ı			
. 26	5.28%	5.46%	5.65%	H	₩.	1		-	1.00	.0.35	0.65		,	-
27	0.62%	. 69.0	0.73%	0	0	0	0	٠	0.00	0.00				
40	3.39%	11.31%	10.87%	0	æ	. 2	2		1.00	0.85	0.15			
41	9.63%	9.37%	8.23%	. 2	2	. 2	. 5		1.00	0.75	0.25			
42	8.66%	9.28%	8.54%	. 2	7	7	. 2		1.00	0.75	0.25			
43	9.60%	5.08%	4.26%		-	0	1		1.00	0.35	0.65			
44	9.03%	9.16%	%06.9	2.	. 7	П	2		1.00	0.75	0.25			
45	4.72%	7.74%	6.40%	0	H	гч	1		1.00	0.75	0.25			
						-		-		٠				

a. If all 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

Indicated Private Passenger Auto Residual Market Share Group - Operator Class 20

												Residual	
	Resid	Residual Market Share	Share	Indicated	Indicated Market Share Range	are Range	Selected Market	2012	2011			Market Share Keep Ou	Keep Ou
Territoη	2010	2011	2012	2010	2011	2012	Share Range*	Credit	Credit	Change		Group	Credit
.	13.08%	14.45%	10.00%	æ	m	2	က	1.00	0.80	0.20		0	0.00
. 7	13.96%	10.54%	8.82%	æ	7	. 2	2	1.00	0.80	0.20		1	1.00
3	16.42%	14.07%	8.89%	m	m	2	EC.	1.00	0.80	0.20		2	1.00
4	13.25%	11.12%	7.49%	: m	M	1	က	1.00	0.80	0.20		m	1.00
2	21.33%	16.76%	13.95%	4	E	æ	c	1.00	1.50	-0.50		4	1.25
9	17.83%	13.42%	11.22%	4	æ	m	3	1.00	08.0	0.20		5	1.50
7	22.56%	18.40%	13.71%	4	4	m	4	1.25	1.50	-0.25		9	1.75
8	22.09%	19.22%	14.12%	4	4	m	4	1.25	1.50	-0.25		7	2.00
ග	23.55%	20.11%	16.67%	iΩ	4	m	4	1.25	1.50	-0.25		∞	2.25
10	27.21%	22.49%	16.30%	2	4	m	4	1.25	1.50	-0.25		6	2.50
. 11	21.82%	23.64%	16.09%	4	·C	က	4	1.25	1.50	-0.25			
12.	20.06%	17.85%	14.03%	4	4	æ	4	1.25	1.50	-0.25			-
13	29.23%	23.33%	17.03%	9	2	4	2	1.50	1.50	ı			
14	22.05%	23.34%	18.56%	4	2	4	4	1.25	1.50	-0.25			
15	50.53%	34.96%	31.56%	6	9	9	9	1.75	1.50	0.25			•
16	54.47%	42.96%	32.05%	თ	œ	9	∞ ×	2.25	2.50	-0.25	1		
17	22.34%	16.86%	17.73%	4	m	4	4	1.25	1.50	-0.25			
18	38.89%	31.94%	24.32%	7	9	·D	9	1.75	1.50	0.25		•	
19	44.85%	32.29%	17.22%	8	9	4	9	1.75	1.50	0.25			
50	36.52%	29.68%	29.89%	7	9	9	9	1.75	1.50	0.25			
21	43.33%	39.60%	32.09%	∞		9	7.	2.00	2.50	-0.50	-	4	
22	35.24%	37.48%	34.54%	7	7	9	7	2.00	2.50	-0.50			
23	50.14%	36.58%	25.43%	G	. 7	2	7	2.00	2.50	-0.50			
24	28.34%	20.76%	17.71%	Ŋ	4	4	. 4	1.25	1.50	-0.25			
. 25	28.71%	22.06%	16.77%	5	4	က	4	1.25	1.50	-0.25			
. 56	39.31%	37.10%	32.45%	7	7	9	7	2.00	2.50	-0.50			
27	15.09%	12.89%	9.47%	æ	m	2	m	1.00	0.80	0.20			
40	54.85%	47.16%	41.14%	6	٠ ص	∞	6	2.50	2.50	ı			
41	33.81%	28.94%	23.11%	9	S	2		1.50	1.50	i			
42	42.25%	31.78%	22.27%	∞	9	4	9	1.75	1.50	0.25			
43	42.90%	37.10%	29.90%	∞	7	9		2.00	2.50	-0.50			
44	41.65%	26.27%	21.69%	&	5	4	2	1.50	1.50	1			
45	49.51%	40.75%	34.43%	6	7	9	7	2.00	2.50	-0.50			1.
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a. If all 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

Indicated Private Passenger Auto Residual Market Share Group - Operator Class 21

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		<u>a</u>		1.0	1.00	1.0	1.2	1.50	1.7	2.00	2.25	2.50																							
	Residual	Market Share	eroup O	· +	2	က	4	5	9	7	80	6													,										٠
									٠																										
			<u>Change</u>		ı	* .	0.65		0.65	-0.35	0.65	0.65	0.65	0.65	0.25	1.00	-0.75	0.25	. ,	-0.75	0.25	0.15	-0.75	0.15	0.15	0.65	0.15	-0.75	ı	-0.25	-0.75	-0.50	0.15	0.25	0.15
	,	2011	Credit 0.00	0.00	0.00	0.00	0.35	00.00	0.35	. 0.35	0.35	0.35	0.35	0.35	0.75	0.00	1.75	0.75	0.00	1.75	0.75	0.85	1.75	0.85	0.85	0.35	0.85	1.75	0.00	1.75	1.75	1.75	0.85	0.75	0.85
		2017	Credit 0.00	0.00	0.00	0.00	1.00	0.00	1.00	00.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	00:00	1.50	1.00	1.25	1.00	1.00	1.00
	٠.																																		
		Selected Market	Share Range* 0	0	0	0		0	T,	0.		7	1	П	2	1	e E	33	0	က	7	₩.	m	m	2	1	7	ю	0	2	m .	4	m	m	m,
		Sele Sele	띩							-																									
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	c	are Kan	0 0	0	0	0		0	. 1	0	1	2	-	1	2	. 7	æ	4	0	m.	7		m	. 5	m.	0	0	æ	0	9.	. M	m	m	æ	m
		Market Sr	0	0	0	0	1	0	1	1	1	1	1	1	7	0	4	7	0	4	7	m	'n	ю	7	1	. 2	æ	0	Ŋ	m	4	m	7	m
		Indicated Market Share Range	0 0	0	0	0	Н	0	2	0	ᆏ		0	П	2	Н	m	B	,0	0	0	0	m	wi	2		2	Ŋ	. 0	3	m	4	M	m	m
		nare	<u>2012</u> 2.84%	2.10%	3.75%	3.00%	5.04%	3.04%	5.43%	3.52%	6.19%	8.48%	2.96%	5.92%	9.57%	8.75%	12.03%	17.62%	3.19%	16.64%	10.15%	6.45%	14.40%	10.73%	11.68%	0.19%	2.93%	13.61%	2.44%	29.02%	13.54%	11.80%	11.76%	11.45%	11.15%
		Kesiduai Market Share	<u>2011</u> 3.86%	2.04%	3.52%	2.61%	6.00%	4.77%	6.04%	6.18%	808.9	6.57%	%69.9	%69'9	8.77%	4.60%	17.61%	9.70%	0.15%	17.24%	9.77%	14.43%	15.46%	12.71%	10.96%	6.31%	10.98%	15.68%	1.87%	27.49%	15.44%	18.23%	13.12%	8.66%	11.85%
٠	1	Residu	4.10%	1.60%	3.99%	3.84%	6.25%	3.00%	9.18%	3.95%	2.60%	8.89%	4.81%	7.61%	9.64%	5.07%	16.67%	15.08%	4.74%	2.84%	3.28%	2.12%	16.51%	13.46%	9.30%	10.45%	9.23%	23.83%	3.66%	11.37%	15.54%	18.45%	16.00%	11.62%	12.83%
		,	ierritory 1	2	e	4	2	9	7	∞	6	10	11	12	. 13	14	15	16	17	18	19	20	21	22	23	24	. 25	56	27	40	41	42	43	44	45

a. If all 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

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	Keep Out	Credit	0.00	1.00	1.00	1.00	1.25	1.50	1.75	2.00	2.25	2.50								"																
Residual	Market Share	Group	0		2	m	4	2	9		ø3	თ																								
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		ent.			•									•												-								•		
	:	Change	1	1 22	ı			1		1	0.75	٠.	0.75	0.75	0.30	0.30	-0.50	ŧ	0.30	0.20	0.20	0.20	-0.50	-0.50	-0.50	0.30	0.30	0.20	1 7	0.20	0.20	0.20	0.20	0.20	0.20	
	2011	Credit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.25	0.70	0.70	1.50	1.50	0.70	0.80	0.80	0.80	1.50	1.50	1.50	0.70	0.70	0.80	0.00	0.80	0.80	0.80	0.80	0.80	0.80	
٠	2012	Credit	0.00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	000	1.00	1.00	1.00	1.00	1.00	1.00	
																			٠.				. *													
	Selected Market	Share Range*	0	0	0	0	0	0	0	0	1	0	₩.	Н	-	2	ന	<u>ن</u>	. 1	m	m	m	m	m	m [°]	. 2	ᆏ	ന	0	m	က	ന	ຕ	က	m	
		I	i																		÷										:					
	re Range	2012	0	0	0	0	0	.0	0	0	0	0	0		1	.	က	6	1	က	2	æ	m	3	7	2	Н	2	0	1	. 2	1	2	₩	2	
	Market Sha	2011	0	0	0	0	0	0	0	0	1	0	1	1	1	7	4	9	T.	6	ú	m	<u>က</u>	4	m	. 2	7	m	0	က	ec.	m	m	က	m	
. *	Indicated Market Share Range	2010		0	0	0	0	0	. 0	₩	∺	0	1	← 1	7	7	m	<u>ب</u>	რ	1	m	2	m	m	·m	ë.	0	က်	0	4	ო	۴.	က	m	пi	
-	<u> </u>	1	٠.		-																					,							-			
	hare	2012	2.19%	2.28%	2.40%	2.06%	3.04%	2.87%	2.92%	3.73%	4.50%	3.43%	4.82%	5.23%	5,34%	7.12%	12.71%	15.32%	6.22%	11.64%	10.38%	14.12%	13.37%	13.71%	9.23%	9.22%	6.09%	10.32%	1.49%	7.98%	8.24%	5.61%	8.63%	7.51%	9.88%	
	Residual Market Share	2011	2.19%	2.66%	3.00%	2.93%	3.43%	3.19%	3.75%	4.44%	5.13%	4.04%	5.92%	7.06%	7.82%	8.57%	20.53%	30.78%	7.80%	14.85%	12.45%	12.22%	16.55%	17.35%	15.83%	8.64%	9.29%	14.37%	1.88%	14.24%	11.41%	11.03%	12.83%	12.31%	14.34%	
	Residu	2010	2.15%	2.13%	3.12%	3.45%	3.34%	3.51%	4.07%	5.26%	5.02%	4.68%	6.46%	7.22%	8.27%	9.86%	16.82%	28.94%	16.08%	7.27%	13.47%	10.59%	16.41%	13.15%	15.60%	11.76%	3.45%	11.80%	2.31%	17.49%	16.50%	14.40%	13.88%	13.12%	16.22%	
		Territory	П	7	8	4	2	9	7	∞	6	10	11	12	13	14	15	16	17	18	. 19	20	21	22	23	24	25	. 52	72	40	41	42	43	44	45	

- a. If all 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

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	Resid	Residual Market Share	5hare :	Indicated M	1 Market Sh	arket Share Range	š	Selected Market	2012	2011			Market Share	Keep Ou
Territory	<u>2010</u>	2011	2012	<u>2010</u>	2011	2012	У Л	Share Range*	Credit	Credit	Change		Group	Credit
₽	0.19%	0.58%	0.62%	0	0	0			0.00	0.00		,	0	0.00
2.	0.39%	0.50%	0.49%	0	0	0		0	0.00	0.00	ι		ਜ	1.00
е	0.57%	0.77%	1.05%	0	0	0		0	0.00	0.00	t		2	1.00
4	0.54%	0.42%	0.57%	0	0	0	-	0	0.00	0.00	- 1		m	1.00
· S	0.52%	0.95%	1.19%	: 0	0	0	-	0	0.00	00.00	1		4	1.25
9	0.83%	0.76%	0.78%	0.	0	0		0	0.00	0.00	1 .		·Ω	1.50
. 7	1.10%	1.22%	1.22%	0	0	0		. 0	0.00	0.00	1		9	1.75
∞	1.05%	1.07%	0.98%	0	0	0		0	0.00	00:0	1		۲.	2.00
6	0.87%	1.19%	1.29%	0	0	0			0.00	0.00			∞	2.25
10	1.66%	0.73%	1.08%	0	0	0			0.00	0.00	•		Ф	2.50
11	0.72%	0.59%	1.08%	0	0	0		0	0.00	0.00	(
12	1.23%	1.27%	1.72%	0	0	0		0	0.00	0.00	· 1		4	
13	2.93%	2.13%	2.17%	0	0	0		0	0.00	0.00	ı			
14	1.26%	2.58%	3.50%	0	0	0		0	0.00	0.00	ı		- :	
15	2.19%	2.61%	3.93%	0	. 0	0		0	0.00	0.00	ı.			
16	17.88%	4.25%	6.21%	4	0	н	,	1	1.00	0.00	1.00			
17	2.56%	1.85%	1.97%	o	0	0		0	0.00	0.00	1			-
18	3.73%	3.36%	2.77%	0	0	0		0	0.00	0.00				
19	3.95%	3.85%	3.10%	0	0	Ο,		0	0.00	0.00	1			
20	6.41%	10.10%	7.04%	₽	7	1		. 1	1.00	0.85	. 0.15			
21	4.99%	3.98%	2.73%	0	0	0		0	0.00	0.00				
22	2.91%	7.16%	6.53%	0	⊣.	.			1.00	0.35	0.65			
. 23	1.68%	2.47%	3.30%	0	0	0		0	0.00	0.00			,	
24	1.45%	2.54%	4.92%	0	0	0		0	0.00	0.00	1			٠
25	0.00%	1.05%	0.49%	0	0	0			0.00	0.00	ì			
56	3.30%	4.16%	1.48%	0	0	0		. 0	0.00	0.00	· .			
27	0.18%	0.31%	0.57%	0	0	0		0	0.00	0.00	1	5		
40	2.74%	4.76%	2.81%	0	0	0		. 0	0.00	0.00	ì			٠
41	7.41%	4.88%	3.54%		0	0		0	0.00	0.00	ì			
42	4.49%	3.63%	3.28%	0	0	0		0	0.00	0.00	1			
43	4.83%	3.18%	2.34%	0	0	0	٠	0	0.00	0.00				
44	7.35%	5.70%	2.20%	T	1	0		1	1.00	0.35	0.65			
45	1.72%	3.23%	4.76%	0	0	0		0	0.00	0.00				

a. If all 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

Indicated Private Passenger Auto Residual Market Share Group - Operator Class 30

			-								Residua	···
	Resid	Residual Market Share	Share	Indicated	Indicated Market Share Range	Ire Range	Selected Market	2012	2011		Market Share	are Keep Out
Territory	2010	2011	2012	2010	2011	2012	Share Range*	Credit	Credit	Change	Group	Credit
	0.33%	0.50%	0.56%	0	0	0	0	0.00	0.00	1	0	0.00
2	0.68%	0.61%	%96.0	0	0	0	0	0.00	0.00	1	Ţ	1.00
6	0.51%	0.60%	0.77%	0	0	0	0	0.00	0.00		2	1.00
4	0.61%	0.74%	0.73%	0	0	0	0	0.00	0.00	ı	m ·	1.00
ß	0.86%	0.92%	1.31%	0	0	0	0	0.00	0.00	•	4	1.25
9	0.57%	1.17%	0.97%	0	0	0	. 0	00.00	00.00	ſ	5	1.50
7	0.79%	1.19%	1.29%	0	0	. 0	0	0.00	0.00	1. 	9	1.75
`∞	1.51%	1.36%	1.10%	0	0	0	0	0.00	0.00	r	7	2.00
6	1.14%	1.61%	1.80%	0	0	· 0	. 0	0.00	0.00	i	∞	2.25
10	2.78%	2.28%	1.92%	0	0	0	0	0.00	0.00		6	2.50
11	0.95%	1.41%	1.60%	0	0	0	0	0.00	0.00	ı		
12	2.01%	2.46%	2.17%	0	0	0	0	0.00	0.00	ı		
. 13	1.55%	1.84%	2.59%	. 0	0	0	0	00.00	0.00	ť		
14	4.62%	3.35%	2.34%	0	0	0	0	0.00	0.00			
15	6.78%	3.24%	4.22%	, ,	0	0	0	0.00	0.00	1		
16	9.20%	6.22%	7.05%	. 2	1	1	1.	1.00	0.35	0.65		,
17	2.35%	1.65%	. %66.0	0	0		0	00.00	00.00	1		
18	5.21%	4.29%	5.49%	1	0	1		1.00	0.00	1.00	-	
19	0.89%	0.98%	1.49%	0	0	0	0	00.00	0.00	1	٠	
20	5.28%	0.68%	0.79%	н	0	0	0	0.00	0.00	ı		-
21	9.63%	7.85%	6.55%	2	П	1	7	1.00	0.75	0.25		
22	3.57%	1.64%	9.91%	0.	0	7	0	0.00	0.00	. 1		
23	1.20%	1.62%	1.63%	0	0	0	0	0.00	0.00	1		
24	1.98%	1.80%	3.61%	0	0	0	0	0.00	0.00	1		
. 25	1.43%	2.15%	1.32%	0	0	0	0	0.00	0.00	. 1		
. 26	3.53%	3.37%	0.59%	0	0	0	0	0.00	0.00	1		
27	0.30%	0.39%	0.43%	0	0	0	0	0.00	0.00	i .		
40	1.78%	0.05%	%60.0	0	0	0	0	0.00	0.00	ı		
41	1.05%	2.06%	1.75%	0	0	0.	0	0.00	0.00		-	
42	2.05%	2.92%	2.44%	0	0	0	0	0.00	0.00	1		
43	4.10%	2.32%	3.28%	0 .	0	0	0	0.00	0.00	1		
44	5.71%	6.14%	5.93%	1	-	1	T	1.00	0.35	0.65		
45	5.16%	4.71%	5.24%	1	0	Н	-	1.00	0.00	1.00		

- If all indicated residual market share group equal in all three years, select that residual market share group
 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

Indicated Private Passenger Auto Residual Market Share Group - Operator Class MM

•	Resid	Residual Market Share	Share	M hateribal M	Market Share Bases	O Daniel	tolocky between		7.		. Re		
Territory	2010	2011	2012	2010	2011	2012	Share Range*	ZUIZ Credit	Credit	Change	Mark	are	Keep Ou
H	1.76%	1.69%	1.89%	0	0	0	0			Cildiba	5	dionb	
2	1.91%	1.77%	1.62%	0	0	0		00.0	000	l i		· > +	96
æ	2.37%	2.20%	2.09%	0	0	. 0	o . O	00.0	0000			٦ ،	3 5
4	1.83%	1.56%	1.49%	0	0	0		0.00				7 (1	3 6
S	2.72%	2.28%	2.44%	0	0	0	0	0.00	000	. 1		٥ ٨	1.00
9	2.35%	2.19%	2.31%	0	0	0	0	00.0	000	• 1		• •	1 50
7 2	3.72%	3.18%	3.28%	0	0	0	0	0.00	0.00			ר ע	1.30
∞	3.35%	3.26%	3.50%	0	0	0	0	0.00	0.00	ı		o r	7.7
6	3.84%	3.47%	3.81%	0	0	0	0	0.00	0.00	1		- 00	2.25
10	3.97%	3.22%	4.06%	0	0		0	0.00	0.00			o	7.50
11	4.63%	4.17%	.4.34%	0		. 0	0	0.00	0.00	,			j 5
12	5.01%	4.45%	4.16%	н	0	0	0	0.00	0.00	. 1			
13	6.40%	5.47%	2.05%	н	П	1	П	1.00	0.35	0.65			
14	8:47%	7.01%	6.53%	. 7	1	-	← 1	1.00	0.35	0.65		٠.	
15	11.69%	11.23%	10.13%	m	33	2	æ	1.00	0.85	0.15			
16	11.45%	12.14%	6.95%	m		₽.	ĸ	1:00	0.85	0.15			
17	4.41%	4.12%	4.06%	0	0	0	0	0.00	0.00	1			
18	8.44%	6.84%	3.93%	5	-	0	· +1	1.00	0.35	0.65			
1.9	9.99%	5.19%	5.53%	7	Π .	₩.	1	1.00	0.35	0.65			
20	10.67%	10.25%	7.98%	2	7		2	1.00	0.85	0.15			* *.
21	12.87%	12.71%	10.70%	m	m	2	m	1.00	0.85	0.15			
22	16.39%	12.68%	10.15%	m	æ	2	m	1.00	0.85	0.15			
23	12.50%	7.81%	6.65%	m			. 1	1.00	0.75	0.25			
24	8.94%	3.83%	4.72%	2	. 0	0	0.	00.00	0.00	ı		•	
. 25	4.45%	.3.68%	4.91%	0	0	0	0	0.00	0.00	•			
56	13.71%	8.28%	6.11%	ю	2	1	7	1.00	0.75	0.25			
27	1.64%	1.38%	1.34%	0	0	0	0	0.00	0.00	ı			
40	11.55%	11.56%	12.51%	m	ĸ	m	С	1.00	0.85	0.15	\$		
41	6.57%	6.94%	6.76%		П		1	1.00	0.35	0.65			
42	11.63%	10.04%	7.08%	Э	7	1	2	1.00	0.85	0.15			
43	7.43%	5.81%	5.86%	П	1	1	-	1.00	0.35	0.65			
44	12.58%	11.48%	10.89%	m	е	2	.	1.00	0.85	0.15			
4S	10.88%	9.72%	11.00%	2	7	m	. 2	1.00	0.75	0.25			
		-											

- a. If all 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 groupc. If all three years indicate a different residual market share group, select the median residual market share group



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RECORDS OF MEETING

ACTUARIAL COMMITTEE – SEPTEMBER 2, 2015

Members Present

Mr. Joseph F. Cofield – Chair

Mr. Geoffrey H. Arnold

Mr. Jonathan Blake

Mr. Alex F. Butensky

Mr. Christopher Dupill

Mr. Glenn R. Hiltpold

Mr. Tom Boyer⁽¹⁾

Mr. Michael Petrarca, Jr.

Ms. Lynellen Ramirez

Mr. John P. Tierney

Ms. Meredith M. Woodcock

Metropolitan P & C Insurance Company

Plymouth Rock Assurance Corporation

The Hanover Insurance Company

The Norfolk & Dedham Group

EM Freedman Insurance Agency, Inc.

Safety Insurance Company

MAPFRE U.S.A. Corporation

Amica Mutual Insurance Company

Arbella Insurance Group

Quincy Mutual Group

Liberty Mutual Group

Substituted for:

(1)Mr. John V. Kelly

Not in Attendance:

N/A

15.01 Records of Previous Meeting

The Committee unanimously voted to approve the Records of the Actuarial Committee meeting of June 23, 2015. The Records have been distributed and are on file with CAR's Secretary.

15.03 Quota Share Credits for Policies Effective April 1, 2016 and Later

Staff reviewed data exhibits requested by the committee at its last meeting, including loss ratio results for credit business, residual market share exhibits, and summary exhibits outlining the historical credit offers and relevant Division of Insurance (DOI) communications related to credits since 2010.

Staff then reviewed the following alternate credit models reflective of committee discussion at its last meeting:

- The current methodology as codified in Rule 29: estimates 74% reduction in credit eligible exposures and 64% reduction in available credit premium
- Freeze credits at 2015 factors for 2016: estimates no change in credit eligible exposures or available credit premium

- Average of current indications and prior year approved credit factors: estimates no change in credit eligible exposures and 32% reduction is available credit premium.
- Relative Range Methodology: estimates 23% reduction in credit eligible exposures and 22% reduction in available credit premium

Based on prior Committee discussions, the so-called Relative Range model attempts to define which class/territory cells are disproportionately represented in the Plan in light of the continued depopulation in all cells. The Relative Range model determines a residual market size threshold of 3.5%, which is 70% of the current threshold. This result is derived by comparing the current state-wide residual market size of 1.38% to the "target" residual market size of 2.00%. Residual market share groupings are then determined using market share ranges similar to those defined in the current Rule. The revised market share groupings are applied to all three years of data underlying the credit indications.

Mr. Geoffrey Arnold presented an alternate method for consideration, which determines the class/territory residual market size threshold of 2.5% to trigger credit eligibility. This definition of "disproportionate representation" is 50% of the current threshold and is derived by comparing the current state-wide residual market size of 1.38% to the 2012 market share of 2.75%. Upper residual market share range groupings are also redefined by the same 50% factor. The adjusted market share ranges are applied to the current year of data only. This method results in an estimated 1.3% reduction in credit eligible exposures and a 1.6% reduction in available credit premium.

Mr. Arnold noted his concern that other methods under consideration may not address the requirement of M.G.L. c. 175, §113H 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". Specifically, he pointed out that his proposed model continues the availability of credits in the towns of Chelsea, Hyde Park, Dorchester, Roxbury, E Boston, Holyoke, Lowell, Springfield, Lynn, Lawrence, and Brockton, which are towns where the need for credits was reinforced by the Commissioner in a letter in 2009.

Mr. Joseph Cofield distributed and reviewed an exhibit that modeled historical residual market shares by cell as compared to the statewide average. The model calculated credit premium using a factor of 1.0 for all cells with residual market shares at least two times the statewide average. Results for both the three and five year credit indications by classification and territory were included in the exhibit.

Mr. John Tierney distributed an analysis that projected the available credit exposures and premium under each model looking two years ahead and assuming that the market conditions remain as they are currently.

The current residual market share group methodology showed a decrease in credit eligible exposures of 77.3% from the current 2015 level included in the credit indications, as well as a decrease of 68.4% in credit eligible premium. The Relative Range methodology showed a decrease in credit eligible exposures of 51.0% from the current 2015 level included in the credit indications, as well as a decrease of 46.9% in credit eligible premium. The PRAC proposal showed an increase in credit eligible exposures of 48.6% from the current 2015 level included in the credit indications, as well as an increase of 37.0% in credit eligible premium.

Mr. Tierney observed an approximate 4:1 ratio of statistically reported credit premium to statistically reported Quota Share assigned premium dating back to the end of the first year of the DOI Residual Market Share Group methodology implementation, using data reported through March, 2013. As of July 2015, that ratio has grown to approximately 8:1, reflective of an increasing credit population and a reduction in the size of the residual market. Mr. Tierney concluded that the two year projection of

the Relative Range methodology results in a 4:1 ratio: a reasonable result to preserve the value of a credit without creating a disproportionate market for the transfer of excess credits.

Considerable committee discussion followed. Some members opined that the reduction in the size of the residual market is driven more by the competitive voluntary rates, and that a reduction in credits will not reverse this trend. However, those members suggested that if an increase in assignments is observed, then the formula is self-correcting. Other members, though, suggested that the self-correcting formula is overly responsive and therefore disruptive.

In order to determine whether there was a consensus forming, the Chair asked each committee member to identify his or her position. Five members supported the significant reduction in credits, favoring the current formula. However, 4 of those 5 would support the more gradual reduction resulting from the Relative Range model. Three members agreed that a reduction in credit volume is justified, but supported a more moderate reduction.

Two members favored little or no change to the current credits as resulting from the PRAC proposal, and expressed concern over the indicated decrease given the statutory requirements and previous Division of Insurance directives.

A brief discussion ensued relative to the Take-Out credit provision of Rule 29. The Committee unanimously voted to make no changes to Take-Out credits. The Committee then directed Staff to update the current model, the Relative Range model, and the PRAC model in order to continue discussion of voluntary credits at the its next meeting scheduled for Wednesday, October 7, 2015 at 10:00 a.m.

TIMOTHY F. GALLIGAN Financial Services Coordinator

Boston, Massachusetts September 11, 2015

ATTACHMENT LISTING

Docket #AC15.02, Exhibit #2	Attendance Listing
Docket #AC15.03, Exhibit #15	Alternate Method for 2016 Credit Offer Prepared by Geoffrey Arnold
Docket #AC15.03, Exhibit #16	Historical MAIP Percentages by Cell Exhibit Prepared by Joseph Cofield
Docket #AC15.03, Exhibit #17	2 Year Projection Analysis Prepared by John Tierney

ACTUARIAL COMMITTEE MEETING SIGN-IN SHEET September 2, 2015

Individual's Name	Company / Agency
MATHAN BLANK	HANDVER
Thomas Bayer	MAPFRE
Chris Durice	EM Freedman Insurance
Meredith Woodcock	Liberty Mutual Insurance
Alex Butenshy	Norfolk & Dedham
Lynellen Ramirez	Arbella
Mike Petranca	AMICA
JOHN TIERLEY	LUNCY MOTVAL
Geoffrey Arnold	Plymonth Rock
Glem Hitpur	Safoty Insuance
Dotalie Hubbles	CAR
Voe Coffeed	Metropoiton
Tgally S'honnon Chiu	CAL
Shannon Chia	(AR
<u>.</u>	

ACTUARIAL COMMITTEE MEETING SIGN-IN SHEET September 2, 2015

Individual's Name	Company / Agency
Peros Jones	PRJ Assocutes
Aller Chara	Arnella
Wendy Browne	CAR
HALL CHONDER	Acronate
Bruce Cregger	Encompass Ins.
Juson Cali Aras	MCAA
Ken Willis	Plymouth Rock
Sean Thompson	Hanover
Marian Adgate	CAR
Katy Robbins	CAR

MEMORANDUM September 2, 2015

TO: CAR Actuarial Committee

FROM: Geoff Arnold RE: 2016 Credit Offer

Today the CAR Actuarial Committee will continue to discuss MAIP Quota Share credits for policies effective April 1, 2016 through March 31, 2017. There were four approaches presented as part of the Meeting Notice and a fifth distributed subsequently, which – when compared to the current credit offer (itself not very different from those of the past several years) – would have the following impact:

	Δ in Credit	Δ in Potential
	Eligible	<u>Credit</u>
<u>Methodology</u>	Exposures	<u>Premium</u>
Market Share Group	-73.6%	-64.0%
Average of Mkt Shr Grp & Current	0.0%	-32.0%
Relative Range	-22.8%	-21.7%
Freeze	0.0%	0.0%
Indexed Market Share Group	-1.3%	-1.6%

We are concerned that none of the first three methodologies would comply with the requirement of M.G.L. c. 175, §113H 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."

This requirement has been addressed by the Commissioner of Insurance on two separate occasions – in a letter to CAR dated December 18, 2009¹, disapproving a proposed credit offer for 2010, and again in a very similar letter dated December 19, 2011², disapproving a proposed offer for 2012. In both instances, Commissioner Murphy made it clear that "MAIP credits are intended to control the size of the residual market and to provide an incentive for companies to voluntarily write private passenger auto insurance in those territories and classifications that would otherwise be disproportionately represented in the MAIP" and that any credit offer must be measured against that standard and that standard alone.

It is particularly important to note that in 2011 the Commissioner disapproved the very methodology that had been adopted two years earlier, as it was no longer consistent with the goals of the credit offer as stated above. It could not have been made any more clear that blind reliance on any methodology, no matter how relevant to past circumstances, is no substitute for sound analytics – and that each year's offer must be analyzed with respect to the statutory requirement that no territory or classification be disproportionately represented in the MAIP.

Since the more recent of the two credit offer rejections, the size of the MAIP has been halved – from 2.8% of exposures in 2011 to 1.4% today. We have not only met the goal (2.0%) for reducing

² Actuarial Committee: CAR Docket #AC15.03, Exhibit #14

¹ Actuarial Committee: CAR Docket #AC15.03, Exhibit #13

the size of the residual market but have exceeded it by a significant margin. Everyone involved deserves a pat on the back for that. But it remains as important as ever to maintain a focus on the disproportionate representation of the territories and classifications identified by the Division of Insurance as being of particular concern.

On both occasions the towns of Chelsea, Hyde Park, Dorchester, Roxbury, East Boston, Holyoke, Lowell, Springfield, Lynn, Lawrence, and Brockton were analyzed, and the need for credits was reinforced. In the 2009 letter the Commissioner stated "Credit premium for the 11 territories noted above, as a group, shall increase by at least 25 percent, and no individual territory in the group shall have a reduction in premium of more than 15 percent." Two years later, MAIP usage for this group of towns was specifically noted as having risen from 3.0 times the statewide average to 3.4 times the statewide average. As a result, CAR's initial 2012 credit offer – which had held the percent of credit eligible exposures flat and decreased potential credit premium by about 10% – was revised, and a 4.1% exposure / 37.2% premium increase was implemented.

Largely as a result of this stronger 2012 credit offer – which has been maintained at a similar level for the three subsequent years – insureds in the eleven territories are now only 2.6 times as likely to be placed in the MAIP as average. Coincidentally, this degree of disproportionate representation is now very close to that of the other category of concern to the DOI (inexperienced principal operators), who are 2.4 times as likely to be placed in the MAIP as average. A credit offer sufficient to "enhance the prospects that no classification or territory is disproportionately represented in the plan" is essential – not only to maintain this favorable trend, but also to keep the MAIP at its impressively small volume as well.

The four credit offers approved for the April 1, 2012 through March 31, 2016 period have been sufficient to not only halve the size of the MAIP but also to reduce the disproportionate representation of the eleven key towns from 3.5 to 2.6 times average. A significant reduction from this level of credits can only result in a reversal of both trends. If our desire is to keep things stable, then the credit offer must be stable as well – either the freeze modeled by CAR³ or the Indexed Market Share Group approach – either of which produces a credit offer consistent with both the Massachusetts General Laws and the objectives repeatedly expressed by the Division of Insurance.

It is important to focus in particular on the impact of the credit offer on the eleven towns which remain of concern to the Division of Insurance. The five approaches before the Actuarial Committee differ widely in this respect. The following table, analogous to that containing the overall impact, measures solely the credit change for these towns:

	Δ in Credit	Δ in Potential
	<u>Eligible</u>	<u>Credit</u>
<u>Methodology</u>	Exposures	Premium
Market Share Group	-76.2%	-68.1%
Average of Mkt Shr Grp & Current	0.0%	-34.1%
Relative Range	-35.3%	-32.4%
Freeze	0.0%	0.0%
Indexed Market Share Group	-0.7%	-0.9%

³ Actuarial Committee: CAR Docket #AC15.03, Exhibit #5

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Contrary to one of the explicit goals of the MAIP Quota Share Credit system (and the statutory requirement), the first three approaches would have an even greater detrimental impact on the eleven towns most disproportionately represented in MAIP than they would on the market as a whole. While a freeze of course has an identical lack of impact anywhere, the Indexed Market Share Group approach affects the eleven towns to a lesser degree than average, mainly removing credits where they are needed least.

Six years ago, the Commissioner rejected a 26.4% decrease in credit-eligible exposures and a 43.3% decrease in available credit premium, and he established a maximum decrease of five percent in credit premium as the criterion appropriate to the market conditions at that time. As noted above, the most recent indication is for a 73.6% overall decrease in credit-eligible exposures and a 64.0% overall decrease in available credit premium – much greater than the decreases objected to by the Commissioner in either 2009 or 2011. At the same time, the disproportionate representation of credit-eligible territories and classifications has moderated only slightly⁴. If one believes, as the Division of Insurance apparently does, that MAIP keep-out credits are responsible for keeping disproportionate representation in check, then a severe reduction in those credits is not appropriate. Once again – as it did in 2011 – the incumbent methodology requires some revision in order to remain consistent with goals of the credit offer.

The Indexed Market Share Group methodology replaces the ranges used in the current Market Share Group methodology with ones that are bounded by constant levels of disproportionate representation in MAIP (as shown in the supplementary exhibit distributed at today's meeting) — enabling us to achieve this objective. The current lower bound of 5% for Group 1, for example, was equivalent to 1.82 times the average at the time the Market Share Group methodology was devised. If this bound is maintained at a level 1.82 times average (and others similarly adjusted), there need be no other change to that methodology. The exhibit does just this, and the result is a reduction in Credit Eligible Exposures of 1.3% and a reduction in Potential Credit Premium of 1.6%.

CAR has a responsibility to submit a proposal to the Commissioner that is consistent with the statute. In order to do so, CAR should assign a sufficient volume of credits to cells that are disproportionately represented in the MAIP to ensure that those cells are not overrepresented in the MAIP. The assignment of credits to those cells should certainly be based on the degree to which their MAIP share currently exceeds the state-wide average – consistent with current methodology – but either a freeze at the 2015 level or the Indexed Market Share Group approach is also appropriate at this time.

Thank you for your consideration of these comments.

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⁴ Actuarial Committee: CAR Docket #AC15.03, Exhibit #9 suggests that this trend may be reversing. An apples-to-apples comparison of April-May 2015 to April-May 2014 shows that the ratio of Credit-Eligible Residual Market Share to Non-Credit-Eligible Residual Market Share has risen from 3.5 to 3.9.

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Relative Range Methodology (Plymouth Rock) Summary by Rate Class

4/1/2015 Credit Factors

4/1/16 Indicated - Relative Ranges

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
<u>Class</u>	Exposures	Exposures	Credit Premium	Exposures	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,070,466	293,247	437,702,290	293,247	0.0%	437,702,290	0.0%
15	782,127	8,091	10,891,112	8,091	0.0%	10,891,112	0.0%
17	144,383	60,950	115,233,840	60,950	0.0%	115,233,840	0.0%
18	55,019	1,192	1,939,846	337	-71.7%	658,180	-66.1%
20	34,282	33,449	116,472,201	31,851	-4.8%	113,008,894	-3.0%
21	15,499	5,813	14,215,271	4,196	-27.8%	10,479,364	-26.3%
25	74,621	3,973	14,864,458	3,484	-12.3%	13,212,120	-11.1%
26	65,541	372	1,115,203	0	-100.0%	0	-100.0%
30	62,038	523	798,566	296	-43.5%	419,288	-47.5%
M/M	166,422	19,116	4,231,745	18,652	-2.4%	4,123,902	-2.5%
Total	4,470,398	426,727	717,464,534	421,103	-1.3%	705,728,990	-1.6%

% of Total Mkt. Exp. 9.5% 9.4%

	Estimated Cred Credit Utilizatio		678,766,758 94.6%	Estimated Cred Credit Utilization	667,285,375 94.6%		
Original I	Ranges:			Relative Rang	ges:		
<u>Group</u>	Lower	<u>Upper</u>	<u>Factor</u>	<u>Group</u>	Lower	<u>Upper</u>	<u>Factor</u>
0	0.00	0.05	0	0	0.000	0.025	0
1	0.05	0.08	1	1	0.025	0.040	1
2	0.08	0.11	1	2	0.040	0.055	1
3	0.11	0.17	1	3	0.055	0.085	1
4	0.17	0.23	1.25	4	0.085	0.115	1.25
5	0.23	0.29	1.5	5	0.115	0.145	1.5
6	0.29	0.35	1.75	6	0.145	0.175	1.75
7	0.35	0.41	2	7	0.175	0.205	2
8	0.41	0.47	2.25	8	0.205	0.235	2.25
9	0.47	1.00	2.5	9	0.235	1.000	2.5

1.38%	Current	Residual	Market	Rate	Usina	Data	Through	Mav.	2015
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^{2.8%} Base Cession Rate From 2012 Division of Insurance Decision (Bulletin 953)

Relative Range Calculation:

- 1. Divide the actual overall residual market share by the target (1.38 / 2.75) = 0.502
- 2. Round the result from 1. above to the nearest 10th = 0.5
- 3. Multiply the result from 2. above by the original average residual market share threshold $(0.5 \times 0.05) = 0.025$
- 4. Adjust the remaining bands in the same manner, rounding to 3 decimal places

^{5.0%} Residual Market rate Threshold Point, Credits were given for 5.0% and above (2012-2015)

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 - Relative Ranges

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential <u>Credit Premium</u>	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	178,846	0	0	0	0.0%	0	0.0%
2	240,517	1,071	2,136,317	1,071	0.0%	2,136,317	0.0%
3	516,709	2,389	4,958,166	2,389	0.0%	4,958,166	0.0%
4	328,044	1,323	3,128,040	1,323	0.0%	3,128,040	0.0%
5	503,612	2,979	6,640,413	2,979	0.0%	6,640,413	0.0%
6	337,265	1,686	4,381,658	1,686	0.0%	4,381,658	0.0%
7	346,203	13,242	21,955,577	13,242	0.0%	21,955,577	0.0%
8	198,142	6,783	11,898,661	6,783	0.0%	11,898,661	0.0%
9	197,535	8,959	16,771,593	8,248	-7.9%	15,432,923	-8.0%
10	95,365	4,425	8,333,668	4,425	0.0%	8,333,668	0.0%
11	72,051	622	2,067,094	622	0.0%	2,067,094	0.0%
12	193,543	7,214	14,969,401	7,214	0.0%	14,969,401	0.0%
13	209,132	17,789	26,280,639	17,789	0.0%	26,280,639	0.0%
14	71,888	6,624	14,066,453	6,624	0.0%	14,066,453	0.0%
15	25,481	2,572	5,523,585	2,416	-6.1%	5,123,559	-7.2%
16	13,716	12,349	19,409,286	12,203	-1.2%	19,177,210	-1.2%
17	17,221	394	935,879	394	0.0%	935,879	0.0%
18	16,024	13,819	20,313,141	13,819	0.0%	20,313,141	0.0%
19	15,535	507	1,369,708	507	0.0%	1,428,138	4.3%
20	17,850	14,698	22,950,553	14,698	0.0%	22,950,553	0.0%
21	47,126	45,990	92,918,729	45,990	0.0%	92,918,729	0.0%
22	15,070	15,070	32,426,892	14,943	-0.8%	32,133,792	-0.9%
23	44,947	2,840	7,306,664	2,653	-6.6%	5,960,276	-18.4%
24	24,678	1,240	2,582,239	468	-62.3%	1,607,971	-37.7%
25	16,489	501	1,420,658	455	-9.2%	1,274,253	-10.3%
26	21,310	1,627	4,331,949	1,335	-18.0%	3,449,928	-20.4%
27	410,054	1,599	2,794,681	0	-100.0%	0	-100.0%
40	20,429	16,563	22,445,108	16,411	-0.9%	22,189,076	-1.1%
41	58,493	50,381	59,922,425	49,678	-1.4%	58,896,790	-1.7%
42	73,196	59,487	96,870,257	59,080	-0.7%	95,734,890	-1.2%
43	47,219	39,711	65,489,722	39,711	0.0%	65,489,722	0.0%
44	33,392	29,611	38,826,123	29,611	0.0%	38,826,123	0.0%
45	50,680	42,661	82,039,256	42,334	-0.8%	81,069,950	-1.2%
99	12,637	0	0	0	0.0%	0	0.0%
Total	4,470,398	426,727	717,464,534	421,103	-1.3%	705,728,990	-1.6%
0/ of Total I	Mist From	0.50/		0.40/			

% of Total Mkt. Exp. 9.5% 9.4%

Original R	langes:						
<u>Group</u>	Lower	<u>Upper</u>	<u>Factor</u>	<u>Group</u>	Lower	<u>Upper</u>	Factor
0	0.00	0.05	0	0	0.000	0.025	0
1	0.05	0.08	1	1	0.025	0.040	1
2	0.08	0.11	1	2	0.040	0.055	1
3	0.11	0.17	1	3	0.055	0.085	1
4	0.17	0.23	1.25	4	0.085	0.115	1.25
5	0.23	0.29	1.5	5	0.115	0.145	1.5
6	0.29	0.35	1.75	6	0.145	0.175	1.75
7	0.35	0.41	2	7	0.175	0.205	2
8	0.41	0.47	2.25	8	0.205	0.235	2.25
9	0.47	1.00	2.5	9	0.235	1.000	2.5

Commonwealth Automobile Reinsurers - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 10 Relative Range Methodology

	Danidu	al Mauliat	Ohara	la dia ata a	l Mix Ob a	n Danas	Colootod	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	al Market Aug-14	May-15	2014	d Mkt Shar 2015	2016	Selected Range*	Credits	2015 Credits	Change	Group	Credits	
1	1.17%	0.90%	0.73%	0	0	0	0	<u>Credits</u>	<u>Ciculo</u>	Change	<u>отобр</u> 0	0.00	
2	1.19%	0.92%	0.79%	0	0	0	0	_	_	_	1	1.00	
3	1.45%	1.06%	0.83%	0	0	0	0	_	_	_	2	1.00	
4	1.27%	0.98%	0.83%	0	0	0	0	_	_	_	3	1.00	
5	1.91%	1.44%	1.12%	0	0	0	0	-	-	_	4	1.25	
6	1.91%	1.46%	1.20%	0	0	0	0	-	-	-	5	1.50	
7	2.46%	1.81%	1.42%	0	0	0	0	-	-	-	6	1.75	
8	2.25%	1.64%	1.34%	0	0	0	0	-	-	-	7	2.00	
9	2.87%	2.03%	1.53%	0	0	0	0	-	-	-	8	2.25	
10	2.92%	2.18%	1.78%	0	0	0	0	-	-	-	9	2.50	
11	1.99%	1.51%	1.33%	0	0	0	0	-	-	-			
12	2.50%	1.93%	1.62%	0	0	0	0	-	-	-			
13	4.32%	3.11%	2.52%	0	0	1	0	-	-	-			
14	3.84%	2.79%	2.28%	0	0	0	0	-	-	-			
15	4.35%	2.67%	2.19%	0	0	0	0	-	-	-			
16	6.39%	4.97%	3.50%	1	0	1	1	1.00	1.00	-			
17	2.20%	1.81%	1.64%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.80%	1	0	1	1	1.00	1.00	-			
19	3.68%	3.20%	2.68%	0	0	1	0	-	-	-			
20	6.23%	4.87%	4.59%	1	0	2	1	1.00	1.00	-	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.08%	1	1	2	1	1.00	1.00	-			
22	9.85%	6.82%	5.90%	2	1	3	2	1.00	1.00	-	2016	437,702,290	293,247
23	3.63%	2.49%	1.85%	0	0	0	0	-	-	-			
24	2.15%	1.75%	1.41%	0	0	0	0	-	-	-	2015	437,702,290	293,247
25	2.15%	1.50%	1.24%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.06%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.93%	0.77%	0.64%	0	0	0	0	-	-	-			
40	7.63%	4.08%	2.87%	1	0	1	1	1.00	1.00	-		-	-
41	5.88%	3.11%	2.57%	1	0	1	1	1.00	1.00	-			
42	6.48%	4.37%	2.88%	1	0	1	1	1.00	1.00	-	<u>Pe</u>	ercent Change:	Percent Change:
43	5.28%	3.09%	2.51%	1	0	1	1	1.00	1.00	-			
44	7.95%	4.99%	4.33%	1	0	2	1	1.00	1.00	-		0.0%	0.0%
45	6.64%	3.49%	2.91%	1	0	1	1	1.00	1.00	-			
99	0.70%	0.56%	0.64%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.43%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 15 Relative Range Methodology

Residual

Keen

											Residual	Кеер	
		al Market			d Mkt Shai		Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	<u>Aug-14</u>	<u>May-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	0.32%	0.27%	0.30%	0	0	0	0	-	-	-	0	0.00	
2	0.29%	0.29%	0.28%	0	0	0	0	-	-	-	1	1.00	
3	0.38%	0.29%	0.26%	0	0	0	0	-	-	-	2	1.00	
4	0.30%	0.29%	0.27%	0	0	0	0	-	-	-	3	1.00	
5	0.44%	0.38%	0.31%	0	0	0	0	-	-	-	4	1.25	
6	0.58%	0.53%	0.43%	0	0	0	0	-	-	-	5	1.50	
7	0.56%	0.46%	0.43%	0	0	0	0	-	-	-	6	1.75	
8	0.78%	0.67%	0.63%	0	0	0	0	-	-	-	7	2.00	
9	0.78%	0.63%	0.52%	0	0	0	0	-	-	-	8	2.25	
10	0.71%	0.62%	0.52%	0	0	0	0	-	-	-	9	2.50	
11	1.12%	0.88%	0.77%	0	0	0	0	-	-	-			
12	0.88%	0.86%	0.75%	0	0	0	0	-	-	-			
13	1.46%	1.17%	0.94%	0	0	0	0	-	-	-			
14	1.65%	1.32%	1.18%	0	0	0	0	-	-	-			
15	1.42%	1.43%	1.25%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.14%	0	0	0	0	-	-	-			
17	0.79%	0.76%	0.89%	0	0	0	0	-	-	-			
18	2.45%	2.07%	2.02%	0	0	0	0	-	-	-			
19	2.18%	2.18%	1.81%	0	0	0	0	-	-	-			
20	2.70%	2.39%	2.41%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.25%	1	0	2	1	1.00	1.00	-			
22	8.10%	6.62%	5.91%	2	1	3	2	1.00	1.00	-	2016	10,891,112	8,091
23	2.82%	1.98%	1.48%	0	0	0	0	-	-	-			
24	2.99%	2.98%	2.44%	0	0	0	0	-	-	-	2015	10,891,112	8,091
25	1.73%	1.28%	1.20%	0	0	0	0	-	-	-			
26	1.99%	1.56%	1.38%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.26%	0.24%	0.20%	0	0	0	0	-	-	-			
40	2.44%	1.80%	1.20%	0	0	0	0	-	-	-		-	-
41	1.68%	1.28%	1.08%	0	0	0	0	-	-	-			
42	3.10%	3.10%	2.41%	0	0	0	0	-	-	-	<u>Pe</u>	ercent Change:	Percent Change:
43	1.59%	1.06%	0.96%	0	0	0	0	-	-	-		,	-
44	3.16%	2.11%	1.91%	0	0	0	0	-	-	-		0.0%	0.0%
45	2.38%	1.83%	1.51%	0	0	0	0	-	-	-			
99	0.36%	0.26%	0.13%	0	0	0	0	-	-	-			
Tot	0.73%	0.62%	0.54%										

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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 17 Relative Range Methodology

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	re Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	<u>Aug-14</u>	May-15	<u>2014</u>	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	3.25%	2.47%	2.09%	0	0	0	0	-	-	-	0	0.00	
2	2.96%	2.03%	1.94%	0	0	0	0	-	-	-	1	1.00	
3	4.05%	2.61%	2.21%	0	0	0	0	-	-	-	2	1.00	
4	3.21%	2.63%	2.20%	0	0	0	0	-	-	-	3	1.00	
5	4.26%	3.06%	2.54%	0	0	1	0	-	-	-	4	1.25	
6	4.40%	3.57%	3.16%	0	0	1	0	-	-	-	5	1.50	
7	5.00%	3.57%	2.85%	1	0	1	1	1.00	1.00	-	6	1.75	
8	5.01%	3.58%	3.43%	1	0	1	1	1.00	1.00	-	7	2.00	
9	5.05%	3.56%	2.83%	1	0	1	1	1.00	1.00	-	8	2.25	
10	5.55%	3.98%	3.35%	1	0	1	1	1.00	1.00	-	9	2.50	
11	4.60%	3.99%	2.71%	0	0	1	0	-	-	-			
12	5.90%	4.74%	4.01%	1	0	2	1	1.00	1.00	-			
13	7.34%	5.15%	4.50%	1	1	2	1	1.00	1.00	-			
14	8.44%	5.78%	5.38%	2	1	2	2	1.00	1.00	-			
15	8.90%	6.45%	4.43%	2	1	2	2	1.00	1.00	-			
16	14.02%	9.76%	6.38%	3	2	3	3	1.00	1.00	-			
17	6.51%	5.57%	3.71%	1	1	1	1	1.00	1.00	-			
18	10.10%	7.78%	6.18%	2	1	3	2	1.00	1.00	-			
19	11.66%	7.72%	6.94%	3	1	3	3	1.00	1.00	-			
20	12.72%	10.84%	10.03%	3	2	4	3	1.00	1.00	-	<u>Availal</u>	ble Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	10.21%	3	3	4	3	1.00	1.00	-			
22	14.23%	10.75%	9.70%	3	2	4	3	1.00	1.00	-	2016	115,233,840	60,950
23	8.79%	6.11%	5.46%	2	1	2	2	1.00	1.00	-			
24	4.64%	3.61%	2.90%	0	0	1	0	-	-	-	2015	115,233,840	60,950
25	6.65%	4.56%	3.40%	1	0	1	1	1.00	1.00	-			
26	8.63%	5.64%	4.78%	2	1	2	2	1.00	1.00	-		Difference:	<u>Difference:</u>
27	2.51%	2.07%	1.52%	0	0	0	0	-	-	-			
40	12.55%	7.28%	5.44%	3	1	2	2	1.00	1.00	-		-	-
41	12.06%	6.14%	4.77%	3	1	2	2	1.00	1.00	-			
42	9.55%	4.71%	3.63%	2	0	1	1	1.00	1.00	-	<u> </u>	Percent Change:	Percent Change:
43	8.81%	5.59%	5.43%	2	1	2	2	1.00	1.00	-			
44	11.57%	6.62%	6.20%	3	1	3	3	1.00	1.00	-		0.0%	0.0%
45	12.13%	6.63%	6.56%	3	1	3	3	1.00	1.00	-			
99	0.83%	0.39%	0.43%	0	0	0	0	-	-	-			
Tot	5.17%	3.64%	3.09%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 18 Relative Range Methodology

	Residual Market Share			Indicato	d Mid Cha	a Danga	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	Aug-14	May-15	2014	d Mkt Shar 2015	2016	Range*	Credits	Credits	Change	Group	Credits	
1	1.12%	0.63%	0.61%	0	0	0	0	-	<u>Cicuis</u>	<u>Change</u>	<u>отоир</u> 0	0.00	
2	0.84%	0.55%	0.44%	0	0	0	0	_	_	_	1	1.00	
3	1.34%	0.92%	0.77%	0	0	0	0	_	_	_	2	1.00	
4	1.14%	0.86%	0.53%	0	0	0	0	_	_	_	3	1.00	
5	1.75%	1.26%	1.01%	0	0	0	0	_	_	_	4	1.25	
6	1.10%	1.13%	0.71%	0	0	0	0	_	_	_	5	1.50	
7	1.98%	1.31%	0.84%	0	0	0	0	-	_	_	6	1.75	
8	1.08%	0.94%	1.05%	0	0	0	0	-	-	-	7	2.00	
9	2.17%	1.57%	1.02%	0	0	0	0	-	-	-	8	2.25	
10	1.83%	1.02%	1.22%	0	0	0	0	-	-	-	9	2.50	
11	1.24%	0.77%	0.84%	0	0	0	0	-	-	-			
12	2.44%	1.85%	1.41%	0	0	0	0	-	-	-			
13	2.71%	1.96%	1.89%	0	0	0	0	-	-	-			
14	3.53%	2.39%	1.77%	0	0	0	0	-	-	-			
15	4.75%	4.06%	3.02%	0	0	1	0	-	-	-			
16	1.75%	0.00%	1.75%	0	0	0	0	-	-	-			
17	2.14%	1.13%	1.38%	0	0	0	0	-	-	-			
18	5.63%	5.10%	5.99%	1	1	3	1	1.00	1.00	-			
19	3.16%	2.04%	1.16%	0	0	0	0	-	-	-			
20	3.59%	4.15%	2.44%	0	0	0	0	-	-	-	Available Credit Prem:		Credit Eligible Exp:
21	4.86%	3.05%	3.08%	0	0	1	0	-	-	-			
22	9.76%	4.32%	3.49%	2	0	1	1	1.00	1.00	-	2016	658,180	337
23	2.12%	1.27%	1.88%	0	0	0	0	-	-	-			
24	3.56%	0.43%	1.85%	0	0	0	0	-	-	-	2015	1,939,846	1,192
25	0.15%	1.68%	0.83%	0	0	0	0	-	-	-			
26	4.20%	3.21%	2.12%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.89%	0.72%	0.48%	0	0	0	0	-	-	-			
40	5.77%	2.78%	1.26%	1	0	0	0	-	1.00	(1.00)		(1,281,667)	(855)
41	7.29%	1.64%	1.51%	1	0	0	0	-	1.00	(1.00)			
42	2.50%	1.69%	1.29%	0	0	0	0	-	-	-	<u>Pe</u>	ercent Change:	Percent Change:
43	3.03%	3.04%	2.07%	0	0	0	0	-	-	-			
44	1.80%	2.70%	1.73%	0	0	0	0	-	-	-		-66.1%	-71.7%
45	4.86%	3.11%	2.34%	0	0	0	0	-	-	-			
99	1.96%	0.51%	0.66%	0	0	0	0	-	-	-			
Tot	1.72%	1.21%	0.97%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 20 Relative Range Methodology

	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	Aug-14	May-15	2014	2015	2016	Range*	Credits	Credits	<u>Change</u>	Group	<u>Credits</u>	
1	4.03%	3.98%	5.35%	0	0	2	0	-	-	<u>-</u>	0	0.00	
2	5.82%	4.31%	4.05%	1	0	2	1	1.00	1.00	-	1	1.00	
3	7.69%	3.82%	4.45%	1	0	2	1	1.00	1.00	-	2	1.00	
4	5.70%	3.32%	2.72%	1	0	1	1	1.00	1.00	-	3	1.00	
5	7.89%	6.27%	5.24%	1	1	2	1	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.80%	2	1	3	2	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.16%	2	1	2	2	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.47%	3	1	3	3	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	5.98%	2	1	3	2	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	6.24%	3	1	3	3	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	4.73%	2	1	2	2	1.00	1.00	-			
12	12.77%	7.55%	6.58%	3	1	3	3	1.00	1.00	-			
13	11.99%	8.85%	8.43%	3	2	3	3	1.00	1.00	-			
14	15.28%	13.10%	11.05%	3	3	4	3	1.00	1.00	-			
15	21.15%	13.01%	13.27%	4	3	5	4	1.25	1.25	-			
16	26.59%	25.13%	19.78%	5	5	7	5	1.50	1.50	-			
17	19.61%	9.89%	10.30%	4	2	4	4	1.25	1.25	-			
18	20.86%	22.51%	13.75%	4	4	5	4	1.25	1.25	-			
19	15.29%	16.67%	15.09%	3	3	6	3	1.00	1.00	-			
20	24.66%	18.55%	21.63%	5	4	8	5	1.50	1.50	-	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	32.61%	23.95%	24.05%	6	5	9	6	1.75	1.75	-			
22	33.75%	22.17%	19.18%	6	4	7	6	1.75	1.75	-	2016	113,008,894	31,851
23	18.35%	10.83%	8.04%	4	2	3	3	1.00	1.25	(0.25)			
24	8.54%	5.71%	5.75%	2	1	3	2	1.00	1.00	-	2015	116,472,201	33,449
25	13.28%	13.16%	13.61%	3	3	5	3	1.00	1.00	-			
26	23.56%	13.76%	13.82%	5	3	5	5	1.50	1.50	-		Difference:	<u>Difference:</u>
27	5.26%	3.54%	2.29%	1	0	0	0	-	1.00	(1.00)			
40	24.85%	11.38%	12.36%	5	3	5	5	1.50	1.50	-		(3,463,308)	(1,599)
41	14.09%	9.23%	9.19%	3	2	4	3	1.00	1.00	-			
42	18.64%	12.38%	10.10%	4	3	4	4	1.25	1.25	-	<u>Pe</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	13.66%	4	3	5	4	1.25	1.25	-			
44	24.27%	16.44%	14.98%	5	3	6	5	1.50	1.50	-		-3.0%	-4.8%
45	20.07%	18.11%	15.95%	4	4	6	4	1.25	1.25	-			
99	2.48%	3.08%	0.21%	0	0	0	0	-	-	-			
Tot	12.86%	8.91%	8.18%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 21 Relative Range Methodology

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	<u>Aug-14</u>	May-15	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.87%	1.52%	0.45%	0	0	0	0	-	-	-	0	0.00	
2	2.29%	1.29%	0.83%	0	0	0	0	-	-	-	1	1.00	
3	2.90%	1.82%	1.51%	0	0	0	0	-	-	-	2	1.00	
4	2.49%	2.11%	0.76%	0	0	0	0	-	-	-	3	1.00	
5	4.05%	2.57%	2.02%	0	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	1.82%	0	0	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.35%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	2.07%	0	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	2.12%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	9.63%	4.03%	4.10%	2	0	2	2	1.00	1.00	-	9	2.50	
11	3.08%	2.33%	1.49%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.32%	0	0	0	0	-	-	-			
13	10.29%	3.92%	4.73%	2	0	2	2	1.00	1.00	-			
14	5.89%	4.05%	3.82%	1	0	1	1	1.00	1.00	-			
15	10.82%	4.90%	2.14%	2	0	0	0	-	1.00	(1.00)			
16	13.13%	13.16%	6.89%	3	3	3	3	1.00	1.00	-			
17	5.11%	0.00%	0.68%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.94%	1	0	1	1	1.00	1.00	-			
19	5.62%	4.17%	0.72%	1	0	0	0	-	1.00	(1.00)			
20	11.09%	6.02%	4.59%	3	1	2	2	1.00	1.00	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	4.13%	2	0	2	2	1.00	1.00	-			
22	9.88%	2.86%	2.75%	2	0	1	1	1.00	1.00	-	2016	10,479,364	4,196
23	4.67%	4.48%	2.39%	0	0	0	0	-	-	-			
24	6.40%	2.76%	1.19%	1	0	0	0	-	1.00	(1.00)	2015	14,215,271	5,813
25	2.60%	0.00%	1.80%	0	0	0	0	-	-	-			
26	6.32%	1.47%	1.48%	1	0	0	0	-	1.00	(1.00)		Difference:	<u>Difference:</u>
27	2.55%	1.88%	1.39%	0	0	0	0	-	-	-			
40	13.69%	7.00%	5.37%	3	1	2	2	1.00	1.00	-		(3,735,907)	(1,617)
41	12.53%	5.33%	4.95%	3	1	2	2	1.00	1.00	-			
42	6.17%	3.86%	1.25%	1	0	0	0	-	1.00	(1.00)	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	2.67%	1	0	1	1	1.00	1.00	· -			
44	8.43%	3.35%	3.47%	2	0	1	1	1.00	1.00	-		-26.3%	-27.8%
45	10.32%	2.31%	3.00%	2	0	1	1	1.00	1.00	-			
99	0.38%	0.00%	-6.54%	0	0	0	0	-	-	-			
Tot	5.15%	2.98%	2.33%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 25 Relative Range Methodology

		111	<u> </u>	1 2 4	1.1.4.1.4.01			0040	2245		Residual	Keep	
Т		al Market			Mkt Shar		Selected	2016	2015	Chanas	Mark Shr	Out	
<u>Terr</u> 1	Aug-13 1.88%	Aug-14 1.37%	May-15 1.40%	<u>2014</u> 0	<u>2015</u> 0	<u>2016</u> 0	Range* 0	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u> 0	<u>Credits</u> 0.00	
2	1.61%	1.23%	1.40%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.26%	0.89%	0	0	0	0	-	-	-	2	1.00	
4	1.75%	1.27%	1.18%	0	0	0	0	_		_	3	1.00	
5	2.37%	2.09%	1.69%	0	0	0	0	_		_	4	1.25	
6	2.57%	1.99%	1.67%	0	0	0	0	-	-	_	5	1.50	
7	2.53%	1.92%	1.53%	0	0	0	0	_	_	_	6	1.75	
8	3.30%	2.48%	2.47%	0	0	0	0	_	_	_	7	2.00	
9	2.62%	2.15%	2.40%	0	0	0	0	_	_	_	8	2.25	
10	3.19%	3.31%	2.48%	0	0	0	0	_	_	_	9	2.50	
11	2.54%	1.31%	1.98%	Ö	Ő	0	0	-	-	_	Ü	2.00	
12	4.04%	3.41%	3.27%	0	0	1	Ö	-	-	_			
13	3.75%	3.40%	3.27%	0	0	1	0	-	-	_			
14	6.81%	5.30%	2.99%	1	1	1	1	1.00	1.00	-			
15	11.71%	4.46%	5.23%	3	0	2	2	1.00	1.00	-			
16	17.01%	4.90%	3.66%	4	0	1	1	1.00	1.00	-			
17	3.23%	3.64%	1.05%	0	0	0	0	-	-	-			
18	9.96%	5.00%	7.21%	2	1	3	2	1.00	1.00	-			
19	4.46%	11.43%	8.06%	0	3	3	3	1.00	-	1.00			
20	8.81%	5.74%	5.27%	2	1	2	2	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.41%	2	1	3	2	1.00	1.00	-			
22	10.69%	8.39%	3.58%	2	2	1	2	1.00	1.00	-	2016	13,212,120	3,484
23	6.30%	3.39%	1.52%	1	0	0	0	-	1.00	(1.00)			
24	5.30%	2.03%	1.15%	1	0	0	0	-	1.00	(1.00)	2015	14,864,458	3,973
25	8.64%	0.00%	2.18%	2	0	0	0	-	1.00	(1.00)			
26	9.20%	2.76%	2.08%	2	0	0	0	-	1.00	(1.00)		Difference:	<u>Difference:</u>
27	1.33%	0.88%	0.70%	0	0	0	0	-	-	-			
40	3.61%	3.64%	2.86%	0	0	1	0	-	-	-		(1,652,338)	(490)
41	4.94%	4.21%	4.76%	0	0	2	0	-	-	-			
42	4.47%	4.14%	2.87%	0	0	1	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.06%	6.52%	4.05%	1	1	2	1	1.00	1.00	-			
44	10.75%	4.27%	4.46%	2	0	2	2	1.00	1.00	-		-11.1%	-12.3%
45	7.15%	5.62%	6.23%	1	1	3	1	1.00	1.00	-			
99	0.52%	0.40%	0.05%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.73%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 26 Relative Range Methodology

	Docidu	al Markat	Choro	la di a a ta a	Mat Char	o Dongo	Selected	2016	2015		Residual Mark Shr	Keep Out	
Terr	Aug-13	al Market Aug-14	May-15	2014	Mkt Shar 2015	2016	Range*	Credits	Credits	Change	Group	Credits	
1	0.85%	0.56%	0.42%	0	0	0	0	-	Orcaits	-	<u>Слоар</u> О	0.00	
2	0.52%	0.36%	0.41%	0	0	0	0	_	_	-	1	1.00	
3	0.84%	0.58%	0.48%	0	0	0	0	_	_	-	2	1.00	
4	0.67%	0.55%	0.48%	0	0	0	0	-	_	_	3	1.00	
5	0.93%	0.92%	0.57%	0	0	0	0	-	_	_	4	1.25	
6	0.81%	0.67%	0.71%	0	0	0	0	-	-	-	5	1.50	
7	0.92%	0.68%	0.47%	0	0	0	0	-	-	-	6	1.75	
8	0.95%	0.89%	0.59%	0	0	0	0	-	-	-	7	2.00	
9	0.93%	0.58%	0.52%	0	0	0	0	-	-	-	8	2.25	
10	1.56%	1.02%	1.16%	0	0	0	0	-	-	-	9	2.50	
11	0.67%	0.68%	0.74%	0	0	0	0	-	-	-			
12	1.75%	1.20%	0.91%	0	0	0	0	-	-	-			
13	2.28%	1.43%	1.17%	0	0	0	0	-	-	-			
14	1.87%	0.47%	0.64%	0	0	0	0	-	-	-			
15	3.62%	1.93%	0.52%	0	0	0	0	-	-	-			
16	0.76%	0.00%	2.11%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.36%	0	0	0	0	-	-	-			
18	3.56%	3.30%	2.01%	0	0	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	0.06%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	1.76%	0.91%	0.99%	0	0	0	0	-	-	-			
22	5.59%	0.00%	1.49%	1	0	0	0	-	1.00	(1.00)	2016	-	-
23	0.91%	1.55%	0.54%	0	0	0	0	-	-	-			
24	0.85%	0.96%	0.99%	0	0	0	0	-	-	-	2015	1,115,203	372
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	1.87%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.41%	0.35%	0.30%	0	0	0	0	-	-	-			
40	0.06%	1.47%	0.78%	0	0	0	0	-	-	-		(1,115,203)	(372)
41	3.25%	1.54%	1.79%	0	0	0	0	-	-	-			
42	1.58%	0.73%	0.99%	0	0	0	0	-	-	-	<u>Pe</u>	ercent Change:	Percent Change:
43	2.42%	1.10%	0.97%	0	0	0	0	-	-	-			
44	1.88%	2.14%	2.71%	0	0	1	0	-	-	-		-100.0%	-100.0%
45	5.87%	1.57%	1.81%	1	0	0	0	-	1.00	(1.00)			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.57%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 30 Relative Range Methodology

	Danish	al Mauliat	Chana	la di a ata	d Mid Ob a	D	Colootod	2016	2045		Residual Mark Shr	Keep	
Terr	Aug-13	al Market Aug-14	May-15	2014	d Mkt Shar 2015	2016	Selected Range*	2016 Credits	2015 Credits	Change	Group	Out <u>Credits</u>	
1	0.99%	0.64%	0.30%	0	0	0	0	-	Orcaits	-	<u>Слоар</u> О	0.00	
2	0.86%	0.66%	0.64%	0	0	0	0	_	_	-	1	1.00	
3	0.87%	0.52%	0.57%	0	0	0	0	_	_	-	2	1.00	
4	0.81%	0.51%	0.50%	0	0	0	0	_	_	_	3	1.00	
5	0.97%	0.91%	0.85%	0	0	0	0	_	_	-	4	1.25	
6	1.01%	0.85%	0.90%	0	0	0	0	-	-	-	5	1.50	
7	1.54%	1.13%	0.86%	0	0	0	0	-	-	-	6	1.75	
8	0.93%	1.23%	1.07%	0	0	0	0	_	-	-	7	2.00	
9	1.27%	0.94%	0.62%	0	0	0	0	-	-	-	8	2.25	
10	2.29%	1.49%	1.75%	0	0	0	0	-	-	-	9	2.50	
11	0.97%	1.74%	1.39%	0	0	0	0	-	-	-			
12	1.86%	1.29%	1.42%	0	0	0	0	-	-	-			
13	2.05%	1.29%	1.44%	0	0	0	0	-	-	-			
14	3.24%	3.44%	3.39%	0	0	1	0	-	-	-			
15	5.81%	6.90%	2.62%	1	1	1	1	1.00	1.00	-			
16	7.84%	4.32%	2.46%	1	0	0	0	-	1.00	(1.00)			
17	1.39%	1.36%	1.85%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	2.08%	0	0	0	0	-	-	-			
20	1.68%	0.00%	0.72%	0	0	0	0	-	-	-	<u>Availabl</u>	<u>e Credit Prem:</u>	Credit Eligible Exp:
21	2.47%	2.39%	2.97%	0	0	1	0	-	-	-			
22	8.30%	1.27%	2.44%	2	0	0	0	-	1.00	(1.00)	2016	419,288	296
23	0.98%	1.55%	1.14%	0	0	0	0	-	-	-			
24	1.21%	1.06%	2.06%	0	0	0	0	-	-	-	2015	798,566	523
25	1.31%	0.80%	0.69%	0	0	0	0	-	-	-			
26	4.15%	4.92%	3.90%	0	0	1	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.62%	0.61%	0.41%	0	0	0	0	-	-	-			
40	1.29%	0.97%	0.56%	0	0	0	0	-	-	-		(379,278)	(227)
41	1.68%	1.20%	1.22%	0	0	0	0	-	-	-	_		
42	2.10%	1.35%	1.47%	0	0	0	0	-	-	-	<u>Pe</u>	ercent Change:	Percent Change:
43	2.31%	1.26%	1.64%	0	0	0	0	-	-	-		47.50	40 =01
44	4.60%	2.87%	2.40%	0	0	0	0	-	-	-		-47.5%	-43.5%
45	2.31%	1.05%	0.66%	0	0	0	0	-	-	-			
99 T -4	0.00%	2.41%	0.65%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.87%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class MM Relative Range Methodology

	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	May-15	<u>2014</u>	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	1.51%	1.25%	1.04%	0	0	0	0	-	-	-	0	0.00	
2	1.50%	1.38%	1.23%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.63%	1.42%	0	0	0	0	-	-	-	2	1.00	
4	1.57%	1.52%	1.23%	0	0	0	0	-	-	-	3	1.00	
5	2.18%	1.81%	1.63%	0	0	0	0	-	-	-	4	1.25	
6	2.36%	1.97%	1.84%	0	0	0	0	-	-	-	5	1.50	
7	2.92%	2.44%	1.99%	0	0	0	0	-	-	-	6	1.75	
8	2.78%	2.60%	2.06%	0	0	0	0	-	-	-	7	2.00	
9	2.91%	2.44%	2.09%	0	0	0	0	-	-	-	8	2.25	
10	4.43%	2.95%	2.58%	0	0	1	0	-	-	-	9	2.50	
11	3.90%	2.96%	1.98%	0	0	0	0	-	-	-			
12	4.32%	3.68%	3.16%	0	0	1	0	-	-	-			
13	5.08%	4.33%	3.83%	1	0	1	1	1.00	1.00	-			
14	5.67%	4.70%	3.63%	1	0	1	1	1.00	1.00	-			
15	7.59%	7.08%	5.25%	1	1	2	1	1.00	1.00	-			
16	9.92%	8.70%	7.53%	2	2	3	2	1.00	1.00	-			
17	3.40%	3.38%	4.02%	0	0	2	0	-	-	-			
18	5.43%	5.25%	4.21%	1	1	2	1	1.00	1.00	-			
19	4.14%	3.33%	4.82%	0	0	2	0	-	-	-			
20	4.03%	4.17%	5.33%	0	0	2	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	7.34%	2	2	3	2	1.00	1.00	-			
22	10.99%	6.03%	3.14%	2	1	1	1	1.00	1.00	-	2016	4,123,902	18,652
23	6.85%	4.79%	4.19%	1	0	2	1	1.00	1.00	-			
24	5.22%	3.74%	1.74%	1	0	0	0	-	1.00	(1.00)	2015	4,231,745	19,116
25	3.76%	2.63%	2.34%	0	0	0	0	-	-	-			
26	8.28%	7.69%	4.50%	2	1	2	2	1.00	1.00	-		Difference:	<u>Difference:</u>
27	1.26%	1.21%	0.95%	0	0	0	0	-	-	-			
40	8.56%	6.78%	6.69%	2	1	3	2	1.00	1.00	-		(107,843)	(464)
41	5.70%	3.98%	3.52%	1	0	1	1	1.00	1.00	-			
42	8.14%	6.17%	5.10%	2	1	2	2	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	5.84%	4.22%	4.22%	1	0	2	1	1.00	1.00	-			
44	7.90%	7.20%	6.69%	1	1	3	1	1.00	1.00	-		-2.5%	-2.4%
45	7.16%	5.59%	4.77%	1	1	2	1	1.00	1.00	-			
99	1.42%	0.43%	0.82%	0	0	0	0	-	-	-			
Tot	2.66%	2.26%	1.93%										

- 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.

2016 Proposed Credit Factors Relative Range Methodology PRAC - Data Through May, 2015

	Rate Class Group err 10 15 17 18 20 21 25 26 30 MC/Misc.													
Terr	10	15	17	18	20	21	25	26	30	MC/Misc.				
1	-	-	-	-	-	-	-	-	-	-				
2	-	-	-	-	1.00	-	-	-	-	-				
3	-	-	-	-	1.00	-	-	-	-	-				
4	-	-	-	-	1.00	-	-	-	-	-				
5	-	-	-	-	1.00	-	-	-	-	-				
6	-	-	-	-	1.00	-	-	-	-	-				
7	-	-	1.00	-	1.00	-	-	-	-	-				
8	-	-	1.00	-	1.00	-	-	-	-	-				
9	-	-	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				
16	1.00	-	1.00	-	1.50	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				
23	-	-	1.00	-	1.00	-	-	-	-	1.00				
24	-	-	-	-	1.00	-	-	-	-	-				
25	-	-	1.00	-	1.00	-	-	-	-	-				
26	-	-	1.00	-	1.50	-	-	-	-	1.00				
27	-	-	-	-	-	-	-	-	-	-				
40	1.00	-	1.00	-	1.50	1.00	-	-	-	1.00				
41	1.00	-	1.00	-	1.00	1.00	-	-	-	1.00				
42	1.00	-	1.00	-	1.25	-	-	-	-	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				
99	-	-	-	-	-	-	-	-	-	-				

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep		
Mark Shr	Out		
Group	Credits	Lower	<u>Upper</u>
0	0.00	0	0.025
1	1.00	0.025	0.04
2	1.00	0.04	0.055
3	1.00	0.055	0.085
4	1.25	0.085	0.115
5	1.50	0.115	0.145
6	1.75	0.145	0.175
7	2.00	0.175	0.205
8	2.25	0.205	0.235
9	2.50	0.235	1

To: Tim Galligan

From: Joe Cofield

Date: August 25, 2015

RE: Historical MAIP Percentages by Cell

Attached is a short review of historical MAIP percentages by cell, for use in considering whether credits reflecting only relative MAIP percentages might be of interest.

- MAIP Percentage Rates by cell were calculated (8/2011 5/2015)
- Cells were then ranked by MAIP % from 1 to 340
- Three "cutoff" thresholds were reviewed based on credit eligible cells
- Credit Eligible Cells (4/2013-3/2014): 159 cells
- Credit Eligible Cells (4/2014-3/2015): 148 cells
- Credit Eligible Cells (4/2015-3/2016): 127 cells

Cells	MAIP (2011)	MAIP (2012)	MAIP (2013)	MAIP (2014)	MAIP (2015)
127	6.78%	6.49%	5.01%	3.41%	2.67%
148	5.76%	5.11%	4.15%	2.98%	2.32%
159	5.01%	4.73%	3.75%	2.70%	2.11%
Statewide	2.73%	2.71%	2.29%	1.68%	1.38%
127 vs S/W	2.48	2.40	2.19	2.03	1.93
148 vs S/W	2.11	1.89	1.81	1.78	1.68
159 vs S/W	1.84	1.75	1.64	1.61	1.53

For example, if there were 127 credit eligible cells ranked from highest MAIP percentage to lowest, then credits would have been available to any cell with a MAIP percentage of at least 1.93 times the statewide average (2015).

In the interest of stability, I then summarized the data into the last three time periods and the last five time periods. (Otherwise, we would potentially be changing credit eligible cells due to the latest year.)

I would like to request that we determine the potential credits using:

- All cells with a three year MAIP percentage at least 2 times the statewide percentage
- A premium credit factor of 1.0 (consistent with other AIPSO states) for all cells

Metropolitan Exhibit - Credit Offer 4/1/2016

Rate	20)15	Rate		3 Year - 4/1/20	16		Rate		5 Year - 4/1/20	16	
Class	<u>Exp</u>	<u>Prem</u>	<u>Class</u>	<u>Exp</u>	<u>Prem</u>	ΔExp	$\Delta Prem$	<u>Class</u>	<u>Exp</u>	<u>Prem</u>	ΔExp	<u>∆Prem</u>
10	293,247	437,702,290	10	293,247	437,702,290	0.0%	0.0%	10	293,247	437,702,290	0.0%	0.0%
15	8,091	10,891,112	15	8,091	10,891,112	0.0%	0.0%	15	8,091	10,891,112	0.0%	0.0%
17	60,950	115,233,840	17	74,161	135,542,517	21.7%	17.6%	17	63,756	120,962,283	4.6%	5.0%
18	1,192	1,939,846	18	1,147	2,381,508	-3.8%	22.8%	18	2,505	4,715,802	110.2%	143.1%
20	33,449	116,472,201	20	34,164	103,055,339	2.1%	-11.5%	20	34,164	103,055,339	2.1%	-11.5%
21	5,813	14,215,271	21	5,526	13,427,636	-4.9%	-5.5%	21	6,853	16,440,674	17.9%	15.7%
25	3,973	14,864,458	25	7,331	24,853,310	84.5%	67.2%	25	5,853	21,012,277	47.3%	41.4%
26	372	1,115,203	26	-	-	-100.0%	-100.0%	26	-	-	-100.0%	-100.0%
30	523	798,566	30	765	1,145,217	46.2%	43.4%	30	523	798,566	0.0%	0.0%
MC/Misc.	19,116	4,231,745	MC/Misc.	25,396	5,373,368	32.8%	27.0%	MC/Misc.	19,286	4,272,837	0.9%	1.0%
Total	426,727	717,464,534	Total	449,827	734,372,298	5.4%	2.4%	Total	434,278	719,851,180	1.8%	0.3%

Metropolitan Exhibit

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs Tl	ree Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	10	1.06%	293	0.49	1	10	0.93%	288	0.52	0.00	0.00	
2	10	1.08%	291	0.50	2	10	0.97%	282	0.54	0.00	0.00	
3	10	1.30%	277	0.61	3	10	1.11%	270	0.62	0.00	0.00	
4	10	1.15%	288	0.54	4	10	1.03%	275	0.58	0.00	0.00	
5	10	1.71%	249	0.80	5	10	1.49%	239	0.84	0.00	0.00	
6	10	1.74%	248	0.81	6	10	1.52%	236	0.86	0.00	0.00	
7	10	2.24%	218	1.04	7	10	1.90%	211	1.07	0.00	0.00	
8	10	2.01%	235	0.93	8	10	1.74%	222	0.98	0.00	0.00	
9	10	2.81%	188	1.31	9	10	2.14%	192	1.20	0.00	0.00	
10	10	2.64%	198	1.23	10	10	2.29%	185	1.29	0.00	0.00	
11	10	1.93%	238	0.90	11	10	1.61%	230	0.91	0.00	0.00	
12	10	2.37%	211	1.10	12	10	2.02%	204	1.13	0.00	0.00	
13	10	3.96%	147	1.84	13	10	3.31%	145	1.86	0.00	0.00	
14	10	3.70%	158	1.72	14	10	2.96%	156	1.66	0.00	0.00	
15	10	4.16%	142	1.93	15	10	3.06%	153	1.72	0.00	0.00	
16	10	6.41%	87	2.98	16	10	4.91%	86	2.76	1.00	1.00	1.00
17	10	2.07%	227	0.97	17	10	1.88%	212	1.06	0.00	0.00	
18	10	5.25%	119	2.44	18	10	4.41%	103	2.48	1.00	1.00	1.00
19	10	3.76%	153	1.75	19	10	3.19%	150	1.79	0.00	0.00	
20	10	6.25%	91	2.91	20	10	5.23%	82	2.94	1.00	1.00	1.00
21	10	7.72%	66	3.59	21	10	6.22%	67	3.49	1.00	1.00	1.00
22	10	9.14%	43	4.25	22	10	7.45%	40	4.19	1.00	1.00	1.00
23	10	3.30%	173	1.54	23	10	2.65%	170	1.49	0.00	0.00	
24	10	2.33%	215	1.08	24	10	1.77%	218	0.99	0.00	0.00	
25	10	2.03%	232	0.95	25	10	1.63%	228	0.91	0.00	0.00	
26	10	3.81%	151	1.77	26	10	2.72%	166	1.53	0.00	0.00	
27	10	0.86%	304	0.40	27	10	0.78%	302	0.44	0.00	0.00	
40	10	7.85%	64	3.65	40	10	4.86%	89	2.73	1.00	1.00	1.00
41	10	5.15%	123	2.40	41	10	3.84%	116	2.16	1.00	1.00	1.00
42	10	6.45%	85	3.00	42	10	4.57%	99	2.57	1.00	1.00	1.00
43	10	5.34%	114	2.48	43	10	3.61%	129	2.03	1.00	1.00	1.00
44	10	7.03%	75	3.27	44	10	5.72%	73	3.21	1.00	1.00	1.00
45	10	6.30%	90	2.93	45	10	4.33%	106	2.43	1.00	1.00	1.00
99	10	0.68%	318	0.32	99	10	0.63%	316	0.36	0.00	0.00	

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs Th	ree Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	15	0.30%	336	0.14	1	15	0.30%	334	0.17	0.00	0.00	
2	15	0.28%	338	0.13	2	15	0.29%	335	0.16	0.00	0.00	
3	15	0.32%	334	0.15	3	15	0.31%	333	0.17	0.00	0.00	
4	15	0.28%	337	0.13	4	15	0.28%	336	0.16	0.00	0.00	
5	15	0.37%	333	0.17	5	15	0.37%	330	0.21	0.00	0.00	
6	15	0.52%	328	0.24	6	15	0.52%	326	0.29	0.00	0.00	
7	15	0.49%	329	0.23	7	15	0.48%	327	0.27	0.00	0.00	
8	15	0.69%	316	0.32	8	15	0.69%	310	0.39	0.00	0.00	
9	15	0.66%	320	0.31	9	15	0.64%	315	0.36	0.00	0.00	
10	15	0.64%	323	0.30	10	15	0.62%	318	0.35	0.00	0.00	
11	15	0.98%	295	0.46	11	15	0.92%	289	0.52	0.00	0.00	
12	15	0.83%	307	0.39	12	15	0.83%	295	0.47	0.00	0.00	
13	15	1.25%	281	0.58	13	15	1.19%	267	0.67	0.00	0.00	
14	15	1.41%	271	0.66	14	15	1.38%	246	0.78	0.00	0.00	
15	15	1.45%	266	0.67	15	15	1.37%	250	0.77	0.00	0.00	
16	15	2.90%	183	1.35	16	15	2.46%	180	1.38	0.00	0.00	
17	15	0.87%	303	0.41	17	15	0.81%	298	0.46	0.00	0.00	
18	15	2.51%	204	1.17	18	15	2.17%	189	1.22	0.00	0.00	
19	15	2.39%	210	1.11	19	15	2.05%	200	1.15	0.00	0.00	
20	15	2.61%	200	1.22	20	15	2.50%	176	1.40	0.00	0.00	
21	15	5.33%	116	2.48	21	15	4.65%	96	2.61	1.00	1.00	1.00
22	15	7.31%	71	3.40	22	15	6.82%	49	3.83	1.00	1.00	1.00
23	15	2.49%	205	1.16	23	15	2.08%	196	1.17	0.00	0.00	
24	15	3.06%	177	1.42	24	15	2.80%	163	1.57	0.00	0.00	
25	15	1.46%	265	0.68	25	15	1.40%	245	0.79	0.00	0.00	
26	15	1.66%	253	0.77	26	15	1.64%	225	0.92	0.00	0.00	
27	15	0.23%	339	0.11	27	15	0.23%	338	0.13	0.00	0.00	
40	15	2.21%	220	1.03	40	15	1.81%	217	1.02	0.00	0.00	
41	15	1.51%	260	0.70	41	15	1.34%	255	0.75	0.00	0.00	
42	15	3.00%	179	1.40	42	15	2.87%	161	1.61	0.00	0.00	
43	15	1.35%	276	0.63	43	15	1.20%	266	0.67	0.00	0.00	
44	15	2.61%	201	1.21	44	15	2.37%	183	1.33	0.00	0.00	
45	15	2.25%	217	1.05	45	15	1.90%	210	1.07	0.00	0.00	
99	15	0.31%	335	0.14	99	15	0.24%	337	0.14	0.00	0.00	

Metropolitan Exhibit

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs T	hree Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	17	3.02%	178	1.41	1	17	2.60%	173	1.46	0.00	0.00	
2	17	2.70%	192	1.26	2	17	2.31%	184	1.30	0.00	0.00	
3	17	3.39%	169	1.58	3	17	2.94%	157	1.65	0.00	0.00	
4	17	2.98%	181	1.39	4	17	2.67%	169	1.50	0.00	0.00	
5	17	3.94%	148	1.83	5	17	3.27%	148	1.84	0.00	0.00	
6	17	4.17%	141	1.94	6	17	3.70%	124	2.08	0.00	1.00	
7	17	4.68%	133	2.18	7	17	3.79%	121	2.13	1.00	1.00	1.00
8	17	4.99%	125	2.32	8	17	3.99%	113	2.24	1.00	1.00	1.00
9	17	5.40%	112	2.51	9	17	3.79%	120	2.13	1.00	1.00	1.00
10	17	5.37%	113	2.50	10	17	4.25%	109	2.39	1.00	1.00	1.00
11	17	5.57%	109	2.59	11	17	3.77%	122	2.12	1.00	1.00	
12	17	5.73%	103	2.66	12	17	4.86%	88	2.73	1.00	1.00	1.00
13	17	7.00%	77	3.26	13	17	5.62%	75	3.16	1.00	1.00	1.00
14	17	8.01%	62	3.73	14	17	6.52%	57	3.66	1.00	1.00	1.00
15	17	8.92%	47	4.15	15	17	6.48%	58	3.64	1.00	1.00	1.00
16	17	12.51%	25	5.82	16	17	9.92%	23	5.57	1.00	1.00	1.00
17	17	5.61%	108	2.61	17	17	5.33%	79	2.99	1.00	1.00	1.00
18	17	10.79%	29	5.02	18	17	8.03%	34	4.51	1.00	1.00	1.00
19	17	10.74%	30	5.00	19	17	8.74%	26	4.91	1.00	1.00	1.00
20	17	12.54%	24	5.84	20	17	11.23%	20	6.31	1.00	1.00	1.00
21	17	14.61%	17	6.80	21	17	12.26%	17	6.89	1.00	1.00	1.00
22	17	12.83%	21	5.97	22	17	11.45%	19	6.43	1.00	1.00	1.00
23	17	9.14%	44	4.25	23	17	6.76%	52	3.80	1.00	1.00	1.00
24	17	5.28%	118	2.46	24	17	3.67%	125	2.06	1.00	1.00	-
25	17	6.64%	81	3.09	25	17	4.68%	93	2.63	1.00	1.00	1.00
26	17	8.22%	59	3.83	26	17	6.24%	66	3.50	1.00	1.00	1.00
27	17	2.28%	216	1.06	27	17	2.03%	203	1.14	0.00	0.00	-
40	17	13.64%	20	6.35	40	17	8.19%	32	4.60	1.00	1.00	1.00
41	17	10.16%	36	4.73	41	17	7.50%	39	4.21	1.00	1.00	1.00
42	17	9.26%	42	4.31	42	17	5.95%	69	3.34	1.00	1.00	1.00
43	17	9.05%	46	4.21	43	17	6.58%	56	3.70	1.00	1.00	1.00
44	17	10.61%	32	4.94	44	17	7.99%	36	4.49	1.00	1.00	1.00
45	17	12.69%	22	5.91	45	17	8.43%	29	4.74	1.00	1.00	1.00
99	17	0.62%	325	0.29	99	17	0.55%	324	0.31	0.00	0.00	

Metropolitan Exhibit

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs Tl	ree Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	18	0.94%	296	0.44	1	18	0.77%	303	0.44	0.00	0.00	
2	18	0.70%	315	0.33	2	18	0.60%	321	0.34	0.00	0.00	
3	18	1.14%	289	0.53	3	18	1.00%	277	0.56	0.00	0.00	
4	18	0.89%	300	0.42	4	18	0.83%	296	0.47	0.00	0.00	
5	18	1.48%	262	0.69	5	18	1.32%	257	0.74	0.00	0.00	
6	18	1.28%	278	0.59	6	18	0.98%	280	0.55	0.00	0.00	
7	18	1.82%	244	0.85	7	18	1.35%	252	0.76	0.00	0.00	
8	18	1.40%	273	0.65	8	18	1.02%	276	0.57	0.00	0.00	
9	18	2.06%	229	0.96	9	18	1.56%	232	0.87	0.00	0.00	
10	18	1.64%	254	0.76	10	18	1.34%	254	0.75	0.00	0.00	
11	18	1.15%	287	0.54	11	18	0.95%	284	0.54	0.00	0.00	
12	18	2.18%	222	1.01	12	18	1.88%	213	1.06	0.00	0.00	
13	18	2.98%	180	1.39	13	18	2.16%	191	1.21	0.00	0.00	
14	18	3.18%	175	1.48	14	18	2.52%	175	1.42	0.00	0.00	
15	18	4.10%	144	1.91	15	18	3.87%	115	2.17	0.00	1.00	
16	18	4.97%	126	2.31	16	18	1.20%	265	0.67	1.00	0.00	
17	18	2.35%	214	1.09	17	18	1.54%	234	0.86	0.00	0.00	
18	18	5.99%	96	2.79	18	18	5.56%	76	3.12	1.00	1.00	1.00
19	18	3.81%	152	1.77	19	18	2.13%	193	1.20	0.00	0.00	
20	18	4.88%	130	2.27	20	18	3.37%	140	1.90	1.00	0.00	
21	18	5.33%	115	2.48	21	18	3.66%	126	2.05	1.00	1.00	
22	18	7.25%	73	3.38	22	18	5.43%	78	3.05	1.00	1.00	1.00
23	18	2.59%	202	1.20	23	18	1.75%	219	0.98	0.00	0.00	
24	18	2.45%	207	1.14	24	18	1.91%	209	1.07	0.00	0.00	
25	18	1.81%	245	0.84	25	18	0.90%	294	0.50	0.00	0.00	
26	18	4.25%	139	1.98	26	18	3.09%	151	1.74	0.00	0.00	
27	18	0.76%	313	0.35	27	18	0.69%	309	0.39	0.00	0.00	
40	18	6.05%	94	2.81	40	18	3.27%	147	1.84	1.00	0.00	1.00
41	18	4.91%	129	2.28	41	18	3.31%	146	1.86	1.00	0.00	1.00
42	18	3.74%	154	1.74	42	18	1.75%	220	0.98	0.00	0.00	
43	18	3.60%	160	1.67	43	18	2.68%	168	1.50	0.00	0.00	
44	18	3.45%	165	1.60	44	18	2.07%	197	1.16	0.00	0.00	
45	18	5.46%	111	2.54	45	18	3.38%	138	1.90	1.00	0.00	
99	18	0.83%	308	0.39	99	18	1.04%	274	0.59	0.00	0.00	

Metropolitan Exhibit

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs T	hree Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	20	5.79%	102	2.69	1	20	4.46%	102	2.51	1.00	1.00	
2	20	5.86%	100	2.73	2	20	4.68%	94	2.63	1.00	1.00	1.00
3	20	6.51%	82	3.03	3	20	5.23%	81	2.94	1.00	1.00	1.00
4	20	5.18%	122	2.41	4	20	3.83%	117	2.15	1.00	1.00	1.00
5	20	8.56%	54	3.99	5	20	6.39%	62	3.59	1.00	1.00	1.00
6	20	8.05%	61	3.74	6	20	6.31%	64	3.54	1.00	1.00	1.00
7	20	8.83%	50	4.11	7	20	6.27%	65	3.52	1.00	1.00	1.00
8	20	10.53%	33	4.90	8	20	8.36%	30	4.69	1.00	1.00	1.00
9	20	9.75%	37	4.54	9	20	6.94%	47	3.90	1.00	1.00	1.00
10	20	10.73%	31	4.99	10	20	8.25%	31	4.63	1.00	1.00	1.00
11	20	9.27%	41	4.31	11	20	6.76%	51	3.80	1.00	1.00	1.00
12	20	10.83%	28	5.04	12	20	8.75%	25	4.91	1.00	1.00	1.00
13	20	11.97%	26	5.57	13	20	9.59%	24	5.39	1.00	1.00	1.00
14	20	14.63%	16	6.81	14	20	13.02%	15	7.32	1.00	1.00	1.00
15	20	20.42%	11	9.50	15	20	15.64%	12	8.78	1.00	1.00	1.25
16	20	27.35%	3	12.73	16	20	23.83%	3	13.39	1.00	1.00	1.50
17	20	13.87%	19	6.46	17	20	12.53%	16	7.04	1.00	1.00	1.25
18	20	22.91%	7	10.66	18	20	19.10%	5	10.73	1.00	1.00	1.25
19	20	17.97%	12	8.36	19	20	15.69%	11	8.81	1.00	1.00	1.00
20	20	24.86%	4	11.57	20	20	21.46%	4	12.05	1.00	1.00	1.50
21	20	30.00%	1	13.96	21	20	26.82%	1	15.07	1.00	1.00	1.75
22	20	28.75%	2	13.38	22	20	24.48%	2	13.75	1.00	1.00	1.75
23	20	16.66%	14	7.75	23	20	12.17%	18	6.84	1.00	1.00	1.25
24	20	8.63%	53	4.01	24	20	6.42%	61	3.61	1.00	1.00	1.00
25	20	14.77%	15	6.88	25	20	13.37%	14	7.51	1.00	1.00	1.00
26	20	21.23%	8	9.88	26	20	16.80%	8	9.44	1.00	1.00	1.50
27	20	5.61%	107	2.61	27	20	3.61%	128	2.03	1.00	1.00	1.00
40	20	23.08%	6	10.74	40	20	15.74%	10	8.84	1.00	1.00	1.50
41	20	14.35%	18	6.68	41	20	10.59%	22	5.95	1.00	1.00	1.00
42	20	17.42%	13	8.11	42	20	13.41%	13	7.53	1.00	1.00	1.25
43	20	20.63%	9	9.60	43	20	15.82%	9	8.89	1.00	1.00	1.25
44	20	20.61%	10	9.59	44	20	18.37%	6	10.32	1.00	1.00	1.50
45	20	23.63%	5	11.00	45	20	17.95%	7	10.08	1.00	1.00	1.25
99	20	2.65%	197	1.23	99	20	1.96%	206	1.10	0.00	0.00	

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs T	hree Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	21	2.06%	231	0.96	1	21	1.26%	261	0.71	0.00	0.00	
2	21	1.62%	257	0.75	2	21	1.44%	241	0.81	0.00	0.00	
3	21	2.89%	186	1.35	3	21	2.05%	201	1.15	0.00	0.00	
4	21	2.21%	219	1.03	4	21	1.75%	221	0.98	0.00	0.00	
5	21	3.71%	157	1.73	5	21	2.82%	162	1.58	0.00	0.00	
6	21	3.32%	171	1.54	6	21	2.94%	159	1.65	0.00	0.00	
7	21	3.56%	161	1.66	7	21	2.59%	174	1.46	0.00	0.00	
8	21	3.39%	170	1.58	8	21	2.73%	165	1.53	0.00	0.00	
9	21	4.35%	138	2.03	9	21	3.36%	141	1.89	1.00	0.00	1.00
10	21	6.73%	80	3.13	10	21	5.70%	74	3.20	1.00	1.00	1.00
11	21	3.53%	163	1.64	11	21	2.24%	186	1.26	0.00	0.00	
12	21	4.68%	134	2.18	12	21	3.60%	130	2.02	1.00	1.00	
13	21	7.31%	72	3.40	13	21	5.94%	70	3.34	1.00	1.00	1.00
14	21	5.69%	105	2.65	14	21	4.50%	101	2.53	1.00	1.00	1.00
15	21	7.44%	69	3.46	15	21	5.53%	77	3.10	1.00	1.00	1.00
16	21	11.76%	27	5.47	16	21	10.65%	21	5.98	1.00	1.00	1.00
17	21	2.54%	203	1.18	17	21	2.17%	190	1.22	0.00	0.00	
18	21	9.05%	45	4.21	18	21	4.31%	108	2.42	1.00	1.00	1.00
19	21	5.71%	104	2.66	19	21	3.46%	137	1.94	1.00	0.00	1.00
20	21	7.57%	68	3.52	20	21	7.10%	45	3.99	1.00	1.00	1.00
21	21	8.74%	52	4.07	21	21	6.12%	68	3.44	1.00	1.00	1.00
22	21	6.50%	83	3.03	22	21	4.64%	97	2.61	1.00	1.00	1.00
23	21	6.08%	92	2.83	23	21	3.82%	118	2.14	1.00	1.00	
24	21	3.66%	159	1.70	24	21	3.35%	143	1.88	0.00	0.00	1.00
25	21	1.67%	252	0.78	25	21	1.47%	240	0.83	0.00	0.00	
26	21	5.81%	101	2.70	26	21	2.71%	167	1.52	1.00	0.00	1.00
27	21	2.09%	226	0.97	27	21	1.92%	208	1.08	0.00	0.00	
40	21	12.66%	23	5.89	40	21	8.10%	33	4.55	1.00	1.00	1.00
41	21	10.36%	34	4.82	41	21	7.18%	44	4.03	1.00	1.00	1.00
42	21	6.48%	84	3.01	42	21	3.48%	135	1.96	1.00	0.00	1.00
43	21	6.31%	89	2.94	43	21	4.25%	110	2.39	1.00	1.00	1.00
44	21	6.32%	88	2.94	44	21	4.78%	91	2.69	1.00	1.00	1.00
45	21	8.22%	60	3.82	45	21	4.94%	85	2.77	1.00	1.00	1.00
99	21	1.37%	274	0.64	99	21	-1.47%	340	(0.83)	0.00	0.00	

Metropolitan Exhibit

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs Th	ree Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	25	1.79%	247	0.83	1	25	1.55%	233	0.87	0.00	0.00	
2	25	1.63%	256	0.76	2	25	1.38%	247	0.78	0.00	0.00	
3	25	1.68%	251	0.78	3	25	1.33%	256	0.75	0.00	0.00	
4	25	1.63%	255	0.76	4	25	1.40%	244	0.79	0.00	0.00	
5	25	2.37%	212	1.10	5	25	2.05%	199	1.15	0.00	0.00	
6	25	2.40%	209	1.12	6	25	2.08%	195	1.17	0.00	0.00	
7	25	2.36%	213	1.10	7	25	2.00%	205	1.12	0.00	0.00	
8	25	3.27%	174	1.52	8	25	2.75%	164	1.55	0.00	0.00	
9	25	2.89%	185	1.35	9	25	2.39%	182	1.34	0.00	0.00	
10	25	3.06%	176	1.43	10	25	2.99%	154	1.68	0.00	0.00	
11	25	2.69%	195	1.25	11	25	1.95%	207	1.10	0.00	0.00	
12	25	4.18%	140	1.95	12	25	3.57%	132	2.00	0.00	1.00	
13	25	4.13%	143	1.92	13	25	3.48%	136	1.95	0.00	0.00	
14	25	5.99%	97	2.79	14	25	4.91%	87	2.76	1.00	1.00	1.00
15	25	8.44%	56	3.93	15	25	7.03%	46	3.95	1.00	1.00	1.00
16	25	10.17%	35	4.73	16	25	7.93%	37	4.46	1.00	1.00	1.00
17	25	4.02%	146	1.87	17	25	2.64%	171	1.48	0.00	0.00	
18	25	9.27%	40	4.31	18	25	7.23%	43	4.06	1.00	1.00	1.00
19	25	8.00%	63	3.72	19	25	8.03%	35	4.51	1.00	1.00	
20	25	8.92%	48	4.15	20	25	6.62%	55	3.72	1.00	1.00	1.00
21	25	8.80%	51	4.09	21	25	6.91%	48	3.88	1.00	1.00	1.00
22	25	9.59%	38	4.46	22	25	7.74%	38	4.35	1.00	1.00	1.00
23	25	6.05%	93	2.81	23	25	3.64%	127	2.04	1.00	1.00	1.00
24	25	4.52%	135	2.10	24	25	2.48%	177	1.40	1.00	0.00	1.00
25	25	4.36%	137	2.03	25	25	3.57%	133	2.00	1.00	1.00	1.00
26	25	5.95%	98	2.77	26	25	4.22%	111	2.37	1.00	1.00	1.00
27	25	1.21%	282	0.56	27	25	0.97%	281	0.55	0.00	0.00	
40	25	4.93%	128	2.30	40	25	3.38%	139	1.90	1.00	0.00	
41	25	5.88%	99	2.74	41	25	4.64%	98	2.61	1.00	1.00	
42	25	4.94%	127	2.30	42	25	3.81%	119	2.14	1.00	1.00	
43	25	6.41%	86	2.98	43	25	5.82%	72	3.27	1.00	1.00	1.00
44	25	7.03%	74	3.27	44	25	6.47%	59	3.63	1.00	1.00	1.00
45	25	7.71%	67	3.59	45	25	6.33%	63	3.56	1.00	1.00	1.00
99	25	0.43%	331	0.20	99	25	0.33%	332	0.19	0.00	0.00	

Metropolitan Exhibit

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs Th	nree Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	26	0.62%	324	0.29	1	26	0.61%	319	0.34	0.00	0.00	
2	26	0.46%	330	0.22	2	26	0.43%	329	0.24	0.00	0.00	
3	26	0.76%	312	0.36	3	26	0.63%	317	0.36	0.00	0.00	
4	26	0.59%	326	0.27	4	26	0.57%	322	0.32	0.00	0.00	
5	26	0.92%	299	0.43	5	26	0.81%	301	0.45	0.00	0.00	
6	26	0.77%	311	0.36	6	26	0.73%	306	0.41	0.00	0.00	
7	26	0.84%	306	0.39	7	26	0.69%	311	0.39	0.00	0.00	
8	26	0.88%	301	0.41	8	26	0.81%	299	0.46	0.00	0.00	
9	26	0.88%	302	0.41	9	26	0.68%	312	0.38	0.00	0.00	
10	26	1.37%	275	0.64	10	26	1.25%	262	0.70	0.00	0.00	
11	26	0.80%	309	0.37	11	26	0.70%	308	0.39	0.00	0.00	
12	26	1.57%	259	0.73	12	26	1.29%	259	0.73	0.00	0.00	
13	26	1.93%	237	0.90	13	26	1.63%	227	0.91	0.00	0.00	
14	26	1.92%	239	0.89	14	26	1.00%	278	0.56	0.00	0.00	
15	26	2.64%	199	1.23	15	26	2.12%	194	1.19	0.00	0.00	
16	26	2.70%	194	1.26	16	26	0.96%	283	0.54	0.00	0.00	
17	26	1.21%	283	0.56	17	26	0.82%	297	0.46	0.00	0.00	
18	26	2.87%	187	1.33	18	26	2.98%	155	1.67	0.00	0.00	
19	26	1.19%	284	0.55	19	26	0.74%	305	0.42	0.00	0.00	
20	26	2.11%	225	0.98	20	26	0.54%	325	0.30	0.00	0.00	
21	26	2.41%	208	1.12	21	26	1.23%	263	0.69	0.00	0.00	1.00
22	26	3.40%	167	1.58	22	26	2.04%	202	1.14	0.00	0.00	
23	26	1.60%	258	0.74	23	26	0.99%	279	0.55	0.00	0.00	
24	26	2.01%	234	0.94	24	26	0.94%	287	0.53	0.00	0.00	
25	26	0.80%	310	0.37	25	26	0.48%	328	0.27	0.00	0.00	
26	26	1.42%	270	0.66	26	26	1.61%	229	0.91	0.00	0.00	
27	26	0.42%	332	0.20	27	26	0.35%	331	0.20	0.00	0.00	
40	26	1.44%	269	0.67	40	26	0.75%	304	0.42	0.00	0.00	
41	26	2.68%	196	1.25	41	26	2.21%	188	1.24	0.00	0.00	
42	26	1.97%	236	0.92	42	26	1.10%	271	0.62	0.00	0.00	
43	26	2.03%	233	0.94	43	26	1.51%	238	0.85	0.00	0.00	
44	26	2.47%	206	1.15	44	26	2.24%	187	1.26	0.00	0.00	
45	26	3.87%	149	1.80	45	26	3.08%	152	1.73	0.00	0.00	1.00
99	26	0.00%	340	-	99	26	0.00%	339	-	0.00	0.00	

Metropolitan Exhibit

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs	Three Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	30	0.64%	322	0.30	1	30	0.65%	314	0.36	0.00	0.00	
2	30	0.84%	305	0.39	2	30	0.72%	307	0.40	0.00	0.00	
3	30	0.73%	314	0.34	3	30	0.65%	313	0.37	0.00	0.00	
4	30	0.68%	317	0.32	4	30	0.61%	320	0.34	0.00	0.00	
5	30	1.05%	294	0.49	5	30	0.91%	293	0.51	0.00	0.00	
6	30	0.92%	298	0.43	6	30	0.92%	292	0.52	0.00	0.00	
7	30	1.28%	279	0.59	7	30	1.18%	268	0.66	0.00	0.00	
8	30	1.08%	292	0.50	8	30	1.08%	273	0.60	0.00	0.00	
9	30	1.25%	280	0.58	9	30	0.95%	285	0.53	0.00	0.00	
10	30	1.89%	241	0.88	10	30	1.85%	215	1.04	0.00	0.00	
11	30	1.45%	268	0.67	11	30	1.37%	249	0.77	0.00	0.00	
12	30	1.83%	242	0.85	12	30	1.52%	237	0.85	0.00	0.00	
13	30	1.91%	240	0.89	13	30	1.59%	231	0.90	0.00	0.00	
14	30	2.78%	190	1.29	14	30	3.36%	142	1.89	0.00	0.00	
15	30	5.51%	110	2.57	15	30	5.12%	83	2.88	1.00	1.00	1.00
16	30	5.64%	106	2.63	16	30	4.82%	90	2.71	1.00	1.00	1.00
17	30	1.40%	272	0.65	17	30	1.54%	235	0.86	0.00	0.00	
18	30	2.94%	182	1.37	18	30	1.34%	253	0.75	0.00	0.00	
19	30	1.81%	246	0.84	19	30	1.84%	216	1.03	0.00	0.00	
20	30	1.12%	290	0.52	20	30	0.81%	300	0.45	0.00	0.00	
21	30	3.74%	155	1.74	21	30	2.61%	172	1.47	0.00	0.00	
22	30	7.02%	76	3.27	22	30	3.88%	114	2.18	1.00	1.00	1.00
23	30	1.48%	263	0.69	23	30	1.22%	264	0.69	0.00	0.00	
24	30	2.06%	230	0.96	24	30	1.43%	243	0.81	0.00	0.00	
25	30	1.18%	286	0.55	25	30	0.92%	290	0.52	0.00	0.00	
26	30	3.47%	164	1.61	26	30	4.32%	107	2.43	0.00	1.00	
27	30	0.55%	327	0.26	27	30	0.55%	323	0.31	0.00	0.00	
40	30	0.64%	321	0.30	40	30	0.94%	286	0.53	0.00	0.00	
41	30	1.70%	250	0.79	41	30	1.36%	251	0.76	0.00	0.00	
42	30	2.13%	224	0.99	42	30	1.64%	224	0.92	0.00	0.00	
43	30	2.19%	221	1.02	43	30	1.74%	223	0.98	0.00	0.00	
44	30	3.43%	166	1.60	44	30	3.25%	149	1.82	0.00	0.00	
45	30	2.70%	193	1.26	45	30	1.32%	258	0.74	0.00	0.00	
99	30	0.67%	319	0.31	99	30	1.08%	272	0.61	0.00	0.00	

Metropolitan Exhibit

		Five Yrs		MAIP %			Three Yrs		MAIP %	Five Yrs Tl	nree Yrs	2015
Terr	Class	MAIP %	Rank	vs S/W	Terr	Class	MAIP %	Rank	vs S/W	2*S/W	2*S/W	Credits
1	M/M	1.45%	267	0.67	1	M/M	1.27%	260	0.71	0.00	0.00	
2	M/M	1.47%	264	0.68	2	M/M	1.37%	248	0.77	0.00	0.00	
3	M/M	1.82%	243	0.85	3	M/M	1.63%	226	0.92	0.00	0.00	
4	M/M	1.50%	261	0.70	4	M/M	1.44%	242	0.81	0.00	0.00	
5	M/M	2.07%	228	0.96	5	M/M	1.87%	214	1.05	0.00	0.00	
6	M/M	2.16%	223	1.01	6	M/M	2.06%	198	1.16	0.00	0.00	
7	M/M	2.74%	191	1.27	7	M/M	2.45%	181	1.37	0.00	0.00	
8	M/M	2.80%	189	1.30	8	M/M	2.48%	178	1.39	0.00	0.00	
9	M/M	2.90%	184	1.35	9	M/M	2.48%	179	1.39	0.00	0.00	
10	M/M	3.71%	156	1.73	10	M/M	3.32%	144	1.86	0.00	0.00	
11	M/M	3.30%	172	1.54	11	M/M	2.94%	158	1.65	0.00	0.00	
12	M/M	3.82%	150	1.78	12	M/M	3.71%	123	2.09	0.00	1.00	
13	M/M	4.70%	132	2.19	13	M/M	4.40%	104	2.47	1.00	1.00	1.00
14	M/M	5.28%	117	2.46	14	M/M	4.67%	95	2.62	1.00	1.00	1.00
15	M/M	7.84%	65	3.65	15	M/M	6.63%	54	3.72	1.00	1.00	1.00
16	M/M	8.49%	55	3.95	16	M/M	8.70%	27	4.89	1.00	1.00	1.00
17	M/M	3.40%	168	1.58	17	M/M	3.60%	131	2.02	0.00	1.00	
18	M/M	4.85%	131	2.26	18	M/M	4.96%	84	2.79	1.00	1.00	1.00
19	M/M	4.47%	136	2.08	19	M/M	4.08%	112	2.29	1.00	1.00	
20	M/M	5.02%	124	2.34	20	M/M	4.51%	100	2.53	1.00	1.00	
21	M/M	9.47%	39	4.41	21	M/M	8.47%	28	4.76	1.00	1.00	1.00
22	M/M	8.24%	58	3.83	22	M/M	6.76%	50	3.80	1.00	1.00	1.00
23	M/M	6.04%	95	2.81	23	M/M	5.28%	80	2.96	1.00	1.00	1.00
24	M/M	4.03%	145	1.87	24	M/M	3.56%	134	2.00	0.00	1.00	1.00
25	M/M	3.54%	162	1.65	25	M/M	2.90%	160	1.63	0.00	0.00	
26	M/M	6.91%	78	3.21	26	M/M	6.75%	53	3.79	1.00	1.00	1.00
27	M/M	1.19%	285	0.55	27	M/M	1.14%	269	0.64	0.00	0.00	
40	M/M	8.86%	49	4.12	40	M/M	7.33%	41	4.12	1.00	1.00	1.00
41	M/M	5.19%	121	2.42	41	M/M	4.38%	105	2.46	1.00	1.00	1.00
42	M/M	6.86%	79	3.19	42	M/M	6.47%	60	3.63	1.00	1.00	1.00
43	M/M	5.21%	120	2.43	43	M/M	4.75%	92	2.67	1.00	1.00	1.00
44	M/M	8.31%	57	3.87	44	M/M	7.27%	42	4.08	1.00	1.00	1.00
45	M/M	7.43%	70	3.46	45	M/M	5.83%	71	3.27	1.00	1.00	1.00
99	M/M	0.94%	297	0.44	99	M/M	0.92%	291	0.52	0.00	0.00	
All	All	2.15%			All	All	1.78%					

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Summary by Rate Class DOI Residual Market Share Group Methodology Quincy Mutual Analysis

4/1/2015 Credit Factors

4/1/16 Indicated - Residual Market Share Group Methodology

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible	04.	Potential	a. .
<u>Class</u>	<u>Exposures</u>	<u>Exposures</u>	Credit Premium	<u>Exposures</u>	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,070,466	293,247	437,702,290	46,736	-84.1%	88,648,806	-79.7%
15	782,127	8,091	10,891,112	1,897	-76.6%	2,628,381	-75.9%
17	144,383	60,950	115,233,840	25,988	-57.4%	56,889,710	-50.6%
18	55,019	1,192	1,939,846	180	-84.9%	300,668	-84.5%
20	34,282	33,449	116,472,201	27,067	-19.1%	94,391,768	-19.0%
21	15,499	5,813	14,215,271	750	-87.1%	1,631,037	-88.5%
25	74,621	3,973	14,864,458	2,961	-25.5%	11,730,229	-21.1%
26	65,541	372	1,115,203	0	-100.0%	0	-100.0%
30	62,038	523	798,566	296	-43.5%	419,288	-47.5%
M/M	166,422	19,116	4,231,745	6,940	-63.7%	1,739,815	-58.9%
Total	4,470,398	426,727	717,464,534	112,815	-73.6%	258,379,702	-64.0%

% of Total Mkt. Exp.

9.5%

2.5%

ed Credits Used Itilization	678,766,758 94.6%	Estimated Credits Used Credit Utilization	237,609,432 92.0%
		Residual	Keep
		Mark Shar	•
		<u>Group</u>	<u>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 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Summary by Rate Class DOI Residual Market Share Group Methodology Quincy Mutual Exhibit - 2 Year Look Forward

4/1/2015 Credit Factors

4/1/16 Indicated - Residual Market Share Group Methodology

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
<u>Class</u>	<u>Exposures</u>	<u>Exposures</u>	Credit Premium	<u>Exposures</u>	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,070,466	293,247	437,702,290	46,736	-84.1%	88,648,806	-79.7%
15	782,127	8,091	10,891,112	1,897	-76.6%	2,628,381	-75.9%
17	144,383	60,950	115,233,840	14,169	-76.8%	34,706,614	-69.9%
18	55,019	1,192	1,939,846	180	-84.9%	300,668	-84.5%
20	34,282	33,449	116,472,201	27,160	-18.8%	91,862,532	-21.1%
21	15,499	5,813	14,215,271	205	-96.5%	462,520	-96.7%
25	74,621	3,973	14,864,458	1,578	-60.3%	6,738,340	-54.7%
26	65,541	372	1,115,203	0	-100.0%	0	-100.0%
30	62,038	523	798,566	0	-100.0%	0	-100.0%
M/M	166,422	19,116	4,231,745	5,015	-73.8%	1,235,306	-70.8%
Total	4,470,398	426,727	717,464,534	96,939	-77.3%	226,583,167	-68.4%

% of Total Mkt. Exp.

9.5%

2.2%

Estimated Credits Used Credit Utilization	678,766,758 94.6%	Estimated Credits Used Credit Utilization	207,564,641 91.6%	
		Residual	Keep	
			•	
		Mark Share	Out	
		<u>Group</u>	<u>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 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Relative Range Methodology Summary by Rate Class Relative Range Methodology Quincy Mutual Analysis

4/1/2015 Credit Factors

4/1/16 Indicated - Relative Ranges

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
<u>Class</u>	Exposures	Exposures	Credit Premium	Exposures	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,070,466	293,247	437,702,290	177,060	-39.6%	268,921,714	-38.6%
15	782,127	8,091	10,891,112	8,091	0.0%	10,891,112	0.0%
17	144,383	60,950	115,233,840	74,161	21.7%	135,542,517	17.6%
18	55,019	1,192	1,939,846	837	-29.8%	1,483,660	-23.5%
20	34,282	33,449	116,472,201	32,840	-1.8%	107,306,845	-7.9%
21	15,499	5,813	14,215,271	5,223	-10.2%	12,527,213	-11.9%
25	74,621	3,973	14,864,458	5,294	33.2%	19,125,780	28.7%
26	65,541	372	1,115,203	0	-100.0%	0	-100.0%
30	62,038	523	798,566	683	30.6%	998,014	25.0%
M/M	166,422	19,116	4,231,745	25,097	31.3%	5,302,995	25.3%
Total	4,470,398	426,727	717,464,534	329,286	-22.8%	562,099,849	-21.7%

% of Total Mkt. Exp.

9.5%

7.4%

	Estimated Credits Used Credit Utilization		678,766,758 94.6%	Estimated Credits Used Credit Utilization		529,065,469 94.1%	
Original Ranges:			Relative Ranges:				
Group	Lower	<u>Upper</u>	<u>Factor</u>	Group	Lower	<u>Upper</u>	<u>Factor</u>
0	0	0.05	0	0	0	0.035	0
1	0.05	0.08	1	1	0.035	0.065	1
2	0.08	0.11	1	2	0.065	0.095	1
3	0.11	0.17	1	3	0.095	0.155	1
4	0.17	0.23	1.25	4	0.155	0.215	1.25
5	0.23	0.29	1.5	5	0.215	0.275	1.5
6	0.29	0.35	1.75	6	0.275	0.335	1.75
7	0.35	0.41	2	7	0.335	0.395	2
8	0.41	0.47	2.25	8	0.395	0.455	2.25
9	0.47	1	2.5	9	0.455	1	2.5

1.38% (Current Residual	Market Rate	Using Data	Through May, 2015

^{2.0%} Target Cession Rate From 2012 Division of Insurance Decision (Bulletin 953)

- 1. Divide the actual overall residual market share by the target (1.38 / 2.0) = .69
- 2. Round the result from 1. above to the nearest 10th = .7
- 3. Multiply the result from 2. above by the original average residual market share threshold $(.7 \times .05) = 3.5$
- 4. Use the same increment for bands as original methodology: .03 for first two bands, .06 for all remaining bands

^{5.0%} Residual Market rate Threshold Point, Credits were given for 5.0% and above (2012-2015)

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Relative Range Methodology Summary by Rate Class Relative Range Methodology Quincy Mutual Exhibit - 2 Year Look Forward

4/1/2015 Credit Factors

4/1/16 Indicated - Relative Ranges

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
<u>Class</u>	Exposures	Exposures	Credit Premium	Exposures	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,070,466	293,247	437,702,290	109,189	-62.8%	168,760,045	-61.4%
15	782,127	8,091	10,891,112	8,091	0.0%	10,891,112	0.0%
17	144,383	60,950	115,233,840	34,115	-44.0%	73,479,328	-36.2%
18	55,019	1,192	1,939,846	180	-84.9%	300,668	-84.5%
20	34,282	33,449	116,472,201	31,242	-6.6%	102,576,742	-11.9%
21	15,499	5,813	14,215,271	3,089	-46.9%	7,339,612	-48.4%
25	74,621	3,973	14,864,458	3,489	-12.2%	12,705,549	-14.5%
26	65,541	372	1,115,203	0	-100.0%	0	-100.0%
30	62,038	523	798,566	242	-53.8%	346,651	-56.6%
M/M	166,422	19,116	4,231,745	19,369	1.3%	4,290,998	1.4%
Total	4,470,398	426,727	717,464,534	209,005	-51.0%	380,690,705	-46.9%

% of Total Mkt. Exp.

9.5%

4.7%

	Estimated Credits Used Credit Utilization		678,766,758 94.6%	Estimated Credits Used Credit Utilization		354,002,601 93.0%	
Original Ranges:				Relative Ran	ges:		
<u>Group</u>	<u>Lower</u>	<u>Upper</u>	<u>Factor</u>	<u>Group</u>	<u>Lower</u>	<u>Upper</u>	<u>Factor</u>
0	0	0.05	0	0	0	0.035	0
1	0.05	0.08	1	1	0.035	0.065	1
2	0.08	0.11	1	2	0.065	0.095	1
3	0.11	0.17	1	3	0.095	0.155	1
4	0.17	0.23	1.25	4	0.155	0.215	1.25
5	0.23	0.29	1.5	5	0.215	0.275	1.5
6	0.29	0.35	1.75	6	0.275	0.335	1.75
7	0.35	0.41	2	7	0.335	0.395	2
8	0.41	0.47	2.25	8	0.395	0.455	2.25
9	0.47	1	2.5	9	0.455	1	2.5

1.38%	Current Residual Ma	arket Rate Using Dat	a Through May, 2015

^{2.0%} Target Cession Rate From 2012 Division of Insurance Decision (Bulletin 953)

- 1. Divide the actual overall residual market share by the target (1.38 / 2.0) = .69
- 2. Round the result from 1. above to the nearest 10th = .7
- 3. Multiply the result from 2. above by the original average residual market share threshold $(.7 \times .05) = 3.5$
- 4. Use the same increment for bands as original methodology: .03 for first two bands, .06 for all remaining bands

^{5.0%} Residual Market rate Threshold Point, Credits were given for 5.0% and above (2012-2015)

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Relative Range Methodology (Plymouth Rock) Summary by Rate Class PRAC Methodology Quincy Mutual Analysis

4/1/2015 Credit Factors

4/1/16 Indicated - PRAC

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
Class	Exposures	Exposures	Credit Premium	<u>Exposures</u>	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,070,466	293,247	437,702,290	293,247	0.0%	437,702,290	0.0%
15	782,127	8,091	10,891,112	8,091	0.0%	10,891,112	0.0%
17	144,383	60,950	115,233,840	60,950	0.0%	115,233,840	0.0%
18	55,019	1,192	1,939,846	337	-71.7%	658,180	-66.1%
20	34,282	33,449	116,472,201	31,851	-4.8%	113,008,894	-3.0%
21	15,499	5,813	14,215,271	4,196	-27.8%	10,479,364	-26.3%
25	74,621	3,973	14,864,458	3,484	-12.3%	13,212,120	-11.1%
26	65,541	372	1,115,203	0	-100.0%	0	-100.0%
30	62,038	523	798,566	296	-43.5%	419,288	-47.5%
M/M	166,422	19,116	4,231,745	18,652	-2.4%	4,123,902	-2.5%
Total	4,470,398	426,727	717,464,534	421,103	-1.3%	705,728,990	-1.6%

% of Total Mkt. Exp.

9.5%

9.4%

	Estimated Credits Used Credit Utilization		678,766,758 94.6%	Estimated Credits Used Credit Utilization		667,285,375 94.6%	
Original Ranges:			Relative Ranges:				
<u>Group</u>	<u>Lower</u>	<u>Upper</u>	<u>Factor</u>	<u>Group</u>	Lower	<u>Upper</u>	<u>Factor</u>
0	0.00	0.05	0	0	0.000	0.025	0
1	0.05	0.08	1	1	0.025	0.040	1
2	0.08	0.11	1	2	0.040	0.055	1
3	0.11	0.17	1	3	0.055	0.085	1
4	0.17	0.23	1.25	4	0.085	0.115	1.25
5	0.23	0.29	1.5	5	0.115	0.145	1.5
6	0.29	0.35	1.75	6	0.145	0.175	1.75
7	0.35	0.41	2	7	0.175	0.205	2
8	0.41	0.47	2.25	8	0.205	0.235	2.25
9	0.47	1.00	2.5	9	0.235	1.000	2.5

1.38% (Current Residual	Market Rate	Using Data [•]	Through May, 2015

^{2.8%} Base Cession Rate From 2012 Division of Insurance Decision (Bulletin 953)

- 1. Divide the actual overall residual market share by the target (1.38 / 2.75) = 0.502
- 2. Round the result from 1. above to the nearest 10th = 0.5
- 3. Multiply the result from 2. above by the original average residual market share threshold $(0.5 \times 0.05) = 0.025$
- 4. Adjust the remaining bands in the same manner, rounding to 3 decimal places

^{5.0%} Residual Market rate Threshold Point, Credits were given for 5.0% and above (2012-2015)

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through May, 2015 (2013 Rates) Relative Range Methodology (Plymouth Rock) Summary by Rate Class PRAC Methodology Quincy Mutual Exhibit - 2 Year Look Forward

4/1/2015 Credit Factors

4/1/16 Indicated - PRAC

Rate <u>Class</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
<u> </u>	Expoduido	<u> Expoduroo</u>	<u>Orodic i romitami</u>	<u>Expoduido</u>	70/1	<u>Orount i ronnium</u>	<u>7023</u>
10	3,070,466	293,247	437,702,290	456,600	55.7%	629,823,420	43.9%
15	782,127	8,091	10,891,112	8,091	0.0%	10,891,112	0.0%
17	144,383	60,950	115,233,840	91,121	49.5%	160,182,658	39.0%
18	55,019	1,192	1,939,846	1,147	-3.8%	2,381,508	22.8%
20	34,282	33,449	116,472,201	32,565	-2.6%	127,842,616	9.8%
21	15,499	5,813	14,215,271	4,196	-27.8%	10,479,364	-26.3%
25	74,621	3,973	14,864,458	9,903	149.2%	32,285,588	117.2%
26	65,541	372	1,115,203	188	-49.5%	373,578	-66.5%
30	62,038	523	798,566	1,813	246.6%	2,712,715	239.7%
M/M	166,422	19,116	4,231,745	28,346	48.3%	5,800,233	37.1%
Total	4,470,398	426,727	717,464,534	633,969	48.6%	982,772,793	37.0%

% of Total Mkt. Exp.

9.5%

14.2%

	Estimated Credits Used Credit Utilization		678,766,758 94.6%	Estimated Cred Credit Utilizatio		933,017,964 94.9%	
Original Ranges:				Relative Ran	ges:		
<u>Group</u>	<u>Lower</u>	<u>Upper</u>	<u>Factor</u>	<u>Group</u>	<u>Lower</u>	<u>Upper</u>	<u>Factor</u>
0	0.00	0.05	0	0	0.000	0.025	0
1	0.05	80.0	1	1	0.025	0.040	1
2	0.08	0.11	1	2	0.040	0.055	1
3	0.11	0.17	1	3	0.055	0.085	1
4	0.17	0.23	1.25	4	0.085	0.115	1.25
5	0.23	0.29	1.5	5	0.115	0.145	1.5
6	0.29	0.35	1.75	6	0.145	0.175	1.75
7	0.35	0.41	2	7	0.175	0.205	2
8	0.41	0.47	2.25	8	0.205	0.235	2.25
9	0.47	1.00	2.5	9	0.235	1.000	2.5

1.38%	Current Residual N	√arket Rate Usin	g Data Throu	ah Mav. 2015

^{2.8%} Base Cession Rate From 2012 Division of Insurance Decision (Bulletin 953)

- 1. Divide the actual overall residual market share by the target (1.38 / 2.75) = 0.502
- 2. Round the result from 1. above to the nearest 10th = 0.5
- 3. Multiply the result from 2. above by the original average residual market share threshold $(0.5 \times 0.05) = 0.025$
- 4. Adjust the remaining bands in the same manner, rounding to 3 decimal places

^{5.0%} Residual Market rate Threshold Point, Credits were given for 5.0% and above (2012-2015)

Quincy Mutual Handout Historical Quota Share Summary

			Stat Reported	Stat Reported	Newly	Total
Company	Report Date	Voluntary	Calculated	Calculated	Assigned	MAIP Premium
		Exposures	Maip Premium	Credit Premium	Premium	in Quota Share
IND	1/31/2013	4,062,252	176,964,591	676,955,398	17,060,908	194,025,499
IND	2/28/2013	4,074,996	174,468,803	693,467,802	20,067,831	194,536,634
IND	3/31/2013	4,086,637	171,298,370	708,865,735	21,702,974	193,001,344
IND	4/30/2013	4,086,264	168,154,975	726,359,786	20,143,203	188,298,178
IND	5/31/2013	4,109,025	166,664,715	751,025,352	18,226,417	184,891,132
IND	6/30/2013	4,127,598	164,073,597	749,439,293	16,241,137	180,314,734
IND	7/31/2013	4,153,051	162,816,955	753,155,160	15,422,251	178,239,206
IND	8/31/2013	4,162,469	158,855,991	754,291,138	16,201,928	175,057,919
IND	9/30/2013	4,174,168	155,830,396	755,819,929	15,536,565	171,366,961
IND	10/31/2013	4,183,008	151,891,000	757,777,252	14,462,402	166,353,402
IND	11/30/2013	4,187,158	148,169,572	757,595,222	13,257,597	161,427,169
IND	12/31/2013	4,192,726	144,911,576	757,377,217	12,080,967	156,992,543
IND	1/31/2014	4,197,765	141,462,604	758,111,441	12,068,111	153,530,715
IND	2/28/2014	4,199,492	138,704,229	758,788,808	14,550,981	153,255,210
IND	3/31/2014	4,195,366	134,563,462	756,036,633	15,985,109	150,548,571
IND	4/30/2014	4,205,572	131,243,532	761,739,336	14,354,874	145,598,406
IND	5/31/2014	4,216,646	128,311,148	765,401,272	12,499,018	140,810,166
IND	6/30/2014	4,228,279	124,779,900	768,153,619	11,558,720	136,338,620
IND	7/31/2014	4,240,505	121,856,986	769,133,870	11,063,390	132,920,376
IND	8/31/2014	4,248,865	119,027,166	767,314,708	10,833,680	129,860,846
IND	9/30/2014	4,259,076	115,935,538	766,037,495	10,615,590	126,551,128
IND	10/31/2014	4,266,821	112,221,413	763,892,759	10,722,560	122,943,973
IND	11/30/2014	4,272,529	109,519,137	762,524,937	9,850,071	119,369,208
IND	12/31/2014	4,278,808	107,568,868	763,281,897	9,158,252	116,727,120
IND	1/31/2015	4,280,167	104,724,914	760,595,685	9,073,319	113,798,233
IND	2/28/2015	4,283,883	103,117,934	760,743,494	9,725,687	112,843,621
IND	3/31/2015	4,280,056	99,845,812	757,958,343	11,732,324	112,570,440
IND	4/30/2015	4,282,802	98,114,698	756,233,254	12,817,665	
IND	5/31/2015	4,285,951	97,063,437	758,127,759	11,698,101	108,761,538
IND	6/30/2015	4,296,294	96,292,091	754,278,682	11,326,580	107,618,671



COMMONWEALTH AUTOMOBILE REINSURERS

225 Franklin Street Boston, Massachusetts 02110
www.commauto.com 617-338-4000

NOTICE OF MEETING

ACTUARIAL COMMITTEE

A meeting of the Actuarial Committee will be held at the offices of Commonwealth Automobile Reinsurers, 225 Franklin Street, Boston, on

WEDNESDAY OCTOBER 7, 2015 AT 10:00 A.M.

MEMBERS OF THE COMMITTEE

Mr. Joseph F. Cofield – Chair Metropolitan P & C Insurance Company

Mr. Geoffrey H. Arnold Plymouth Rock Assurance Corporation Mr. Alex F. Butensky The Norfolk & Dedham Group Mr. Jonathan Blake The Hanover Insurance Company Mr. Christopher Dupill EM Freedman Insurance Agency, Inc. Mr. Glenn R. Hiltpold Safety Insurance Company MAPFRE U.S.A. Corporation Mr. John V. Kelly Mr. Michael Petrarca, Jr. Amica Mutual Insurance Company Ms. Lynellen Ramirez Arbella Insurance Group Mr. John P. Tierney Quincy Mutual Group Ms Meredith M Woodcock Liberty Mutual Group

AGENDA

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15.01 Records of Previous Meeting

The Records of the Actuarial Committee meeting of September 2, 2015 should be read and approved.

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15.03 Quota Share Credits for Policies Effective April 1, 2016 and Later

At its September 2, 2015 meeting, the Committee continued discussions relative to the April 1, 2016 Credit Offer, and requested Staff prepare the following exhibits related to the Quota Share Credits incorporating data through July, 2015:

- A Summary of Exhibits (Docket #AC15.03, Exhibit #18)
- The current indication, using the methodology codified in Rule 29. (Docket #AC15.03, Exhibit #19)
- Credit Indications using the so-called "Relative Range" model, which bases residual market share group ranges on the relative size of today's residual market as compared to the target residual market size established in 2011. (Docket #AC15.03, Exhibit #20)
- Plymouth Rock Assurance Corporation Proposal (Docket #AC15.03, Exhibit #21)
- Quincy Mutual Two Year Projection Analysis (Docket #AC15.03, Exhibit #22)

Staff has also included a summary exhibit of the various credit alternatives to assist the Committee. (Docket #AC15.03, Exhibit #23)

Additionally, Staff has included the loss ratio analysis for voluntary and assigned business. These reports are revised to exclude one company's incorrect data. (Docket #AC15.03, Exhibit #24)

The Committee should be prepared to continue discussions relative to quota share credits for policies effective April 1, 2016 in order to finalize its recommendation to the Governing Committee at its November 18, 2015 meeting.



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 $G.L.\ c.\ 30A,\ \S\ 21.$

TIMOTHY F. GALLIGAN Financial Services Coordinator

Attachments

Boston, Massachusetts September 25, 2015

Commonwealth Automobile Reinsurers Actuarial Committee

Exhibit Summary AC 15.03

Exhibit #	# Pages	<u>Description</u>
18	1	Exhibit Summary
19	13	Indicated Results (1) - Residual Market Share Group Methodology
20	13	Indicated Results (2) - Relative Credit Factor Ranges
21	14	Indicated Results (3) - PRAC Proposal
22	6	Two Year Projection Analysis For Each Alternative - Quincy Mutual
23	1	Summary of Credit Indications Requested By Committee (Data through May, 2015)
24	2	Loss Ratios By Class/Territory

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Summary by Rate Class

	4.	/1/2015 Credit Fa	ctors	4/1/16 Indicated - Residual Market Share Group Methodology							
Rate <u>Class</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>				
10	3,079,664	294,536	439,287,056	46,944	-84.1%	88,920,994	-79.8%				
15	787,860	8,165	10,951,878	1,923	-76.4%	2,662,891	-75.7%				
17	145,779	61,664	116,333,988	26,250	-57.4%	57,393,310	-50.7%				
18	55,230	1,208	1,968,996	180	-85.1%	304,198	-84.6%				
20	34,313	33,463	116,383,809	27,004	-19.3%	94,127,837	-19.1%				
21	15,514	5,797	14,176,145	754	-87.0%	1,639,680	-88.4%				
25	75,827	4,091	15,262,693	3,168	-22.6%	12,425,039	-18.6%				
26	65,048	380	1,139,323	0	-100.0%	0	-100.0%				
30	62,120	526	809,940	303	-42.3%	435,670	-46.2%				
M/M	168,786	19,566	4,341,789	7,094	-63.7%	1,785,849	-58.9%				
Total	4,490,140	429,395	720,655,617	113,620	-73.5%	259,695,468	-64.0%				
May 2015	4,470,398	426,727	717,464,534	112,815	-73.6%	258,379,702	-64.0%				
% of Total N	6 of Total Mkt. Exp. 9.6%			2.5%							
	Estimated Cred		682,579,167 94.7%	Estimated Credit		238,992,859 92.0%					
					Residual Mark Share	Keep Out					
					<u>Group</u>	<u>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 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 - Residual Market Share Group

_	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
<u>Territory</u>	<u>Exposures</u>	<u>Exposures</u>	Credit Premium	<u>Exposures</u>	<u>%∆</u>	Credit Premium	<u>%∆</u>
1	179,645	0	0	0	0.0%	0	0.0%
2	241,632	1,088	2,172,578	0	-100.0%	0	-100.0%
3	519,011	2,359	4,903,494	0	-100.0%	0	-100.0%
4	329,650	1,349	3,191,218	0	-100.0%	0	-100.0%
5	505,909	3,011	6,732,095	3,011	0.0%	6,732,095	0.0%
6	338,514	1,684	4,373,882	1,684	0.0%	4,373,882	0.0%
7	347,953	13,473	22,263,296	2,321	-82.8%	5,856,888	-73.7%
8	198,946	6,854	11,974,908	1,170	-82.9%	3,042,268	-74.6%
9	198,113	8,998	16,805,659	1,622	-82.0%	4,849,507	-71.1%
10	95,743	4,433	8,349,841	695	-84.3%	2,087,562	-75.0%
11	72,383	635	2,110,782	635	0.0%	2,110,782	0.0%
12	194,206	7,252	14,998,854	1,701	-76.6%	5,091,667	-66.1%
13	210,052	18,001	26,373,177	10,404	-42.2%	22,932,584	-13.0%
14	72,381	6,759	14,216,143	4,412	-34.7%	12,418,441	-12.6%
15	25,613	2,608	5,559,235	2,463	-5.6%	4,855,514	-12.7%
16*	13,786	12,407	19,439,240	1,366	-89.0%	4,018,545	-79.3%
17	17,276	409	971,286	409	0.0%	887,911	-8.6%
18	16,051	13,844	20,283,776	1,163	-91.6%	2,602,177	-87.2%
19	15,574	511	1,386,654	519	1.5%	1,464,034	5.6%
20*	17,998	14,796	23,214,158	1,084	-92.7%	3,746,142	-83.9%
21*	47,453	46,303	93,336,130	39,684	-14.3%	82,510,811	-11.6%
22*	15,082	15,082	32,284,144	14,669	-2.7%	30,032,585	-7.0%
23	45,098	2,898	7,436,636	2,006	-30.8%	5,884,615	-20.9%
24	24,791	1,271	2,618,743	466	-63.3%	1,600,660	-38.9%
25	16,590	509	1,431,503	153	-70.1%	547,601	-61.7%
26*	21,365	1,639	4,353,093	1,341	-18.2%	2,808,377	-35.5%
27	412,141	1,664	2,905,935	0	-100.0%	0	-100.0%
40*	20,516	16,612	22,547,056	1,725	-89.6%	2,945,328	-86.9%
41*	58,739	50,559	60,000,400	4,007	-92.1%	8,467,491	-85.9%
42*	73,454	59,665	97,080,594	3,253	-94.5%	6,041,919	-93.8%
43*	47,483	39,935	65,821,904	3,067	-92.3%	9,340,087	-85.8%
44*	33,690	29,883	39,223,163	3,555	-88.1%	7,054,713	-82.0%
45*	50,938	42,902	82,296,042	5,036	-88.3%	15,391,282	-81.3%
99	12,368	0	0	0	0.0%	0	0.0%
Total	4,490,140	429,395	720,655,617	113,620	-73.5%	259,695,468	-64.0%
·/ - . T - (- 1)	Mkt. Exp.	9.6%		2.5%			

	Summary for Key Territories cited by the Division of Insurance											
Total	400,504	329,783	539,595,923	78,786	-76.1%	172,357,281	-68.1%					
% of Total	Mkt. Exp.	82.3%		19.7%								

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	<u>Aug-14</u>	<u>Jul-15</u>	2014	<u>2015</u>	2016	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.17%	0.90%	0.73%	0	0	0	0	-	-	-	0	0.00	
2	1.19%	0.92%	0.77%	0	0	0	0	-	-	-	1	1.00	
3	1.45%	1.06%	0.80%	0	0	0	0	-	-	-	2	1.00	
4	1.27%	0.98%	0.79%	0	0	0	0	-	-	-	3	1.00	
5	1.91%	1.44%	1.07%	0	0	0	0	-	-	-	4	1.25	
6	1.91%	1.46%	1.15%	0	0	0	0	-	-	-	5	1.50	
7	2.46%	1.81%	1.39%	0	0	0	0	-	-	-	6	1.75	
8	2.25%	1.64%	1.29%	0	0	0	0	-	-	-	7	2.00	
9	2.87%	2.03%	1.44%	0	0	0	0	-	-	-	8	2.25	
10	2.92%	2.18%	1.71%	0	0	0	0	-	-	-	9	2.50	
11	1.99%	1.51%	1.24%	0	0	0	0	-	-	-			
12	2.50%	1.93%	1.57%	0	0	0	0	-	-	-			
13	4.32%	3.11%	2.43%	0	0	0	0	-	-	-			
14	3.84%	2.79%	2.30%	0	0	0	0	-	-	-			
15	4.35%	2.67%	2.11%	0	0	0	0	-	-	-			
16	6.39%	4.97%	3.44%	1	0	0	0	-	1.00	(1.00)			
17	2.20%	1.81%	1.70%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.74%	1	0	0	0	-	1.00	(1.00)			
19	3.68%	3.20%	2.65%	0	0	0	0	-	-	-			
20	6.23%	4.87%	4.63%	1	0	0	0	-	1.00	(1.00)	Availab	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.14%	1	1	1	1	1.00	1.00	-			
22	9.85%	6.82%	5.74%	2	1	1	1	1.00	1.00	-	2016	88,920,994	46,944
23	3.63%	2.49%	1.76%	0	0	0	0	-	-	-			
24	2.15%	1.75%	1.39%	0	0	0	0	-	-	-	2015	439,287,056	294,536
25	2.15%	1.50%	1.20%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.05%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.93%	0.77%	0.62%	0	0	0	0	-	-	-			
40	7.63%	4.08%	2.65%	1	0	0	0	-	1.00	(1.00)		(350,366,062)	(247,592)
41	5.88%	3.11%	2.48%	1	0	0	0	-	1.00	(1.00)			
42	6.48%	4.37%	2.74%	1	0	0	0	-	1.00	(1.00)	<u>Pe</u>	ercent Change:	Percent Change:
43	5.28%	3.09%	2.44%	1	0	0	0	-	1.00	(1.00)			
44	7.95%	4.99%	4.32%	1	0	0	0	-	1.00	(1.00)		-79.8%	-84.1%
45	6.64%	3.49%	2.79%	1	0	0	0	-	1.00	(1.00)			
99	0.70%	0.56%	0.62%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.39%										

- 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.

											Residual	Keep	
	Residu	al Market		Indicated Mkt Share Range		Selected	2016	2015		Mark Shr	Out		
<u>Terr</u>	Aug-13	<u>Aug-14</u>	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	2016	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	0.32%	0.27%	0.29%	0	0	0	0	-	-	-	0	0.00	
2	0.29%	0.29%	0.28%	0	0	0	0	-	-	-	1	1.00	
3	0.38%	0.29%	0.26%	0	0	0	0	-	-	-	2	1.00	
4	0.30%	0.29%	0.26%	0	0	0	0	-	-	-	3	1.00	
5	0.44%	0.38%	0.32%	0	0	0	0	-	-	-	4	1.25	
6	0.58%	0.53%	0.43%	0	0	0	0	-	-	-	5	1.50	
7	0.56%	0.46%	0.41%	0	0	0	0	-	-	-	6	1.75	
8	0.78%	0.67%	0.60%	0	0	0	0	-	-	-	7	2.00	
9	0.78%	0.63%	0.49%	0	0	0	0	-	-	-	8	2.25	
10	0.71%	0.62%	0.53%	0	0	0	0	-	-	-	9	2.50	
11	1.12%	0.88%	0.72%	0	0	0	0	-	-	-			
12	0.88%	0.86%	0.76%	0	0	0	0	-	-	-			
13	1.46%	1.17%	0.91%	0	0	0	0	-	-	-			
14	1.65%	1.32%	1.16%	0	0	0	0	-	-	-			
15	1.42%	1.43%	1.28%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.07%	0	0	0	0	-	-	-			
17	0.79%	0.76%	0.91%	0	0	0	0	-	-	-			
18	2.45%	2.07%	1.93%	0	0	0	0	-	-	-			
19	2.18%	2.18%	1.94%	0	0	0	0	-	-	-			
20	2.70%	2.39%	2.57%	0	0	0	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.20%	1	0	0	0	-	1.00	(1.00)			
22	8.10%	6.62%	5.59%	2	1	1	1	1.00	1.00	-	2016	2,662,891	1,923
23	2.82%	1.98%	1.40%	0	0	0	0	-	-	-			
24	2.99%	2.98%	2.47%	0	0	0	0	-	-	-	2015	10,951,878	8,165
25	1.73%	1.28%	1.12%	0	0	0	0	-	-	-			
26	1.99%	1.56%	1.45%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.26%	0.24%	0.20%	0	0	0	0	-	-	-			
40	2.44%	1.80%	0.95%	0	0	0	0	-	-	-		(8,288,987)	(6,242)
41	1.68%	1.28%	0.96%	0	0	0	0	-	-	-			
42	3.10%	3.10%	2.28%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	1.59%	1.06%	0.88%	0	0	0	0	-	-	-			
44	3.16%	2.11%	1.97%	0	0	0	0	-	-	-		-75.7%	-76.4%
45	2.38%	1.83%	1.45%	0	0	0	0	-	-	-			
99	0.36%	0.26%	0.19%	0	0	0	0	-	-	-			
Tot	0.73%	0.62%	0.53%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	2014	<u>2015</u>	2016	Range*	Credits	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	3.25%	2.47%	2.04%	0	0	0	0	-	-	-	0	0.00	
2	2.96%	2.03%	1.95%	0	0	0	0	-	-	-	1	1.00	
3	4.05%	2.61%	2.06%	0	0	0	0	-	-	-	2	1.00	
4	3.21%	2.63%	1.94%	0	0	0	0	-	-	-	3	1.00	
5	4.26%	3.06%	2.38%	0	0	0	0	-	-	-	4	1.25	
6	4.40%	3.57%	2.96%	0	0	0	0	-	-	-	5	1.50	
7	5.00%	3.57%	2.81%	1	0	0	0	-	1.00	(1.00)	6	1.75	
8	5.01%	3.58%	3.29%	1	0	0	0	-	1.00	(1.00)	7	2.00	
9	5.05%	3.56%	2.92%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	5.55%	3.98%	3.09%	1	0	0	0	-	1.00	(1.00)	9	2.50	
11	4.60%	3.99%	2.51%	0	0	0	0	-	-	-			
12	5.90%	4.74%	3.88%	1	0	0	0	-	1.00	(1.00)			
13	7.34%	5.15%	4.50%	1	1	0	1	1.00	1.00	-			
14	8.44%	5.78%	5.23%	2	1	1	1	1.00	1.00	-			
15	8.90%	6.45%	4.34%	2	1	0	1	1.00	1.00	-			
16	14.02%	9.76%	6.38%	3	2	1	2	1.00	1.00	-			
17	6.51%	5.57%	3.47%	1	1	0	1	1.00	1.00	-			
18	10.10%	7.78%	7.06%	2	1	1	1	1.00	1.00	-			
19	11.66%	7.72%	4.77%	3	1	0	1	1.00	1.00	-			
20	12.72%	10.84%	9.55%	3	2	2	2	1.00	1.00	-	<u>Availal</u>	ole Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	9.45%	3	3	2	3	1.00	1.00	-			
22	14.23%	10.75%	9.36%	3	2	2	2	1.00	1.00	-	2016	57,393,310	26,250
23	8.79%	6.11%	4.96%	2	1	0	1	1.00	1.00	-			
24	4.64%	3.61%	2.78%	0	0	0	0	-	-	-	2015	116,333,988	61,664
25	6.65%	4.56%	2.66%	1	0	0	0	-	1.00	(1.00)			
26	8.63%	5.64%	4.22%	2	1	0	1	1.00	1.00	-		Difference:	<u>Difference:</u>
27	2.51%	2.07%	1.50%	0	0	0	0	-	-	-			
40	12.55%	7.28%	5.09%	3	1	1	1	1.00	1.00	-		(58,940,678)	(35,414)
41	12.06%	6.14%	4.61%	3	1	0	1	1.00	1.00	-			
42	9.55%	4.71%	3.40%	2	0	0	0	-	1.00	(1.00)	<u> </u>	Percent Change:	Percent Change:
43	8.81%	5.59%	6.17%	2	1	1	1	1.00	1.00	-		,	-
44	11.57%	6.62%	6.40%	3	1	1	1	1.00	1.00	-		-50.7%	-57.4%
45	12.13%	6.63%	6.25%	3	1	1	1	1.00	1.00	-			
99	0.83%	0.39%	0.42%	0	0	0	0	-	-	-			
Tot	5.17%	3.64%	2.98%										

- 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.

Residual

Keen

	_									Residual	Кеер		
	Residu	al Market		Indicated	d Mkt Shar	re Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	<u>Aug-14</u>	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.12%	0.63%	0.70%	0	0	0	0	-	-	-	0	0.00	
2	0.84%	0.55%	0.42%	0	0	0	0	-	-	-	1	1.00	
3	1.34%	0.92%	0.72%	0	0	0	0	-	-	-	2	1.00	
4	1.14%	0.86%	0.47%	0	0	0	0	-	-	-	3	1.00	
5	1.75%	1.26%	0.96%	0	0	0	0	-	-	-	4	1.25	
6	1.10%	1.13%	0.74%	0	0	0	0	-	-	-	5	1.50	
7	1.98%	1.31%	0.85%	0	0	0	0	-	-	-	6	1.75	
8	1.08%	0.94%	0.98%	0	0	0	0	-	-	-	7	2.00	
9	2.17%	1.57%	0.99%	0	0	0	0	-	-	-	8	2.25	
10	1.83%	1.02%	1.57%	0	0	0	0	-	-	-	9	2.50	
11	1.24%	0.77%	1.04%	0	0	0	0	-	-	-			
12	2.44%	1.85%	1.34%	0	0	0	0	-	-	-			
13	2.71%	1.96%	1.79%	0	0	0	0	-	-	-			
14	3.53%	2.39%	2.02%	0	0	0	0	-	-	-			
15	4.75%	4.06%	2.60%	0	0	0	0	-	-	-			
16	1.75%	0.00%	1.03%	0	0	0	0	-	-	-			
17	2.14%	1.13%	0.80%	0	0	0	0	-	-	-			
18	5.63%	5.10%	3.98%	1	1	0	1	1.00	1.00	-			
19	3.16%	2.04%	0.84%	0	0	0	0	-	-	-			
20	3.59%	4.15%	1.81%	0	0	0	0	-	-	-	Availabl	e Credit Prem:	Credit Eligible Exp:
21	4.86%	3.05%	3.37%	0	0	0	0	-	-	-			
22	9.76%	4.32%	3.76%	2	0	0	0	-	1.00	(1.00)	2016	304,198	180
23	2.12%	1.27%	1.63%	0	0	0	0	-	-	-			
24	3.56%	0.43%	2.37%	0	0	0	0	-	-	-	2015	1,968,996	1,208
25	0.15%	1.68%	0.85%	0	0	0	0	-	-	-			
26	4.20%	3.21%	1.80%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.89%	0.72%	0.53%	0	0	0	0	-	-	-			
40	5.77%	2.78%	0.40%	1	0	0	0	-	1.00	(1.00)		(1,664,798)	(1,028)
41	7.29%	1.64%	1.36%	1	0	0	0	-	1.00	(1.00)		,	,
42	2.50%	1.69%	1.07%	0	0	0	0	_	_	-	Pe	rcent Change:	Percent Change:
43	3.03%	3.04%	1.92%	0	0	0	0	_	_	-		<u></u> _	
44	1.80%	2.70%	2.12%	0	0	0	0	_	_	-		-84.6%	-85.1%
45	4.86%	3.11%	2.89%	0	0	0	0	_	_	-			
99	1.96%	0.51%	0.43%	0	0	0	0	-	-	-			
Tot	1.72%	1.21%	0.95%										

- 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.

	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	2014	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	4.03%	3.98%	5.86%	0	0	1	0	<u>-</u>	<u>-</u>	<u>-</u>	<u>0,045</u>	0.00	
2	5.82%	4.31%	3.79%	1	0	0	0	_	1.00	(1.00)	1	1.00	
3	7.69%	3.82%	4.09%	1	0	0	0	-	1.00	(1.00)	2	1.00	
4	5.70%	3.32%	2.39%	1	0	0	0	-	1.00	(1.00)	3	1.00	
5	7.89%	6.27%	5.51%	1	1	1	1	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.64%	2	1	1	1	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.72%	2	1	1	1	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.37%	3	1	1	1	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	6.38%	2	1	1	1	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	5.64%	3	1	1	1	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	5.06%	2	1	1	1	1.00	1.00	-			
12	12.77%	7.55%	6.51%	3	1	1	1	1.00	1.00	-			
13	11.99%	8.85%	8.20%	3	2	2	2	1.00	1.00	-			
14	15.28%	13.10%	11.54%	3	3	3	3	1.00	1.00	-			
15	21.15%	13.01%	12.37%	4	3	3	3	1.00	1.25	(0.25)			
16	26.59%	25.13%	20.50%	5	5	4	5	1.50	1.50	-			
17	19.61%	9.89%	9.66%	4	2	2	2	1.00	1.25	(0.25)			
18	20.86%	22.51%	12.89%	4	4	3	4	1.25	1.25	-			
19	15.29%	16.67%	15.33%	3	3	3	3	1.00	1.00	-			
20	24.66%	18.55%	20.05%	5	4	4	4	1.25	1.50	(0.25)	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	32.61%	23.95%	24.30%	6	5	5	5	1.50	1.75	(0.25)			
22	33.75%	22.17%	20.19%	6	4	4	4	1.25	1.75	(0.50)	2016	94,127,837	27,004
23	18.35%	10.83%	8.91%	4	2	2	2	1.00	1.25	(0.25)			
24	8.54%	5.71%	5.99%	2	1	1	1	1.00	1.00	-	2015	116,383,809	33,463
25	13.28%	13.16%	13.22%	3	3	3	3	1.00	1.00	-			
26	23.56%	13.76%	13.36%	5	3	3	3	1.00	1.50	(0.50)		Difference:	<u>Difference:</u>
27	5.26%	3.54%	2.51%	1	0	0	0	-	1.00	(1.00)			
40	24.85%	11.38%	10.14%	5	3	2	3	1.00	1.50	(0.50)		(22, 255, 972)	(6,460)
41	14.09%	9.23%	9.28%	3	2	2	2	1.00	1.00	-			
42	18.64%	12.38%	9.20%	4	3	2	3	1.00	1.25	(0.25)	<u>Pe</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	12.44%	4	3	3	3	1.00	1.25	(0.25)			
44	24.27%	16.44%	14.59%	5	3	3	3	1.00	1.50	(0.50)		-19.1%	-19.3%
45	20.07%	18.11%	16.01%	4	4	3	4	1.25	1.25	-			
99	2.48%	3.08%	1.75%	0	0	0	0	-	-	-			
Tot	12.86%	8.91%	8.12%										

^{*}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.

	Residu	al Market	Share	Indicated	l Mkt Shar	e Range	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	2014	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	1.87%	1.52%	0.75%	0	0	0	0	-	-	-	0	0.00	
2	2.29%	1.29%	0.97%	0	0	0	0	-	-	-	1	1.00	
3	2.90%	1.82%	1.46%	0	0	0	0	-	-	-	2	1.00	
4	2.49%	2.11%	0.94%	0	0	0	0	-	-	-	3	1.00	
5	4.05%	2.57%	2.49%	0	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	2.05%	0	0	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.41%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	2.18%	0	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	1.96%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	9.63%	4.03%	3.11%	2	0	0	0	-	1.00	(1.00)	9	2.50	
11	3.08%	2.33%	1.63%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.51%	0	0	0	0	-	-	-			
13	10.29%	3.92%	4.18%	2	0	0	0	-	1.00	(1.00)			
14	5.89%	4.05%	3.36%	1	0	0	0	-	1.00	(1.00)			
15	10.82%	4.90%	2.81%	2	0	0	0	-	1.00	(1.00)			
16	13.13%	13.16%	6.32%	3	3	1	3	1.00	1.00	-			
17	5.11%	0.00%	0.00%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.86%	1	0	0	0	-	1.00	(1.00)			
19	5.62%	4.17%	1.29%	1	0	0	0	-	1.00	(1.00)			
20	11.09%	6.02%	4.70%	3	1	0	1	1.00	1.00	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	3.20%	2	0	0	0	-	1.00	(1.00)			
22	9.88%	2.86%	1.84%	2	0	0	0	-	1.00	(1.00)	2016	1,639,680	754
23	4.67%	4.48%	3.04%	0	0	0	0	-	-	-			
24	6.40%	2.76%	0.46%	1	0	0	0	-	1.00	(1.00)	2015	14,176,145	5,797
25	2.60%	0.00%	1.88%	0	0	0	0	-	-	-			
26	6.32%	1.47%	0.96%	1	0	0	0	-	1.00	(1.00)		<u>Difference:</u>	<u>Difference:</u>
27	2.55%	1.88%	1.44%	0	0	0	0	-	-	-			
40	13.69%	7.00%	6.03%	3	1	1	1	1.00	1.00	-		(12,536,464)	(5,042)
41	12.53%	5.33%	4.65%	3	1	0	1	1.00	1.00	-			
42	6.17%	3.86%	1.49%	1	0	0	0	-	1.00	(1.00)	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	2.47%	1	0	0	0	-	1.00	(1.00)			
44	8.43%	3.35%	3.96%	2	0	0	0	-	1.00	(1.00)		-88.4%	-87.0%
45	10.32%	2.31%	3.78%	2	0	0	0	-	1.00	(1.00)			
99	0.38%	0.00%	-4.98%	0	0	0	0	-	-	-			
Tot	5.15%	2.98%	2.35%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	2016	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	Group	<u>Credits</u>	
1	1.88%	1.37%	1.36%	0	0	0	0	-	-	-	0	0.00	
2	1.61%	1.23%	1.16%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.26%	0.89%	0	0	0	0	-	-	-	2	1.00	
4	1.75%	1.27%	1.16%	0	0	0	0	-	-	-	3	1.00	
5	2.37%	2.09%	1.65%	0	0	0	0	-	-	-	4	1.25	
6	2.57%	1.99%	1.65%	0	0	0	0	-	-	-	5	1.50	
7	2.53%	1.92%	1.58%	0	0	0	0	-	-	-	6	1.75	
8	3.30%	2.48%	2.28%	0	0	0	0	-	-	-	7	2.00	
9	2.62%	2.15%	2.18%	0	0	0	0	-	-	_	8	2.25	
10	3.19%	3.31%	2.20%	0	0	0	0	-	-	-	9	2.50	
11	2.54%	1.31%	2.28%	0	0	0	0	-	-	_			
12	4.04%	3.41%	2.75%	0	0	0	0	-	-	_			
13	3.75%	3.40%	3.16%	0	0	0	0	-	-	-			
14	6.81%	5.30%	2.93%	1	1	0	1	1.00	1.00	-			
15	11.71%	4.46%	5.06%	3	0	1	1	1.00	1.00	-			
16	17.01%	4.90%	5.70%	4	0	1	1	1.00	1.00	-			
17	3.23%	3.64%	1.84%	0	0	0	0	-	-	-			
18	9.96%	5.00%	6.07%	2	1	1	1	1.00	1.00	-			
19	4.46%	11.43%	9.12%	0	3	2	2	1.00	-	1.00			
20	8.81%	5.74%	4.85%	2	1	0	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.48%	2	1	1	1	1.00	1.00	-		_	<u>-</u>
22	10.69%	8.39%	3.15%	2	2	0	2	1.00	1.00	-	2016	12,425,039	3,168
23	6.30%	3.39%	0.53%	1	0	0	0	-	1.00	(1.00)			
24	5.30%	2.03%	0.24%	1	0	0	0	-	1.00	(1.00)	2015	15,262,693	4,091
25	8.64%	0.00%	2.51%	2	0	0	0	-	1.00	(1.00)			
26	9.20%	2.76%	2.83%	2	0	0	0	_	1.00	(1.00)		Difference:	<u>Difference:</u>
27	1.33%	0.88%	0.63%	0	0	0	0	-	-	_			
40	3.61%	3.64%	3.47%	0	0	0	0	-	-	-		(2,837,654)	(923)
41	4.94%	4.21%	4.61%	0	0	0	0	-	-	-		,	. ,
42	4.47%	4.14%	2.42%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.06%	6.52%	3.65%	1	1	0	1	1.00	1.00	-			
44	10.75%	4.27%	4.07%	2	0	0	0	-	1.00	(1.00)		-18.6%	-22.6%
45	7.15%	5.62%	6.59%	1	1	1	1	1.00	1.00	- ′			
99	0.52%	0.40%	0.31%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.66%										

- 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.

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<u>Terr</u>	Aug-13	al Market Aug-14	<u>Jul-15</u>	2014	Mkt Shar 2015	2016	Selected Range*	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
1 1	0.85%	0.56%	0.41%	0	0	0	<u>Range</u> 0	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u> 0	0.00	
2	0.52%	0.36%	0.39%	0	0	0	0	_	_	-	1	1.00	
3	0.84%	0.58%	0.41%	0	0	0	0	_	_	_	2	1.00	
4	0.67%	0.55%	0.41%	0	0	0	0	_	_	_	3	1.00	
5	0.93%	0.92%	0.46%	0	0	0	0	_	_	_	4	1.25	
6	0.81%	0.67%	0.56%	0	0	0	0	_	_	_	5	1.50	
7	0.92%	0.68%	0.52%	0	0	0	0	_	_	_	6	1.75	
8	0.95%	0.89%	0.55%	0	0	0	0	_	_	_	7	2.00	
9	0.93%	0.58%	0.74%	0	0	0	0	-	-	-	8	2.25	
10	1.56%	1.02%	1.16%	0	0	0	0	_	-	-	9	2.50	
11	0.67%	0.68%	0.69%	0	0	0	0	-	-	-			
12	1.75%	1.20%	1.12%	0	0	0	0	-	-	-			
13	2.28%	1.43%	1.24%	0	0	0	0	-	-	-			
14	1.87%	0.47%	0.46%	0	0	0	0	-	-	-			
15	3.62%	1.93%	1.52%	0	0	0	0	-	-	-			
16	0.76%	0.00%	2.43%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.37%	0	0	0	0	-	-	-			
18	3.56%	3.30%	1.72%	0	0	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	0.86%	0	0	0	0	-	-	-	Available	e Credit Prem:	Credit Eligible Exp:
21	1.76%	0.91%	0.73%	0	0	0	0	-	-	-			
22	5.59%	0.00%	0.00%	1	0	0	0	-	1.00	(1.00)	2016	-	-
23	0.91%	1.55%	0.49%	0	0	0	0	-	-	-			
24	0.85%	0.96%	0.96%	0	0	0	0	-	-	-	2015	1,139,323	380
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	1.39%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.41%	0.35%	0.31%	0	0	0	0	-	-	-			
40	0.06%	1.47%	0.82%	0	0	0	0	-	-	-		(1,139,323)	(380)
41	3.25%	1.54%	1.50%	0	0	0	0	-	-	-			
42	1.58%	0.73%	0.76%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.42%	1.10%	0.56%	0	0	0	0	-	-	-			
44	1.88%	2.14%	1.69%	0	0	0	0	-	-	-		-100.0%	-100.0%
45	5.87%	1.57%	1.70%	1	0	0	0	-	1.00	(1.00)			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.54%										

^{*}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.

	Pasidu	al Market	Share	Indicated	d Mkt Shar	re Pange	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	2014	2015	2016	Range*	Credits	Credits	<u>Change</u>	Group	<u>Credits</u>	
1	0.99%	0.64%	0.28%	0	0	0	0	-	-	<u>-</u>	<u>0,045</u>	0.00	
2	0.86%	0.66%	0.62%	0	0	0	0	_	_	_	1	1.00	
3	0.87%	0.52%	0.53%	0	0	0	0	-	-	-	2	1.00	
4	0.81%	0.51%	0.50%	0	0	0	0	_	-	-	3	1.00	
5	0.97%	0.91%	0.82%	0	0	0	0	-	-	-	4	1.25	
6	1.01%	0.85%	0.77%	0	0	0	0	-	-	-	5	1.50	
7	1.54%	1.13%	0.92%	0	0	0	0	-	-	-	6	1.75	
8	0.93%	1.23%	1.16%	0	0	0	0	-	-	-	7	2.00	
9	1.27%	0.94%	0.56%	0	0	0	0	-	-	-	8	2.25	
10	2.29%	1.49%	1.68%	0	0	0	0	-	-	-	9	2.50	
11	0.97%	1.74%	1.28%	0	0	0	0	-	-	-			
12	1.86%	1.29%	1.29%	0	0	0	0	-	-	-			
13	2.05%	1.29%	1.32%	0	0	0	0	-	-	-			
14	3.24%	3.44%	2.94%	0	0	0	0	-	-	-			
15	5.81%	6.90%	3.55%	1	1	0	1	1.00	1.00	-			
16	7.84%	4.32%	2.23%	1	0	0	0	-	1.00	(1.00)			
17	1.39%	1.36%	2.31%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	1.55%	0	0	0	0	-	-	-			
20	1.68%	0.00%	1.39%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	2.47%	2.39%	2.15%	0	0	0	0	-	-	-			
22	8.30%	1.27%	2.37%	2	0	0	0	-	1.00	(1.00)	2016	435,670	303
23	0.98%	1.55%	0.98%	0	0	0	0	-	-	-			
24	1.21%	1.06%	1.80%	0	0	0	0	-	-	-	2015	809,940	526
25	1.31%	0.80%	0.53%	0	0	0	0	-	-	-			
26	4.15%	4.92%	3.09%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.62%	0.61%	0.38%	0	0	0	0	-	-	-			
40	1.29%	0.97%	0.59%	0	0	0	0	-	-	-		(374,270)	(222)
41	1.68%	1.20%	1.22%	0	0	0	0	-	-	-			
42	2.10%	1.35%	1.66%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.31%	1.26%	2.34%	0	0	0	0	-	-	-			
44	4.60%	2.87%	2.77%	0	0	0	0	-	-	-		-46.2%	-42.3%
45	2.31%	1.05%	0.99%	0	0	0	0	-	-	-			
99	0.00%	2.41%	0.67%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.84%										

- 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.

	Dasidu	al Mankat	Oh ava	la dia ata	d Mat Obser	na Danana	Calcatad	2016	2015		Residual	Keep	
Torr	Aug-13	al Market Aug-14	Jul-15	2014	d Mkt Shar 2015	2016	Selected Range*	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
<u>Terr</u> 1	1.51%	1.25%	1.04%	0	0	0	0	-	-	<u>Change</u>	<u> </u>	0.00	
2	1.50%	1.38%	1.17%	0	0	0	0	_	_	-	1	1.00	
3	1.84%	1.63%	1.37%	0	0	0	0	_	_	_	2	1.00	
4	1.57%	1.52%	1.21%	0	0	0	0	_	_	_	3	1.00	
5	2.18%	1.81%	1.64%	0	0	0	0	_	_	_	4	1.25	
6	2.36%	1.97%	1.80%	0	0	0	0	_	_	_	5	1.50	
7	2.92%	2.44%	2.08%	0	0	0	0	_	_	_	6	1.75	
8	2.78%	2.60%	2.01%	0	0	0	0	_	_	_	7	2.00	
9	2.91%	2.44%	2.15%	0	0	0	0	_	_	_	8	2.25	
10	4.43%	2.95%	2.41%	0	0	0	0	_	_	_	9	2.50	
11	3.90%	2.96%	1.58%	0	0	0	0	_	_	_	-		
12	4.32%	3.68%	3.25%	0	0	0	0	_	_	_			
13	5.08%	4.33%	3.82%	1	0	0	0	_	1.00	(1.00)			
14	5.67%	4.70%	3.65%	1	0	0	0	_	1.00	(1.00)			
15	7.59%	7.08%	5.35%	1	1	1	1	1.00	1.00	-			
16	9.92%	8.70%	7.84%	2	2	1	2	1.00	1.00	-			
17	3.40%	3.38%	4.21%	0	0	0	0	-	-	-			
18	5.43%	5.25%	4.30%	1	1	0	1	1.00	1.00	-			
19	4.14%	3.33%	4.30%	0	0	0	0	_	_	-			
20	4.03%	4.17%	4.71%	0	0	0	0	-	-	-	Availabl	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	7.93%	2	2	1	2	1.00	1.00	-			
22	10.99%	6.03%	4.54%	2	1	0	1	1.00	1.00	-	2016	1,785,849	7,094
23	6.85%	4.79%	3.71%	1	0	0	0	-	1.00	(1.00)			
24	5.22%	3.74%	1.89%	1	0	0	0	-	1.00	(1.00)	2015	4,341,789	19,566
25	3.76%	2.63%	3.35%	0	0	0	0	-	-	-			
26	8.28%	7.69%	4.56%	2	1	0	1	1.00	1.00	-		<u>Difference:</u>	<u>Difference:</u>
27	1.26%	1.21%	0.92%	0	0	0	0	-	-	-			
40	8.56%	6.78%	5.93%	2	1	1	1	1.00	1.00	-		(2,555,940)	(12,472)
41	5.70%	3.98%	3.70%	1	0	0	0	-	1.00	(1.00)		• • • • • •	,
42	8.14%	6.17%	5.07%	2	1	1	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	5.84%	4.22%	3.78%	1	0	0	0	-	1.00	(1.00)		-	
44	7.90%	7.20%	6.70%	1	1	1	1	1.00	1.00	-		-58.9%	-63.7%
45	7.16%	5.59%	4.92%	1	1	0	1	1.00	1.00	-			
99	1.42%	0.43%	0.40%	0	0	0	0	-	-	-			
Tot	2.66%	2.26%	1.92%										

- 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.

2016 Proposed Credit Factors - Data Through July, 2015

	Rate Clas									
Terr	10	15	17	18	20	21	25	26	30	MC/Misc.
1	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	1.00	-	-	-	-	-
6	-	-	-	-	1.00	-	-	-	-	-
7	-	-	-	-	1.00	-	-	-	-	-
8	-	-	-	-	1.00	-	-	-	-	-
9	-	-	-	-	1.00	-	-	-	-	-
10	-	-	-	-	1.00	-	-	-	-	-
11	-	-	-	-	1.00	-	-	-	-	-
12	-	-	-	-	1.00	-	-	-	-	-
13	-	-	1.00	-	1.00	-	-	-	-	-
14	-	-	1.00	-	1.00	-	1.00	-	-	-
15	-	-	1.00	-	1.00	-	1.00	-	1.00	1.00
16	-	-	1.00	-	1.50	1.00	1.00	-	-	1.00
17	-	-	1.00	-	1.00	-	-	-	-	-
18	-	-	1.00	1.00	1.25	-	1.00	-	-	1.00
19	-	-	1.00	-	1.00	-	1.00	-	-	-
20	-	-	1.00	-	1.25	1.00	1.00	-	-	-
21	1.00		1.00	-	1.50	-	1.00	-	-	1.00
22	1.00	1.00	1.00		1.25	-	1.00	-	-	1.00
23	-	-	1.00	-	1.00 1.00	- -	-	-	-	-
24	-	-	-	-			-	-	-	-
25 26	-	-	1.00	-	1.00 1.00	-	-	-	-	1.00
26 27	-	-	-	-	-	- -	-	-	-	1.00
40	-	-	1.00	-	1.00	1.00	-	-	-	1.00
40 41	-		1.00		1.00	1.00	-	-	-	1.00
41 42	_	-	-	-	1.00	-	-	-	-	1.00
42 43		-	1.00	-	1.00		1.00	-	-	1.00
43 44		_	1.00	_	1.00	_	1.00	-	-	1.00
44 45	-	_	1.00	_	1.00	_	1.00	<u>-</u>	- -	1.00
99	_	_	-		-		-		_	-
33	-	-	-	-	-	-	-	-	-	-

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep
Mark Shr	Out
Group	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

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Relative Range Methodology Summary by Rate Class

4/1/2015 Credit Factors

4/1/16 Indicated - Relative Ranges

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
<u>Class</u>	Exposures	Exposures	Credit Premium	Exposures	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,079,664	294,536	439,287,056	177,803	-39.6%	269,799,132	-38.6%
15	787,860	8,165	10,951,878	8,165	0.0%	10,951,878	0.0%
17	145,779	61,664	116,333,988	74,930	21.5%	136,684,781	17.5%
18	55,230	1,208	1,968,996	855	-29.2%	1,521,492	-22.7%
20	34,313	33,463	116,383,809	32,846	-1.8%	106,898,836	-8.1%
21	15,514	5,797	14,176,145	5,847	0.9%	14,218,031	0.3%
25	75,827	4,091	15,262,693	5,440	33.0%	19,609,747	28.5%
26	65,048	380	1,139,323	0	-100.0%	0	-100.0%
30	62,120	526	809,940	684	30.1%	1,010,097	24.7%
M/M	168,786	19,566	4,341,789	25,634	31.0%	5,423,673	24.9%
Total	4,490,140	429,395	720,655,617	332,204	-22.6%	566,117,666	-21.4%
May, 2015	4,470,398	426,727	717,464,534	329,286	-22.8%	562,099,849	-21.7%
% of Total M	lkt. Exp.	9.6%		7.4%			
	Estimated Cred Credit Utilization		682,579,167 94.7%	Estimated Credits Credit Utilization	s Used	533,522,151 94.2%	
Original R	anges:			Relative Range	es:		
Group	Lower	<u>Upper</u>	<u>Factor</u>	Group	Lower	<u>Upper</u>	<u>Factor</u>
0	0	0.05	0	0	0	0.035	0
1	0.05	0.08	1	1	0.035	0.065	1
2	0.08	0.11	1	2	0.065	0.095	1
3	0.11	0.17	1	3	0.095	0.155	1
4	0.17	0.23	1.25	4	0.155	0.215	1.25
5	0.23	0.29	1.5	5	0.215	0.275	1.5
6	0.29	0.35	1.75	6	0.275	0.335	1.75
7	0.35	0.41	2	7	0.335	0.395	2
8	0.41	0.47	2.25	8	0.395	0.455	2.25
9	0.47	1	2.5	9	0.455	1	2.5

^{1.34%} Current Residual Market Rate Using Data Through July, 2015

Relative Range Calculation:

- 1. Divide the actual overall residual market share by the target (1.34 / 2.0) = .67
- 2. Round the result from 1. above to the nearest 10th = .7
- 3. Multiply the result from 2. above by the original average residual market share threshold $(.7 \times .05) = 3.5$
- 4. Use the same increment for bands as original methodology: .03 for first two bands, .06 for all remaining bands

^{2.0%} Target Cession Rate From 2012 Division of Insurance Decision (Bulletin 953)

^{5.0%} Residual Market rate Threshold Point, Credits were given for 5.0% and above (2012-2015)

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 - Relative Ranges

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	179,645	0	0	731	0.0%	1,362,061	0.0%
2	241,632	1,088	2,172,578	1,088	0.0%	2,172,578	0.0%
3	519,011	2,359	4,903,494	2,359	0.0%	4,903,494	0.0%
4	329,650	1,349	3,191,218		-100.0%	0	-100.0%
5	505,909	3,011	6,732,095	3,011	0.0%	6,732,095	0.0%
6	338,514	1,684	4,373,882	12,133	620.7%	18,985,508	334.1%
7	347.953	13,473	22.263.296	13,473	0.0%	22.263.296	0.0%
8	198,946	6,854	11,974,908	6,854	0.0%	11,974,908	0.0%
9	198,113	8,998	16,805,659	8,281	-8.0%	15,452,882	-8.0%
10	95,743	4,433	8,349,841	4,433	0.0%	8,349,841	0.0%
11	72,383	635	2,110,782	2,428	282.2%	5,737,675	171.8%
12	194,206	7,252	14,998,854	13,626	87.9%	17,929,300	19.5%
13	210,052	18,001	26,373,177	18,001	0.0%	26,373,177	0.0%
14	72,381	6,759	14,216,143	6,759	0.0%	14,216,143	0.0%
15	25,613	2,608	5,559,235	2,910	11.6%	5,730,826	3.1%
16*	13,786	12,407	19,439,240	12,407	0.0%	19,439,240	0.0%
17	17,276	409	971,286	409	0.0%	887,911	-8.6%
18	16,051	13,844	20,283,776	13,844	0.0%	20,283,776	0.0%
19	15,574	511	1,386,654	895	75.1%	1,696,237	22.3%
20*	17,998	14,796	23,214,158	15,340	3.7%	23,342,121	0.6%
21*	47,453	46,303	93,336,130	46,303	0.0%	91,993,548	-1.4%
22*	15,082	15,082	32,284,144	14,830	-1.7%	30,967,340	-4.1%
23	45,098	2,898	7,436,636	2,918	0.7%	6,588,535	-11.4%
24	24,791	1,271	2,618,743	1,972	55.1%	3,823,658	46.0%
25	16,590	509	1,431,503	463	-9.1%	1,284,515	-10.3%
26*	21,365	1,639	4,353,093	1,583	-3.4%	3,161,148	-27.4%
27	412,141	1,664	2,905,935	1,664	0.0%	2,905,935	0.0%
40*	20,516	16,612	22,547,056	16,691	0.5%	22,457,818	-0.4%
41*	58,739	50,559	60,000,400	6,290	-87.6%	10,858,788	-81.9%
42*	73,454	59,665	97,080,594	60,550	1.5%	99,019,881	2.0%
43*	47,483	39,935	65,821,904	4,769	-88.1%	10,579,711	-83.9%
44*	33,690	29,883	39,223,163	29,883	0.0%	38,363,837	-2.2%
45* 99	50,938	42,902 0	82,296,042 0	5,305 0	-87.6%	16,279,883 0	-80.2%
Total	12,368 4,490,140	429,395	720,655,617	332,204	0.0% -22.6%	566,117,666	0.0% -21.4%
	, ,		720,033,017		-22.0 /0	300,117,000	-21.470
% of Total	Mkt. Exp.	9.6%		7.4%			
		*Summary for	Key Territories cite	d by the Division	of Insurar	ice	
Total	400,504	329,783	539,595,923	213,950	-35.1%	366,463,316	-32.1%
% of Total	Mkt. Exp.	82.3%		53.4%			
	_						
Original I	_			Relative Ra	_		
<u>Group</u>	Lower	<u>Upper</u>	<u>Factor</u>	<u>Group</u>	Lower	<u>Upper</u>	<u>Factor</u>
0	0	0.05	0	0	0	0.035	0
1	0.05	0.08	1	1	0.035	0.065	1
2	0.08	0.11	1	2	0.065	0.095	1
3	0.11	0.17	1	3	0.095	0.155	1
4	0.17	0.23	1.25	4	0.155	0.215	1.25
5	0.23	0.29	1.5	5	0.215	0.275	1.5
6	0.29	0.35	1.75	6	0.275	0.335	1.75
7	0.35	0.41	2 25	7	0.335	0.395	2
8 9	0.41 0.47	0.47 1	2.25 2.5	8 9	0.395 0.455	0.455 1	2.25 2.5
9	0.47	ı	۷.5	y	0.433	ı	۷.5

Commonwealth Automobile Reinsurers - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 10 Relative Range Methodology

	Danidu	al Mankat	Oh ava	la di a ata a	l Mid Ob o	Danas	Colootod	2016	2015		Residual	Keep	
Torr	Aug-13	al Market Aug-14	Jul-15	2014	d Mkt Shar 2015	2016	Selected Range*	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
<u>Terr</u> 1	1.17%	0.90%	0.73%	0	0	0	<u>Range</u> 0	<u>Credits</u>	Credits	Change	<u>Group</u> 0	0.00	
2	1.17 %	0.92%	0.73%	0	0	0	0	_	_	-	1	1.00	
3	1.45%	1.06%	0.80%	0	0	0	0	_	_	_	2	1.00	
4	1.27%	0.98%	0.79%	0	0	0	0	_	_	_	3	1.00	
5	1.91%	1.44%	1.07%	0	0	0	0	_	_	_	4	1.25	
6	1.91%	1.46%	1.15%	0	0	0	0	_	_	_	5	1.50	
7	2.46%	1.81%	1.39%	0	0	0	0	_	_	_	6	1.75	
8	2.25%	1.64%	1.29%	0	0	0	0	_	_	_	7	2.00	
9	2.87%	2.03%	1.44%	0	0	0	0	_	_	_	8	2.25	
10	2.92%	2.18%	1.71%	0	0	0	0	_	_	_	9	2.50	
11	1.99%	1.51%	1.24%	0	0	0	0	_	_	_	_		
12	2.50%	1.93%	1.57%	0	0	0	0	_	_	_			
13	4.32%	3.11%	2.43%	1	0	0	0	_	_	-			
14	3.84%	2.79%	2.30%	1	0	0	0	_	_	-			
15	4.35%	2.67%	2.11%	1	0	0	0	-	-	-			
16	6.39%	4.97%	3.44%	1	1	0	1	1.00	1.00	-			
17	2.20%	1.81%	1.70%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.74%	1	1	1	1	1.00	1.00	-			
19	3.68%	3.20%	2.65%	1	0	0	0	_	-	-			
20	6.23%	4.87%	4.63%	1	1	1	1	1.00	1.00	-	Availab	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.14%	2	1	1	1	1.00	1.00	-			
22	9.85%	6.82%	5.74%	3	2	1	2	1.00	1.00	-	2016	269,799,132	177,803
23	3.63%	2.49%	1.76%	1	0	0	0	-	-	-			
24	2.15%	1.75%	1.39%	0	0	0	0	-	-	-	2015	439,287,056	294,536
25	2.15%	1.50%	1.20%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.05%	1	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.93%	0.77%	0.62%	0	0	0	0	-	-	-			
40	7.63%	4.08%	2.65%	2	1	0	1	1.00	1.00	-		(169,487,925)	(116,733)
41	5.88%	3.11%	2.48%	1	0	0	0	-	1.00	(1.00)			
42	6.48%	4.37%	2.74%	1	1	0	1	1.00	1.00	-	<u>P</u>	ercent Change:	Percent Change:
43	5.28%	3.09%	2.44%	1	0	0	0	-	1.00	(1.00)		-	
44	7.95%	4.99%	4.32%	2	1	1	1	1.00	1.00	-		-38.6%	-39.6%
45	6.64%	3.49%	2.79%	2	0	0	0	-	1.00	(1.00)			
99	0.70%	0.56%	0.62%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.39%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 15 Relative Range Methodology

	Dooidu	al Market	Chara	Indicator	l Mkt Shar	o Dongo	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	Jul-15	2014	2015	2016	Range*	<u>Credits</u>	Credits	Change	Group	<u>Credits</u>	
1	0.32%	0.27%	0.29%	0	0	0	0	-	-	<u>-</u>	<u>0.00p</u>	0.00	
2	0.29%	0.29%	0.28%	0	0	0	0	_	_	_	1	1.00	
3	0.38%	0.29%	0.26%	0	0	0	0	_	_	_	2	1.00	
4	0.30%	0.29%	0.26%	0	0	0	0	_	_	_	3	1.00	
5	0.44%	0.38%	0.32%	0	0	0	0	-	-	-	4	1.25	
6	0.58%	0.53%	0.43%	0	0	0	0	-	-	-	5	1.50	
7	0.56%	0.46%	0.41%	0	0	0	0	_	_	_	6	1.75	
8	0.78%	0.67%	0.60%	0	0	0	0	-	-	_	7	2.00	
9	0.78%	0.63%	0.49%	0	0	0	0	-	-	-	8	2.25	
10	0.71%	0.62%	0.53%	0	0	0	0	-	-	-	9	2.50	
11	1.12%	0.88%	0.72%	0	0	0	0	-	-	-			
12	0.88%	0.86%	0.76%	0	0	0	0	-	-	-			
13	1.46%	1.17%	0.91%	0	0	0	0	-	-	-			
14	1.65%	1.32%	1.16%	0	0	0	0	-	-	-			
15	1.42%	1.43%	1.28%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.07%	0	0	0	0	-	-	-			
17	0.79%	0.76%	0.91%	0	0	0	0	-	-	-			
18	2.45%	2.07%	1.93%	0	0	0	0	-	-	-			
19	2.18%	2.18%	1.94%	0	0	0	0	-	-	-			
20	2.70%	2.39%	2.57%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.20%	1	1	1	1	1.00	1.00	-			
22	8.10%	6.62%	5.59%	2	2	1	2	1.00	1.00	-	2016	10,951,878	8,165
23	2.82%	1.98%	1.40%	0	0	0	0	-	-	-			
24	2.99%	2.98%	2.47%	0	0	0	0	-	-	-	2015	10,951,878	8,165
25	1.73%	1.28%	1.12%	0	0	0	0	-	-	-			
26	1.99%	1.56%	1.45%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.26%	0.24%	0.20%	0	0	0	0	-	-	-			
40	2.44%	1.80%	0.95%	0	0	0	0	-	-	-		-	-
41	1.68%	1.28%	0.96%	0	0	0	0	-	-	-			
42	3.10%	3.10%	2.28%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	1.59%	1.06%	0.88%	0	0	0	0	-	-	-			
44	3.16%	2.11%	1.97%	0	0	0	0	-	-	-		0.0%	0.0%
45	2.38%	1.83%	1.45%	0	0	0	0	-	-	-			
99	0.36%	0.26%	0.19%	0	0	0	0	-	-	-			
Tot	0.73%	0.62%	0.53%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 17 Relative Range Methodology

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	2014	<u>2015</u>	2016	Range*	Credits	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	3.25%	2.47%	2.04%	0	0	0	0	-	-	-	0	0.00	
2	2.96%	2.03%	1.95%	0	0	0	0	-	-	-	1	1.00	
3	4.05%	2.61%	2.06%	1	0	0	0	-	-	-	2	1.00	
4	3.21%	2.63%	1.94%	0	0	0	0	-	-	-	3	1.00	
5	4.26%	3.06%	2.38%	1	0	0	0	-	-	-	4	1.25	
6	4.40%	3.57%	2.96%	1	1	0	1	1.00	-	1.00	5	1.50	
7	5.00%	3.57%	2.81%	1	1	0	1	1.00	1.00	-	6	1.75	
8	5.01%	3.58%	3.29%	1	1	0	1	1.00	1.00	-	7	2.00	
9	5.05%	3.56%	2.92%	1	1	0	1	1.00	1.00	-	8	2.25	
10	5.55%	3.98%	3.09%	1	1	0	1	1.00	1.00	-	9	2.50	
11	4.60%	3.99%	2.51%	1	1	0	1	1.00	-	1.00			
12	5.90%	4.74%	3.88%	1	1	1	1	1.00	1.00	-			
13	7.34%	5.15%	4.50%	2	1	1	1	1.00	1.00	-			
14	8.44%	5.78%	5.23%	2	1	1	1	1.00	1.00	-			
15	8.90%	6.45%	4.34%	2	1	1	1	1.00	1.00	-			
16	14.02%	9.76%	6.38%	3	3	1	3	1.00	1.00	-			
17	6.51%	5.57%	3.47%	2	1	0	1	1.00	1.00	-			
18	10.10%	7.78%	7.06%	3	2	2	2	1.00	1.00	-			
19	11.66%	7.72%	4.77%	3	2	1	2	1.00	1.00	-			
20	12.72%	10.84%	9.55%	3	3	3	3	1.00	1.00	-	<u>Availal</u>	ole Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	9.45%	3	3	2	3	1.00	1.00	-			
22	14.23%	10.75%	9.36%	3	3	2	3	1.00	1.00	-	2016	136,684,781	74,930
23	8.79%	6.11%	4.96%	2	1	1	1	1.00	1.00	-			
24	4.64%	3.61%	2.78%	1	1	0	1	1.00	-	1.00	2015	116,333,988	61,664
25	6.65%	4.56%	2.66%	2	1	0	1	1.00	1.00	-			
26	8.63%	5.64%	4.22%	2	1	1	1	1.00	1.00	-		Difference:	<u>Difference:</u>
27	2.51%	2.07%	1.50%	0	0	0	0	-	-	-			
40	12.55%	7.28%	5.09%	3	2	1	2	1.00	1.00	-		20,350,793	13,266
41	12.06%	6.14%	4.61%	3	1	1	1	1.00	1.00	-			
42	9.55%	4.71%	3.40%	3	1	0	1	1.00	1.00	-	<u> </u>	Percent Change:	Percent Change:
43	8.81%	5.59%	6.17%	2	1	1	1	1.00	1.00	-			
44	11.57%	6.62%	6.40%	3	2	1	2	1.00	1.00	-		17.5%	21.5%
45	12.13%	6.63%	6.25%	3	2	1	2	1.00	1.00	-			
99	0.83%	0.39%	0.42%	0	0	0	0	-	-	-			
Tot	5.17%	3.64%	2.98%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 18 Relative Range Methodology

	Dooidu	al Market	Chara	Indicator	l Mkt Shar	o Dongo	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	Jul-15	2014	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	1.12%	0.63%	0.70%	0	0	0	0	-	-	-	<u>0.00p</u> 0	0.00	
2	0.84%	0.55%	0.42%	0	0	0	0	_	_	_	1	1.00	
3	1.34%	0.92%	0.72%	0	0	0	0	_	_	_	2	1.00	
4	1.14%	0.86%	0.47%	0	0	0	Ö	_	_	_	3	1.00	
5	1.75%	1.26%	0.96%	0	0	0	0	_	_	_	4	1.25	
6	1.10%	1.13%	0.74%	0	0	0	0	-	-	-	5	1.50	
7	1.98%	1.31%	0.85%	0	0	0	0	_	-	-	6	1.75	
8	1.08%	0.94%	0.98%	0	0	0	0	_	_	-	7	2.00	
9	2.17%	1.57%	0.99%	0	0	0	0	-	-	-	8	2.25	
10	1.83%	1.02%	1.57%	0	0	0	0	-	-	-	9	2.50	
11	1.24%	0.77%	1.04%	0	0	0	0	-	-	-			
12	2.44%	1.85%	1.34%	0	0	0	0	-	-	-			
13	2.71%	1.96%	1.79%	0	0	0	0	-	-	-			
14	3.53%	2.39%	2.02%	1	0	0	0	-	-	-			
15	4.75%	4.06%	2.60%	1	1	0	1	1.00	-	1.00			
16	1.75%	0.00%	1.03%	0	0	0	0	-	-	-			
17	2.14%	1.13%	0.80%	0	0	0	0	-	-	-			
18	5.63%	5.10%	3.98%	1	1	1	1	1.00	1.00	-			
19	3.16%	2.04%	0.84%	0	0	0	0	-	-	-			
20	3.59%	4.15%	1.81%	1	1	0	1	1.00	-	1.00	Available	e Credit Prem:	Credit Eligible Exp:
21	4.86%	3.05%	3.37%	1	0	0	0	-	-	-			
22	9.76%	4.32%	3.76%	3	1	1	1	1.00	1.00	-	2016	1,521,492	855
23	2.12%	1.27%	1.63%	0	0	0	0	-	-	-			
24	3.56%	0.43%	2.37%	1	0	0	0	-	-	-	2015	1,968,996	1,208
25	0.15%	1.68%	0.85%	0	0	0	0	-	-	-			
26	4.20%	3.21%	1.80%	1	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.89%	0.72%	0.53%	0	0	0	0	-	-	-			
40	5.77%	2.78%	0.40%	1	0	0	0	-	1.00	(1.00)		(447,504)	(353)
41	7.29%	1.64%	1.36%	2	0	0	0	-	1.00	(1.00)			
42	2.50%	1.69%	1.07%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	3.03%	3.04%	1.92%	0	0	0	0	-	-	-			
44	1.80%	2.70%	2.12%	0	0	0	0	-	-	-		-22.7%	-29.2%
45	4.86%	3.11%	2.89%	1	0	0	0	-	-	-			
99	1.96%	0.51%	0.43%	0	0	0	0	-	-	-			
Tot	1.72%	1.21%	0.95%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 20 Relative Range Methodology

Residual

Keen

	Danidu	al Mankat	Chana	la di a ata a	I MI d Ob a	Danas	Calcatad	2016	2015		Residual	Keep	
Tam		al Market			Mkt Shar		Selected	2016	2015	Change	Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14 3.98%	<u>Jul-15</u> 5.86%	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	Credits 1.00	<u>Credits</u>	Change 1.00	<u>Group</u>	Credits	
1	4.03%			1	1 1	1 1	1	1.00 1.00	1.00	1.00	0	0.00	
2 3	5.82% 7.69%	4.31% 3.82%	3.79% 4.09%	1	1	1	1		1.00	-	1	1.00 1.00	
				2	=		0	1.00	1.00	- (4.00)	2		
4	5.70%	3.32%	2.39% 5.51%	1	0 1	0 1	0	1.00	1.00	(1.00)	3	1.00	
5	7.89%	6.27%		2	1	=	1	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.64%	2	•	1	1	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.72%	2	1	1	1	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.37%	3	2	1	2	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	6.38%	2	2	1	2	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	5.64%	3	2	1	2	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	5.06%	3	1	1	1	1.00	1.00	-			
12	12.77%	7.55%	6.51%	3	2	2	2	1.00	1.00	-			
13	11.99%	8.85%	8.20%	3	2	2	2	1.00	1.00	-			
14	15.28%	13.10%	11.54%	3	3	3	3	1.00	1.00	-			
15	21.15%	13.01%	12.37%	4	3	3	3	1.00	1.25	(0.25)			
16	26.59%	25.13%	20.50%	5	5	4	5	1.50	1.50	-			
17	19.61%	9.89%	9.66%	4	3	3	3	1.00	1.25	(0.25)			
18	20.86%	22.51%	12.89%	4	5	3	4	1.25	1.25	-			
19	15.29%	16.67%	15.33%	3	4	3	3	1.00	1.00	-			
20	24.66%	18.55%	20.05%	5	4	4	4	1.25	1.50	(0.25)	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	32.61%	23.95%	24.30%	6	5	5	5	1.50	1.75	(0.25)			
22	33.75%	22.17%	20.19%	7	5	4	5	1.50	1.75	(0.25)	2016	106,898,836	32,846
23	18.35%	10.83%	8.91%	4	3	2	3	1.00	1.25	(0.25)			
24	8.54%	5.71%	5.99%	2	1	1	1	1.00	1.00	-	2015	116,383,809	33,463
25	13.28%	13.16%	13.22%	3	3	3	3	1.00	1.00	-			
26	23.56%	13.76%	13.36%	5	3	3	3	1.00	1.50	(0.50)		<u>Difference:</u>	<u>Difference:</u>
27	5.26%	3.54%	2.51%	1	1	0	1	1.00	1.00	-			
40	24.85%	11.38%	10.14%	5	3	3	3	1.00	1.50	(0.50)		(9,484,973)	(618)
41	14.09%	9.23%	9.28%	3	2	2	2	1.00	1.00	-			
42	18.64%	12.38%	9.20%	4	3	2	3	1.00	1.25	(0.25)	<u>Pe</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	12.44%	4	3	3	3	1.00	1.25	(0.25)		-	,
44	24.27%	16.44%	14.59%	5	4	3	4	1.25	1.50	(0.25)		-8.1%	-1.8%
45	20.07%	18.11%	16.01%	4	4	4	4	1.25	1.25	_			
99	2.48%	3.08%	1.75%	0	0	0	0	-	-	-			
Tot	12.86%	8.91%	8.12%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 21 Relative Range Methodology

	Residu	al Market	Share	Indicated	l Mkt Shar	e Range	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	2014	2015	2016	Range*	Credits	Credits	<u>Change</u>	Group	<u>Credits</u>	
1	1.87%	1.52%	0.75%	0	0	0	0	-	-	-	0	0.00	
2	2.29%	1.29%	0.97%	0	0	0	0	-	-	-	1	1.00	
3	2.90%	1.82%	1.46%	0	0	0	0	-	-	-	2	1.00	
4	2.49%	2.11%	0.94%	0	0	0	0	-	-	-	3	1.00	
5	4.05%	2.57%	2.49%	1	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	2.05%	1	0	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.41%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	2.18%	1	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	1.96%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	9.63%	4.03%	3.11%	3	1	0	1	1.00	1.00	-	9	2.50	
11	3.08%	2.33%	1.63%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.51%	1	1	0	1	1.00	-	1.00			
13	10.29%	3.92%	4.18%	3	1	1	1	1.00	1.00	-			
14	5.89%	4.05%	3.36%	1	1	0	1	1.00	1.00	-			
15	10.82%	4.90%	2.81%	3	1	0	1	1.00	1.00	-			
16	13.13%	13.16%	6.32%	3	3	1	3	1.00	1.00	-			
17	5.11%	0.00%	0.00%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.86%	1	1	1	1	1.00	1.00	-			
19	5.62%	4.17%	1.29%	1	1	0	1	1.00	1.00	-			
20	11.09%	6.02%	4.70%	3	1	1	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	3.20%	3	1	0	1	1.00	1.00	-			
22	9.88%	2.86%	1.84%	3	0	0	0	-	1.00	(1.00)	2016	14,218,031	5,847
23	4.67%	4.48%	3.04%	1	1	0	1	1.00	-	1.00	00.1-		
24	6.40%	2.76%	0.46%	1	0	0	0	-	1.00	(1.00)	2015	14,176,145	5,797
25	2.60%	0.00%	1.88%	0	0	0	0	-	-	- (4.00)		D:"	D:#
26	6.32%	1.47%	0.96%	1	0	0	0	-	1.00	(1.00)		<u>Difference:</u>	<u>Difference:</u>
27	2.55%	1.88%	1.44%	0	0	0	0	-	-	-		44.000	5 0
40	13.69%	7.00%	6.03%	3	2	1	2	1.00	1.00	-		41,886	50
41	12.53%	5.33%	4.65%	3	1	1	1	1.00	1.00	-	D-		Danas of Ohamas
42	6.17%	3.86%	1.49%	1	1 1	0	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	2.47%	2	•	0	1	1.00	1.00	-		0.20/	0.00/
44 45	8.43%	3.35%	3.96%	2	0	1	1	1.00	1.00	-		0.3%	0.9%
45	10.32%	2.31%	3.78%	3	0	1 0	1	1.00	1.00	-			
99 T ot	0.38%	0.00%	-4.98%	0	0	U	0	-	-	-			
Tot	5.15%	2.98%	2.35%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 25 Relative Range Methodology

	Docide	al Market	Chara	Indianta	I Mid Char	na Danaa	Colootod	2016	2015		Residual	Keep	
Terr	Aug-13	al Market : Aug-14	Jul-15	2014	Mkt Shar 2015	2016	Selected Range*	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
1	1.88%	1.37%	1.36%	0	0	0	0	<u>Credits</u>	<u>Credits</u>	<u>Change</u> -	<u>огоир</u> 0	0.00	
2	1.61%	1.23%	1.16%	0	Ö	0	0	_	_	_	1	1.00	
3	1.84%	1.26%	0.89%	0	0	0	0	_	_	_	2	1.00	
4	1.75%	1.27%	1.16%	0	0	0	0	_	_	_	3	1.00	
5	2.37%	2.09%	1.65%	0	0	0	0	_	_	_	4	1.25	
6	2.57%	1.99%	1.65%	Ö	0	Ö	Ō	_	_	_	5	1.50	
7	2.53%	1.92%	1.58%	0	0	0	0	_	_	_	6	1.75	
8	3.30%	2.48%	2.28%	0	0	0	0	_	_	_	7	2.00	
9	2.62%	2.15%	2.18%	0	0	0	0	-	_	-	8	2.25	
10	3.19%	3.31%	2.20%	0	0	0	0	_	-	-	9	2.50	
11	2.54%	1.31%	2.28%	0	0	0	0	-	-	-			
12	4.04%	3.41%	2.75%	1	0	0	0	_	-	-			
13	3.75%	3.40%	3.16%	1	0	0	0	_	-	-			
14	6.81%	5.30%	2.93%	2	1	0	1	1.00	1.00	-			
15	11.71%	4.46%	5.06%	3	1	1	1	1.00	1.00	-			
16	17.01%	4.90%	5.70%	4	1	1	1	1.00	1.00	-			
17	3.23%	3.64%	1.84%	0	1	0	0	-	-	-			
18	9.96%	5.00%	6.07%	3	1	1	1	1.00	1.00	-			
19	4.46%	11.43%	9.12%	1	3	2	2	1.00	-	1.00			
20	8.81%	5.74%	4.85%	2	1	1	1	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.48%	2	1	1	1	1.00	1.00	-			
22	10.69%	8.39%	3.15%	3	2	0	2	1.00	1.00	-	2016	19,609,747	5,440
23	6.30%	3.39%	0.53%	1	0	0	0	-	1.00	(1.00)			
24	5.30%	2.03%	0.24%	1	0	0	0	-	1.00	(1.00)	2015	15,262,693	4,091
25	8.64%	0.00%	2.51%	2	0	0	0	-	1.00	(1.00)			
26	9.20%	2.76%	2.83%	2	0	0	0	-	1.00	(1.00)		<u>Difference:</u>	<u>Difference:</u>
27	1.33%	0.88%	0.63%	0	0	0	0	-	-	-			
40	3.61%	3.64%	3.47%	1	1	0	1	1.00	-	1.00		4,347,054	1,349
41	4.94%	4.21%	4.61%	1	1	1	1	1.00	-	1.00			
42	4.47%	4.14%	2.42%	1	1	0	1	1.00	-	1.00	<u>Pe</u>	rcent Change:	Percent Change:
43	7.06%	6.52%	3.65%	2	2	1	2	1.00	1.00	-			
44	10.75%	4.27%	4.07%	3	1	1	1	1.00	1.00	-		28.5%	33.0%
45	7.15%	5.62%	6.59%	2	1	2	2	1.00	1.00	-			
99	0.52%	0.40%	0.31%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.66%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 26 Relative Range Methodology

	Posidu	al Market	Shara	Indicator	l Mkt Shar	o Bango	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	Jul-15	2014	2015	2016	Range*	<u>Credits</u>	Credits	Change	Group	<u>Credits</u>	
1	0.85%	0.56%	0.41%	0	0	0	0	-	-	-	<u>0.00p</u> 0	0.00	
2	0.52%	0.36%	0.39%	0	0	0	0	_	_	_	1	1.00	
3	0.84%	0.58%	0.41%	0	0	0	0	_	_	_	2	1.00	
4	0.67%	0.55%	0.41%	0	0	0	0	_	_	_	3	1.00	
5	0.93%	0.92%	0.46%	0	0	0	0	_	_	_	4	1.25	
6	0.81%	0.67%	0.56%	0	0	0	0	_	_	-	5	1.50	
7	0.92%	0.68%	0.52%	0	0	0	0	_	-	-	6	1.75	
8	0.95%	0.89%	0.55%	0	0	0	0	-	-	-	7	2.00	
9	0.93%	0.58%	0.74%	0	0	0	0	-	-	-	8	2.25	
10	1.56%	1.02%	1.16%	0	0	0	0	-	-	-	9	2.50	
11	0.67%	0.68%	0.69%	0	0	0	0	-	-	-			
12	1.75%	1.20%	1.12%	0	0	0	0	-	-	-			
13	2.28%	1.43%	1.24%	0	0	0	0	-	-	-			
14	1.87%	0.47%	0.46%	0	0	0	0	-	-	-			
15	3.62%	1.93%	1.52%	1	0	0	0	-	-	-			
16	0.76%	0.00%	2.43%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.37%	0	0	0	0	-	-	-			
18	3.56%	3.30%	1.72%	1	0	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	0.86%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	1.76%	0.91%	0.73%	0	0	0	0	-	-	-			
22	5.59%	0.00%	0.00%	1	0	0	0	-	1.00	(1.00)	2016	-	-
23	0.91%	1.55%	0.49%	0	0	0	0	-	-	-			
24	0.85%	0.96%	0.96%	0	0	0	0	-	-	-	2015	1,139,323	380
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	1.39%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.41%	0.35%	0.31%	0	0	0	0	-	-	-			
40	0.06%	1.47%	0.82%	0	0	0	0	-	-	-		(1,139,323)	(380)
41	3.25%	1.54%	1.50%	0	0	0	0	-	-	-			
42	1.58%	0.73%	0.76%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.42%	1.10%	0.56%	0	0	0	0	-	-	-			
44	1.88%	2.14%	1.69%	0	0	0	0	-	-	-		-100.0%	-100.0%
45	5.87%	1.57%	1.70%	1	0	0	0	-	1.00	(1.00)			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.54%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 30 Relative Range Methodology

	Dooidu	al Market	Chara	Indicator	l Mkt Shar	o Dongo	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	Jul-15	2014	2015	2016	Range*	<u>Credits</u>	Credits	Change	Group	<u>Credits</u>	
1	0.99%	0.64%	0.28%	0	0	0	0	-	-	-	<u>0.00p</u> 0	0.00	
2	0.86%	0.66%	0.62%	0	0	0	0	_	_	_	1	1.00	
3	0.87%	0.52%	0.53%	0	0	0	0	_	_	_	2	1.00	
4	0.81%	0.51%	0.50%	0	0	0	0	_	_	_	3	1.00	
5	0.97%	0.91%	0.82%	0	0	0	0	_	_	_	4	1.25	
6	1.01%	0.85%	0.77%	0	0	0	0	_	-	-	5	1.50	
7	1.54%	1.13%	0.92%	0	0	0	0	_	-	-	6	1.75	
8	0.93%	1.23%	1.16%	0	0	0	0	-	-	-	7	2.00	
9	1.27%	0.94%	0.56%	0	0	0	0	-	-	-	8	2.25	
10	2.29%	1.49%	1.68%	0	0	0	0	-	-	-	9	2.50	
11	0.97%	1.74%	1.28%	0	0	0	0	-	-	-			
12	1.86%	1.29%	1.29%	0	0	0	0	-	-	-			
13	2.05%	1.29%	1.32%	0	0	0	0	-	-	-			
14	3.24%	3.44%	2.94%	0	0	0	0	-	-	-			
15	5.81%	6.90%	3.55%	1	2	1	1	1.00	1.00	-			
16	7.84%	4.32%	2.23%	2	1	0	1	1.00	1.00	-			
17	1.39%	1.36%	2.31%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	1.55%	0	0	0	0	-	-	-			
20	1.68%	0.00%	1.39%	0	0	0	0	-	-	-	Available	e Credit Prem:	Credit Eligible Exp:
21	2.47%	2.39%	2.15%	0	0	0	0	-	-	-			
22	8.30%	1.27%	2.37%	2	0	0	0	-	1.00	(1.00)	2016	1,010,097	684
23	0.98%	1.55%	0.98%	0	0	0	0	-	-	-			
24	1.21%	1.06%	1.80%	0	0	0	0	-	-	-	2015	809,940	526
25	1.31%	0.80%	0.53%	0	0	0	0	-	-	-			
26	4.15%	4.92%	3.09%	1	1	0	1	1.00	-	1.00		<u>Difference:</u>	<u>Difference:</u>
27	0.62%	0.61%	0.38%	0	0	0	0	-	-	-			
40	1.29%	0.97%	0.59%	0	0	0	0	-	-	-		200,157	158
41	1.68%	1.20%	1.22%	0	0	0	0	-	-	-			
42	2.10%	1.35%	1.66%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.31%	1.26%	2.34%	0	0	0	0	-	-	-			
44	4.60%	2.87%	2.77%	1	0	0	0	-	-	-		24.7%	30.1%
45	2.31%	1.05%	0.99%	0	0	0	0	-	-	-			
99	0.00%	2.41%	0.67%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.84%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class MM Relative Range Methodology

		154 1 4	o. 1	Tr. e. (11411101		0-141	0040	0045		Residual	Keep	
Tam		al Market			d Mkt Shar		Selected	2016	2015	Change	Mark Shr	Out	
<u>Terr</u> 1	Aug-13 1.51%	Aug-14 1.25%	<u>Jul-15</u> 1.04%	<u>2014</u> 0	<u>2015</u> 0	<u>2016</u> 0	Range* 0	Credits -	<u>Credits</u>	<u>Change</u>	<u>Group</u> 0	<u>Credits</u> 0.00	
2	1.51%	1.38%	1.17%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.63%	1.17 %	0	0	0	0	_	_	-	2	1.00	
4	1.57%	1.52%	1.21%	0	0	0	0	_	_	-	3	1.00	
5	2.18%	1.81%	1.64%	0	0	0	0	_	_	_	4	1.25	
6	2.36%	1.97%	1.80%	0	0	0	0	_	_	_	5	1.50	
7	2.92%	2.44%	2.08%	0	0	0	0	_	_	_	6	1.75	
8	2.78%	2.60%	2.01%	0	0	0	0	_	_	_	7	2.00	
9	2.91%	2.44%	2.15%	0	0	0	0	_	_	_	8	2.25	
10	4.43%	2.95%	2.41%	1	0	0	0	_	_	_	9	2.50	
11	3.90%	2.96%	1.58%	1	0	0	0	_	_	_	-		
12	4.32%	3.68%	3.25%	1	1	0	1	1.00	_	1.00			
13	5.08%	4.33%	3.82%	1	1	1	1	1.00	1.00	-			
14	5.67%	4.70%	3.65%	1	1	1	1	1.00	1.00	-			
15	7.59%	7.08%	5.35%	2	2	1	2	1.00	1.00	-			
16	9.92%	8.70%	7.84%	3	2	2	2	1.00	1.00	-			
17	3.40%	3.38%	4.21%	0	0	1	0	-	-	-			
18	5.43%	5.25%	4.30%	1	1	1	1	1.00	1.00	-			
19	4.14%	3.33%	4.30%	1	0	1	1	1.00	-	1.00			
20	4.03%	4.17%	4.71%	1	1	1	1	1.00	-	1.00	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	7.93%	3	2	2	2	1.00	1.00	-			
22	10.99%	6.03%	4.54%	3	1	1	1	1.00	1.00	-	2016	5,423,673	25,634
23	6.85%	4.79%	3.71%	2	1	1	1	1.00	1.00	-			
24	5.22%	3.74%	1.89%	1	1	0	1	1.00	1.00	-	2015	4,341,789	19,566
25	3.76%	2.63%	3.35%	1	0	0	0	-	-	-			
26	8.28%	7.69%	4.56%	2	2	1	2	1.00	1.00	-		<u>Difference:</u>	<u>Difference:</u>
27	1.26%	1.21%	0.92%	0	0	0	0	-	-	-			
40	8.56%	6.78%	5.93%	2	2	1	2	1.00	1.00	-		1,081,885	6,068
41	5.70%	3.98%	3.70%	1	1	1	1	1.00	1.00	-			
42	8.14%	6.17%	5.07%	2	1	1	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	5.84%	4.22%	3.78%	1	1	1	1	1.00	1.00	-			
44	7.90%	7.20%	6.70%	2	2	2	2	1.00	1.00	-		24.9%	31.0%
45	7.16%	5.59%	4.92%	2	1	1	1	1.00	1.00	-			
99	1.42%	0.43%	0.40%	0	0	0	0	-	-	-			
Tot	2.66%	2.26%	1.92%										

- 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.

2016 Proposed Credit Factors Relative Range Methodology - Data Through July, 2015

	Rate Clas	s Group								
Terr	10	15	17	18	20	21	25	26	30	MC/Misc.
1	-	-	-	-	1.00	-	-	-	-	-
2	-	-	-	-	1.00	-	-	-	-	-
3	-	-	-	-	1.00	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	1.00	-	-	-	-	-
6	-	-	1.00	-	1.00	-	-	-	-	-
7	-	-	1.00	-	1.00	-	-	-	-	-
8	-	-	1.00	-	1.00	-	-	-	-	-
9	-	-	1.00	-	1.00	-	-	-	-	-
10	-	-	1.00	-	1.00	1.00	-	-	-	-
11	-	-	1.00	-	1.00	-	-	-	-	-
12	-	-	1.00	-	1.00	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	1.00	1.00	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	-	1.00	-	-	-	-	
18	1.00	-	1.00	1.00	1.25	1.00	1.00	-	-	1.00
19	_	-	1.00	-	1.00	1.00	1.00	-	-	1.00
20	1.00	-	1.00	1.00	1.25	1.00	1.00	-	-	1.00
21	1.00	1.00	1.00	-	1.50	1.00	1.00	-	-	1.00
22	1.00	1.00	1.00	1.00	1.50	-	1.00	-	-	1.00
23	-	-	1.00	-	1.00	1.00	-	-	-	1.00
24	-		1.00	-	1.00	-	-	-	-	1.00
25	-	-	1.00	-	1.00	-	-	-	-	-
26	-	-	1.00	-	1.00	-	-	-	1.00	1.00
27	-	-	-	-	1.00	-	-	-	-	-
40	1.00	-	1.00	-	1.00	1.00	1.00	-	-	1.00
41	-	-	1.00	-	1.00	1.00	1.00	-	-	1.00
42	1.00	-	1.00	-	1.00	1.00	1.00	-	-	1.00
43	-	-	1.00	-	1.00	1.00	1.00	-	-	1.00
44	1.00	-	1.00	-	1.25	1.00	1.00		-	1.00
45	-	-	1.00	-	1.25	1.00	1.00	-	-	1.00
99	-	-	-	-	-	-	-	-	-	-

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep		
Mark Shr	Out		
Group	Credits	Lower	<u>Upper</u>
0	0.00	0	0.035
1	1.00	0.035	0.065
2	1.00	0.065	0.095
3	1.00	0.095	0.155
4	1.25	0.155	0.215
5	1.50	0.215	0.275
6	1.75	0.275	0.335
7	2.00	0.335	0.395
8	2.25	0.395	0.455
9	2.50	0.455	1

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Relative Range Methodology - PRAC Proposal Summary by Rate Class

4/1/2015 Credit Factors

4/1/16 Indicated - Relative Ranges (PRAC Proposal)

Rate <u>Class</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential <u>Credit Premium</u>	<u>%∆</u>
10	3,079,664	294,536	439,287,056	294,536	0.0%	439,287,056	0.0%
15	787,860	8,165	10,951,878	8,165	0.0%	10,951,878	0.0%
17	145,779	61,664	116,333,988	61,664	0.0%	116,333,988	0.0%
18	55,230	1,208	1,968,996	853	-29.4%	1,891,734	-3.9%
20	34,313	33,463	116,383,809	34,194	2.2%	121,299,020	4.2%
21	15,514	5,797	14,176,145	4,897	-15.5%	12,217,849	-13.8%
25	75,827	4,091	15,262,693	7,563	84.9%	25,296,969	65.7%
26	65,048	380	1,139,323	0	-100.0%	0	-100.0%
30	62,120	526	809,940	684	30.1%	1,010,097	24.7%
M/M	168,786	19,566	4,341,789	25,939	32.6%	5,496,011	26.6%
Total	4,490,140	429,395	720,655,617	438,496	2.1%	733,784,604	1.8%

% of Total Mkt. Exp. 9.6%

Estimated Credits Used Credit Utilization

682,579,167 94.7% Estimated Credits Used Credit Utilization

9.8%

694,569,688 94.7%

		Original (20	112) Ranges	2014 R	anges	2015	Ranges	2016 R	anges
<u> Froup</u>	<u>Factor</u>	Lower	<u>Upper</u>	Lower	<u>Upper</u>	Lower	<u>Upper</u>	Lower	<u>Uppe</u>
0	0	0.00	0.05	0.00	0.05	0.00	0.03	0.00	0.03
1	1	0.05	0.08	0.05	0.07	0.03	0.05	0.03	0.04
2	1	0.08	0.11	0.07	0.10	0.05	0.07	0.04	0.06
3	1	0.11	0.17	0.10	0.16	0.07	0.12	0.06	0.09
4	1.25	0.17	0.23	0.16	0.21	0.12	0.16	0.09	0.12
5	1.5	0.23	0.29	0.21	0.27	0.16	0.20	0.12	0.16
6	1.75	0.29	0.35	0.27	0.33	0.20	0.24	0.16	0.19
7	2	0.35	0.41	0.33	0.38	0.24	0.28	0.19	0.22
8	2.25	0.41	0.47	0.38	0.44	0.28	0.32	0.22	0.25
9	2.5	0.47	1.00	0.44	1.00	0.32	1.00	0.25	1.00
MAIP \	/olume		2.48%		2.29%		1.68%		1.349

Relative Ranges for each year are scaled to the original upper and lower bounds based on Relative MAIP Volume

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 - Relative Ranges (PRAC Proposal)

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	179,645	0	0	731	0.0%	1,362,061	0.0%
2	241,632	1,088	2,172,578	1,088	0.0%	2,172,578	0.0%
3	519,011	2,359	4,903,494	2,359	0.0%	4,903,494	0.0%
4	329,650	1,349	3,191,218	1,349	0.0%	3,191,218	0.0%
5	505,909	3,011	6,732,095	3,011	0.0%	6,732,095	0.0%
6	338,514	1,684	4,373,882	1,684	0.0%	4,373,882	0.0%
7	347,953	13,473	22,263,296	13,473	0.0%	22,263,296	0.0%
8	198,946	6,854	11,974,908	6,854	0.0%	11,974,908	0.0%
9	198,113	8,998	16,805,659	8,281	-8.0%	15,452,882	-8.0%
10	95,743	4,433	8,349,841	4,433	0.0%	8,349,841	0.0%
11	72,383	635	2,110,782	635	0.0%	2,110,782	0.0%
12	194,206	7,252	14,998,854	12,677	74.8%	15,929,118	6.2%
13	210,052	18,001	26,373,177	20,804	15.6%	34,646,791	31.4%
14	72,381	6,759	14,216,143	6,759	0.0%	15,262,574	7.4%
15	25,613	2,608	5,559,235	2,608	0.0%	5,890,471	6.0%
16*	13,786	12,407	19,439,240	12,407	0.0%	20,096,962	3.4%
17	17,276	409	971,286	714	74.6%	1,043,624	7.4%
18	16,051	13,844	20,283,776	13,844	0.0%	20,459,296	0.9%
19	15,574	511	1,386,654	895	75.1%	1,999,124	44.2%
20*	17,998	14,796	23,214,158	15,128	2.2%	23,297,463	0.4%
21*	47,453	46,303	93,336,130	46,814	1.1%	94,556,516	1.3%
22*	15,082	15,082	32,284,144	14,830	-1.7%	32,102,550	-0.6%
23	45,098	2,898	7,436,636	3,123	7.8%	7,331,934	-1.4%
24	24,791	1,271	2,618,743	948	-25.4%	1,711,383	-34.6%
25	16,590	509	1,431,503	463	-9.1%	1,421,415	-0.7%
26*	21,365	1,639	4,353,093	1,583	-3.4%	3,812,214	-12.4%
27	412,141	1,664	2,905,935	1,664	0.0%	2,905,935	0.0%
40*	20,516	16,612	22,547,056	16,691	0.5%	22,733,888	0.8%
41*	58,739	50,559	60,000,400	50,594	0.1%	60,993,314	1.7%
42*	73,454	59,665	97,080,594	59,665	0.0%	97,080,594	0.0%
43*	47,483	39,935	65,821,904	39,935	0.0%	65,821,904	0.0%
44*	33,690	29,883	39,223,163	29,883	0.0%	39,223,163	0.0%
45*	50,938	42,902	82,296,042	42,568	-0.8%	82,577,334	0.3%
99	12,368	0	0	0	0.0%	0	0.0%
Total	4,490,140	429,395	720,655,617	438,496	2.1%	733,784,604	1.8%
% of Total I	Mkt. Exp.	9.6%		9.8%			

Total	400,504	329,783	539,595,923	330,099	0.1%	542,295,903	0.5%
% of Total I	Vkt. Exn.	82.3%		82.4%			

Indexed Market Share Group Ranges by Year

			>		Credits	
Base Year	2012	0	0.00	0.05	0.00	0
		1	0.05	0.08	1.00	1
MAIP:	2.75%	2	0.08	0.11	1.00	2
Relativity:	1.00	3	0.11	0.17	1.00	3
. 10.0.1.11.		4	0.17	0.23	1.25	4
		5	0.23	0.29	1.50	5
		6	0.29	0.35	1.75	6
		7	0.35	0.41	2.00	7
		8	0.41	0.47	2.25	8
		9	0.47	1.00	2.50	9
		J	0.47	1.00	2.00	9
			>	≤	Credits	
	2014	0	0.00	0.05	0.00	0
		1	0.05	0.07	1.00	1
MAIP:	2.29%	2	0.07	0.10	1.00	2
Relativity:	0.93	3	0.10	0.16	1.00	3
-		4	0.16	0.21	1.25	4
		5	0.21	0.27	1.50	5
		6	0.27	0.33	1.75	6
		7	0.33	0.38	2.00	7
		8	0.38	0.44	2.25	8
		9	0.44	1.00	2.50	9
		·	• • • • • • • • • • • • • • • • • • • •			· ·
			>	≤	Credits	
	2015	0	0.00	0.03	0.00	0
		1	0.03	0.05	1.00	1
MAIP:	1.68%	2	0.05	0.07	1.00	2
Relativity:	0.68	3	0.07	0.12	1.00	3
,		4	0.12	0.16	1.25	4
		5	0.16	0.20	1.50	5
		6	0.20	0.24	1.75	6
		7	0.24	0.28	2.00	7
		8	0.28	0.32	2.25	8
		9	0.32	1.00	2.50	9
			>	≤	Credits	
	2016	0	0.00	0.03	0.00	0
		1	0.03	0.04	1.00	1
MAIP:	1.34%	2	0.04	0.06	1.00	2
Relativity:	0.54	3	0.06	0.09	1.00	3
,		4	0.09	0.12	1.25	4
		5	0.12	0.16	1.50	5
		6	0.16	0.19	1.75	6
		7	0.19	0.22	2.00	7
		8	0.22	0.25	2.25	8
		9	0.25	1.00	2.50	9
		-				-

Margin: 90% ← Applied to Base Year MAIP Size Before Calculating Relation

Commonwealth Automobile Reinsurers - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 10 Relative Range Methodology - PRAC Proposal

Residual

Keen

											Residual	Кеер	
		al Market		_	Mkt Shar		Selected	2016	2015		Mark Shr	Out	
Terr	Aug-13	<u>Aug-14</u>	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.17%	0.90%	0.73%	0	0	0	0	-	-	-	0	0.00	
2	1.19%	0.92%	0.77%	0	0	0	0	-	-	-	1	1.00	
3	1.45%	1.06%	0.80%	0	0	0	0	-	-	-	2	1.00	
4	1.27%	0.98%	0.79%	0	0	0	0	-	-	-	3	1.00	
5	1.91%	1.44%	1.07%	0	0	0	0	-	-	-	4	1.25	
6	1.91%	1.46%	1.15%	0	0	0	0	-	-	-	5	1.50	
7	2.46%	1.81%	1.39%	0	0	0	0	-	-	-	6	1.75	
8	2.25%	1.64%	1.29%	0	0	0	0	-	-	-	7	2.00	
9	2.87%	2.03%	1.44%	0	0	0	0	-	-	-	8	2.25	
10	2.92%	2.18%	1.71%	0	0	0	0	-	-	-	9	2.50	
11	1.99%	1.51%	1.24%	0	0	0	0	-	-	-			
12	2.50%	1.93%	1.57%	0	0	0	0	-	-	-			
13	4.32%	3.11%	2.43%	0	1	0	0	-	-	-			
14	3.84%	2.79%	2.30%	0	0	0	0	-	-	-			
15	4.35%	2.67%	2.11%	0	0	0	0	-	-	-			
16	6.39%	4.97%	3.44%	1	1	1	1	1.00	1.00	-			
17	2.20%	1.81%	1.70%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.74%	1	1	1	1	1.00	1.00	-			
19	3.68%	3.20%	2.65%	0	1	0	0	-	-	-			
20	6.23%	4.87%	4.63%	1	1	2	1	1.00	1.00	-	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.14%	2	2	2	2	1.00	1.00	-			
22	9.85%	6.82%	5.74%	2	2	2	2	1.00	1.00	-	2016	439,287,056	294,536
23	3.63%	2.49%	1.76%	0	0	0	0	-	-	-			
24	2.15%	1.75%	1.39%	0	0	0	0	-	-	-	2015	439,287,056	294,536
25	2.15%	1.50%	1.20%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.05%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.93%	0.77%	0.62%	0	0	0	0	-	-	-			
40	7.63%	4.08%	2.65%	2	1	0	1	1.00	1.00	-		-	-
41	5.88%	3.11%	2.48%	1	1	0	1	1.00	1.00	-			
42	6.48%	4.37%	2.74%	1	1	0	1	1.00	1.00	-	Pe	ercent Change:	Percent Change:
43	5.28%	3.09%	2.44%	1	1	0	1	1.00	1.00	-			
44	7.95%	4.99%	4.32%	2	1	2	2	1.00	1.00	-		0.0%	0.0%
45	6.64%	3.49%	2.79%	1	1	0	1	1.00	1.00	-			
99	0.70%	0.56%	0.62%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.39%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 15 Relative Range Methodology - PRAC Proposal

	Deside	-1.8414	01	l looding to	I MI I OL -		0-144	0040	2045		Residual	Keep	
Torr	Aug-13	al Market Aug-14	Snare Jul-15	2014	d Mkt Shar 2015	<u>2016</u>	Selected Range*	2016 Credits	2015 Credits	Chango	Mark Shr <u>Group</u>	Out <u>Credits</u>	
<u>Terr</u> 1	0.32%	0.27%	0.29%	<u>2014</u> 0	<u>2015</u> 0	0	<u>Range</u> 0	<u>Credits</u>	Credits	<u>Change</u>	<u>Gгоир</u> 0	0.00	
2	0.32 %	0.27 %	0.29 %	0	0	0	0	-	_	-	1	1.00	
3	0.23%	0.29%	0.26%	0	0	0	0	_	_	_	2	1.00	
4	0.30%	0.29%	0.26%	0	0	0	0	_	_	_	3	1.00	
5	0.44%	0.23%	0.32%	0	0	0	0	_	_	_	4	1.25	
6	0.58%	0.53%	0.43%	0	0	0	0	_	_	_	5	1.50	
7	0.56%	0.46%	0.41%	0	0	0	0	_	_	_	6	1.75	
8	0.78%	0.67%	0.60%	0	0	0	0	_	_	_	7	2.00	
9	0.78%	0.63%	0.49%	0	0	0	0	_	_	_	8	2.25	
10	0.71%	0.62%	0.53%	0	0	0	0	_	_	_	9	2.50	
11	1.12%	0.88%	0.72%	0	0	0	0	_	_	_	·		
12	0.88%	0.86%	0.76%	0	0	0	0	_	_	_			
13	1.46%	1.17%	0.91%	0	0	0	0	_	_	_			
14	1.65%	1.32%	1.16%	0	0	0	0	-	-	-			
15	1.42%	1.43%	1.28%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.07%	0	0	0	0	_	_	_			
17	0.79%	0.76%	0.91%	0	0	0	0	_	_	-			
18	2.45%	2.07%	1.93%	0	0	0	0	-	-	-			
19	2.18%	2.18%	1.94%	0	0	0	0	-	-	-			
20	2.70%	2.39%	2.57%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.20%	1	1	2	1	1.00	1.00	-			-
22	8.10%	6.62%	5.59%	2	2	2	2	1.00	1.00	-	2016	10,951,878	8,165
23	2.82%	1.98%	1.40%	0	0	0	0	-	-	-			
24	2.99%	2.98%	2.47%	0	0	0	0	-	-	-	2015	10,951,878	8,165
25	1.73%	1.28%	1.12%	0	0	0	0	-	-	-			
26	1.99%	1.56%	1.45%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.26%	0.24%	0.20%	0	0	0	0	-	-	-			
40	2.44%	1.80%	0.95%	0	0	0	0	-	-	-		-	-
41	1.68%	1.28%	0.96%	0	0	0	0	-	-	-			
42	3.10%	3.10%	2.28%	0	1	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	1.59%	1.06%	0.88%	0	0	0	0	-	-	-			
44	3.16%	2.11%	1.97%	0	0	0	0	-	-	-		0.0%	0.0%
45	2.38%	1.83%	1.45%	0	0	0	0	-	-	-			
99	0.36%	0.26%	0.19%	0	0	0	0	-	-	-			
Tot	0.73%	0.62%	0.53%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 17 Relative Range Methodology - PRAC Proposal

								0010			Residual	Keep	
T		al Market				re Range	Selected	2016	2015	Ob	Mark Shr	Out	
<u>Terr</u>	Aug-13 3.25%	Aug-14 2.47%	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	Group	<u>Credits</u>	
1	3.25% 2.96%	2.47%	2.04%	0	0 0	0	0 0	-	-	-	0	0.00	
2	4.05%	2.03%	1.95%	0 0	0	0		-	-	-	1	1.00	
3			2.06%	0	0	0	0	-	-	-	2 3	1.00	
4	3.21% 4.26%	2.63% 3.06%	1.94% 2.38%	0	1	0 0	0 0	-	-	-	3 4	1.00 1.25	
5 6	4.40%	3.57%	2.36%	0	1	0	0	-	-	-	5 5	1.50	
7	5.00%	3.57%	2.81%	1	1	0	1	1.00	1.00	-	6	1.75	
8	5.00%	3.58%	3.29%	1	1	1	1	1.00	1.00	-	7	2.00	
9	5.05%	3.56%	2.92%	1	1	0	1	1.00	1.00	-	8	2.25	
10	5.55%	3.98%	3.09%	1	1	1	1	1.00	1.00	-	9	2.50	
11	4.60%	3.99%	2.51%	0	1	0	0	1.00	1.00	-	9	2.50	
12	5.90%	4.74%	3.88%	1	1	1	1	1.00	1.00	-			
13	7.34%	5.15%	4.50%	2	2	2	2	1.00	1.00	-			
14	8.44%	5.78%	5.23%	2	2	2	2	1.00	1.00	-			
15	8.90%	6.45%	4.34%	2	2	2	2	1.00	1.00	-			
16	14.02%	9.76%	6.38%	3	3	3	3	1.00	1.00	-			
17	6.51%	5.57%	3.47%	1	2	1	1	1.00	1.00	-			
18	10.10%	7.78%	7.06%	3	3	3	3	1.00	1.00	_			
19	11.66%	7.72%	4.77%	3	3	2	3	1.00	1.00	-			
20	12.72%	10.84%	9.55%	3	3	4	3	1.00	1.00	_	Δvailal	ble Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	9.45%	3	3	4	3	1.00	1.00	_	Availai	ole orealt i fem.	Orcait Liigibic Lxp.
22	14.23%	10.75%	9.36%	3	3	4	3	1.00	1.00	_	2016	116,333,988	61,664
23	8.79%	6.11%	4.96%	2	2	2	2	1.00	1.00	_	2010	110,000,000	01,004
24	4.64%	3.61%	2.78%	0	1	0	0	-	-	_	2015	116,333,988	61,664
25	6.65%	4.56%	2.66%	1	1	0	1	1.00	1.00	_	2010	110,000,000	01,001
26	8.63%	5.64%	4.22%	2	2	2	2	1.00	1.00	_		<u>Difference:</u>	<u>Difference:</u>
27	2.51%	2.07%	1.50%	0	0	0	0	-	-	_		<u>Billororido.</u>	<u>Billoronoo.</u>
40	12.55%	7.28%	5.09%	3	3	2	3	1.00	1.00	_		_	_
41	12.06%	6.14%	4.61%	3	2	2	2	1.00	1.00	_			
42	9.55%	4.71%	3.40%	2	1	1	_ 1	1.00	1.00	_	F	Percent Change:	Percent Change:
43	8.81%	5.59%	6.17%	2	2	3	2	1.00	1.00	_	_	<u> </u>	<u> </u>
44	11.57%	6.62%	6.40%	3	2	3	3	1.00	1.00	_		0.0%	0.0%
45	12.13%	6.63%	6.25%	3	2	3	3	1.00	1.00	_		2.370	3.0,0
99	0.83%	0.39%	0.42%	0	0	0	0	-	-	_			
Tot	5.17%	3.64%	2.98%	-	-	-	-						

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 18 Relative Range Methodology - PRAC Proposal

Residual

Keen

											Residual	Кеер	
_		al Market			Mkt Shar		Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	<u>Aug-14</u>	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.12%	0.63%	0.70%	0	0	0	0	-	-	-	0	0.00	
2	0.84%	0.55%	0.42%	0	0	0	0	-	-	-	1	1.00	
3	1.34%	0.92%	0.72%	0	0	0	0	-	-	-	2	1.00	
4	1.14%	0.86%	0.47%	0	0	0	0	-	-	-	3	1.00	
5	1.75%	1.26%	0.96%	0	0	0	0	-	-	-	4	1.25	
6	1.10%	1.13%	0.74%	0	0	0	0	-	-	-	5	1.50	
7	1.98%	1.31%	0.85%	0	0	0	0	-	-	-	6	1.75	
8	1.08%	0.94%	0.98%	0	0	0	0	-	-	-	7	2.00	
9	2.17%	1.57%	0.99%	0	0	0	0	-	-	-	8	2.25	
10	1.83%	1.02%	1.57%	0	0	0	0	-	-	-	9	2.50	
11	1.24%	0.77%	1.04%	0	0	0	0	-	-	-			
12	2.44%	1.85%	1.34%	0	0	0	0	-	-	-			
13	2.71%	1.96%	1.79%	0	0	0	0	-	-	-			
14	3.53%	2.39%	2.02%	0	0	0	0	-	-	-			
15	4.75%	4.06%	2.60%	0	1	0	0	-	-	-			
16	1.75%	0.00%	1.03%	0	0	0	0	-	-	-			
17	2.14%	1.13%	0.80%	0	0	0	0	-	-	-			
18	5.63%	5.10%	3.98%	1	2	1	1	1.00	1.00	-			
19	3.16%	2.04%	0.84%	0	0	0	0	-	-	-			
20	3.59%	4.15%	1.81%	0	1	0	0	-	-	-	Available	e Credit Prem:	Credit Eligible Exp:
21	4.86%	3.05%	3.37%	0	1	1	1	1.00	-	1.00			-
22	9.76%	4.32%	3.76%	2	1	1	1	1.00	1.00	-	2016	1,891,734	853
23	2.12%	1.27%	1.63%	0	0	0	0	-	-	-			
24	3.56%	0.43%	2.37%	0	0	0	0	-	-	-	2015	1,968,996	1,208
25	0.15%	1.68%	0.85%	0	0	0	0	-	-	-			
26	4.20%	3.21%	1.80%	0	1	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.89%	0.72%	0.53%	0	0	0	0	-	-	-			
40	5.77%	2.78%	0.40%	1	0	0	0	-	1.00	(1.00)		(77,262)	(355)
41	7.29%	1.64%	1.36%	2	0	0	0	-	1.00	(1.00)			
42	2.50%	1.69%	1.07%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	3.03%	3.04%	1.92%	0	1	0	0	-	-	-			•
44	1.80%	2.70%	2.12%	0	0	0	0	-	-	-		-3.9%	-29.4%
45	4.86%	3.11%	2.89%	0	1	0	0	-	-	-			
99	1.96%	0.51%	0.43%	0	0	0	0	-	-	-			
Tot	1.72%	1.21%	0.95%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 20 Relative Range Methodology - PRAC Proposal

	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	2014	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	4.03%	3.98%	5.86%	0	1	2	1	1.00	-	1.00	0	0.00	
2	5.82%	4.31%	3.79%	1	1	1	1	1.00	1.00	-	1	1.00	
3	7.69%	3.82%	4.09%	2	1	2	2	1.00	1.00	-	2	1.00	
4	5.70%	3.32%	2.39%	1	1	0	1	1.00	1.00	-	3	1.00	
5	7.89%	6.27%	5.51%	2	2	2	2	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.64%	2	2	2	2	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.72%	2	2	2	2	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.37%	3	2	3	3	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	6.38%	2	2	3	2	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	5.64%	3	2	2	2	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	5.06%	3	2	2	2	1.00	1.00	-			
12	12.77%	7.55%	6.51%	3	3	3	3	1.00	1.00	-			
13	11.99%	8.85%	8.20%	3	3	3	3	1.00	1.00	-			
14	15.28%	13.10%	11.54%	3	4	4	4	1.25	1.00	0.25			
15	21.15%	13.01%	12.37%	5	4	5	5	1.50	1.25	0.25			
16	26.59%	25.13%	20.50%	5	7	7	7	2.00	1.50	0.50			
17	19.61%	9.89%	9.66%	4	3	4	4	1.25	1.25	-			
18	20.86%	22.51%	12.89%	4	6	5	5	1.50	1.25	0.25			
19	15.29%	16.67%	15.33%	3	5	5	5	1.50	1.00	0.50			
20	24.66%	18.55%	20.05%	5	5	7	5	1.50	1.50	-	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	32.61%	23.95%	24.30%	6	6	8	6	1.75	1.75	-			
22	33.75%	22.17%	20.19%	7	6	7	7	2.00	1.75	0.25	2016	121,299,020	34,194
23	18.35%	10.83%	8.91%	4	3	3	3	1.00	1.25	(0.25)			
24	8.54%	5.71%	5.99%	2	2	2	2	1.00	1.00	-	2015	116,383,809	33,463
25	13.28%	13.16%	13.22%	3	4	5	4	1.25	1.00	0.25			
26	23.56%	13.76%	13.36%	5	4	5	5	1.50	1.50	-		Difference:	<u>Difference:</u>
27	5.26%	3.54%	2.51%	1	1	0	1	1.00	1.00	-			
40	24.85%	11.38%	10.14%	5	3	4	4	1.25	1.50	(0.25)		4,915,211	731
41	14.09%	9.23%	9.28%	3	3	4	3	1.00	1.00	-			
42	18.64%	12.38%	9.20%	4	4	4	4	1.25	1.25	-	<u>Pe</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	12.44%	4	4	5	4	1.25	1.25	-			
44	24.27%	16.44%	14.59%	5	5	5	5	1.50	1.50	-		4.2%	2.2%
45	20.07%	18.11%	16.01%	4	5	6	5	1.50	1.25	0.25			
99	2.48%	3.08%	1.75%	0	1	0	0	-	-	-			
Tot	12.86%	8.91%	8.12%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 21 Relative Range Methodology - PRAC Proposal

	Residu	al Market	Share	Indicated	l Mkt Shar	e Range	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	2014	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	1.87%	1.52%	0.75%	0	0	0	0	-	-	-	0	0.00	
2	2.29%	1.29%	0.97%	0	0	0	0	-	-	-	1	1.00	
3	2.90%	1.82%	1.46%	0	0	0	0	-	-	-	2	1.00	
4	2.49%	2.11%	0.94%	0	0	0	0	-	-	-	3	1.00	
5	4.05%	2.57%	2.49%	0	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	2.05%	0	1	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.41%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	2.18%	0	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	1.96%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	9.63%	4.03%	3.11%	2	1	1	1	1.00	1.00	-	9	2.50	
11	3.08%	2.33%	1.63%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.51%	0	1	0	0	-	-	-			
13	10.29%	3.92%	4.18%	3	1	2	2	1.00	1.00	-			
14	5.89%	4.05%	3.36%	1	1	1	1	1.00	1.00	-			
15	10.82%	4.90%	2.81%	3	1	0	1	1.00	1.00	-			
16	13.13%	13.16%	6.32%	3	4	3	3	1.00	1.00	-			
17	5.11%	0.00%	0.00%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.86%	1	1	1	1	1.00	1.00	-			
19	5.62%	4.17%	1.29%	1	1	0	1	1.00	1.00	-			
20	11.09%	6.02%	4.70%	3	2	2	2	1.00	1.00	-	Available	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	3.20%	3	1	1	1	1.00	1.00	-			
22	9.88%	2.86%	1.84%	2	0	0	0	-	1.00	(1.00)	2016	12,217,849	4,897
23	4.67%	4.48%	3.04%	0	1	1	1	1.00	-	1.00	00.1-		
24	6.40%	2.76%	0.46%	1	0	0	0	-	1.00	(1.00)	2015	14,176,145	5,797
25	2.60%	0.00%	1.88%	0	0	0	0	-	-	- (4.00)		D:"	D:#
26	6.32%	1.47%	0.96%	1	0	0	0	-	1.00	(1.00)		<u>Difference:</u>	<u>Difference:</u>
27	2.55%	1.88%	1.44%	0	0	0	0	-	-	-		(4.050.005)	(000)
40	13.69%	7.00%	6.03%	3	3	3	3	1.00	1.00	-		(1,958,295)	(899)
41	12.53%	5.33%	4.65%	3	2 1	2	2	1.00	1.00	-	D-		Danas et Obas es
42	6.17%	3.86%	1.49%	1	•	0	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	2.47%	2	1	0	1	1.00	1.00	-		40.00/	4E E0/
44 45	8.43% 10.32%	3.35% 2.31%	3.96% 3.78%	2 3	1	1 1	1	1.00	1.00	-		-13.8%	-15.5%
45 00	0.38%	0.00%	3.78% -4.98%	0	0 0	0	1 0	1.00	1.00	-			
99 T ot		2.98%	-4.98% 2.35%	U	U	U	U	-	-	-			
Tot	5.15%	2.90%	2.35%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 25 Relative Range Methodology - PRAC Proposal

			<u> </u>	<u> </u>	1.1.4.1.4.01		0 1 1 1	0040	2245		Residual	Keep	
Torr	Aug-13	al Market : Aug-14	Snare Jul-15	2014	d Mkt Shar 2015	<u>2016</u>	Selected	2016 Credits	2015 Credits	Chango	Mark Shr	Out <u>Credits</u>	
<u>Terr</u> 1	1.88%	1.37%	1.36%	<u>2014</u> 0	<u>2015</u> 0	<u>2016</u> 0	Range* 0	Credits	Credits	<u>Change</u>	<u>Group</u> 0	0.00	
2	1.61%	1.23%	1.16%	0	0	0	0	_	_	_	1	1.00	
3	1.84%	1.26%	0.89%	0	0	0	0	_	_	_	2	1.00	
4	1.75%	1.27%	1.16%	0	0	0	0	_	_	_	3	1.00	
5	2.37%	2.09%	1.65%	0	0	0	0	_	_	_	4	1.25	
6	2.57%	1.99%	1.65%	0	0	0	Ö	_	_	_	5	1.50	
7	2.53%	1.92%	1.58%	0	0	0	0	_	_	_	6	1.75	
8	3.30%	2.48%	2.28%	0	0	0	0	_	_	_	7	2.00	
9	2.62%	2.15%	2.18%	0	0	0	Ö	_	_	_	8	2.25	
10	3.19%	3.31%	2.20%	0	1	0	0	_	_	_	9	2.50	
11	2.54%	1.31%	2.28%	0	0	0	0	-	-	_	-		
12	4.04%	3.41%	2.75%	0	1	0	0	-	-	-			
13	3.75%	3.40%	3.16%	0	1	1	1	1.00	-	1.00			
14	6.81%	5.30%	2.93%	1	2	0	1	1.00	1.00	-			
15	11.71%	4.46%	5.06%	3	1	2	2	1.00	1.00	-			
16	17.01%	4.90%	5.70%	4	1	2	2	1.00	1.00	-			
17	3.23%	3.64%	1.84%	0	1	0	0	-	-	-			
18	9.96%	5.00%	6.07%	2	2	3	2	1.00	1.00	-			
19	4.46%	11.43%	9.12%	0	3	4	3	1.00	-	1.00			
20	8.81%	5.74%	4.85%	2	2	2	2	1.00	1.00	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.48%	2	2	3	2	1.00	1.00	-			
22	10.69%	8.39%	3.15%	3	3	1	3	1.00	1.00	-	2016	25,296,969	7,563
23	6.30%	3.39%	0.53%	1	1	0	1	1.00	1.00	-			
24	5.30%	2.03%	0.24%	1	0	0	0	-	1.00	(1.00)	2015	15,262,693	4,091
25	8.64%	0.00%	2.51%	2	0	0	0	-	1.00	(1.00)			
26	9.20%	2.76%	2.83%	2	0	0	0	-	1.00	(1.00)		Difference:	<u>Difference:</u>
27	1.33%	0.88%	0.63%	0	0	0	0	-	-	-			
40	3.61%	3.64%	3.47%	0	1	1	1	1.00	-	1.00		10,034,276	3,472
41	4.94%	4.21%	4.61%	0	1	2	1	1.00	-	1.00			
42	4.47%	4.14%	2.42%	0	1	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.06%	6.52%	3.65%	2	2	1	2	1.00	1.00	-			
44	10.75%	4.27%	4.07%	3	1	2	2	1.00	1.00	-		65.7%	84.9%
45	7.15%	5.62%	6.59%	2	2	3	2	1.00	1.00	-			
99	0.52%	0.40%	0.31%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.66%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 26 Relative Range Methodology - PRAC Proposal

Residual

Keen

											Residual	кеер	
	Residu	al Market	Share	Indicated	Mkt Shar	re Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	<u>Aug-14</u>	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	0.85%	0.56%	0.41%	0	0	0	0	-	-	-	0	0.00	
2	0.52%	0.36%	0.39%	0	0	0	0	-	-	-	1	1.00	
3	0.84%	0.58%	0.41%	0	0	0	0	-	-	-	2	1.00	
4	0.67%	0.55%	0.41%	0	0	0	0	-	-	-	3	1.00	
5	0.93%	0.92%	0.46%	0	0	0	0	-	-	-	4	1.25	
6	0.81%	0.67%	0.56%	0	0	0	0	-	-	-	5	1.50	
7	0.92%	0.68%	0.52%	0	0	0	0	-	-	-	6	1.75	
8	0.95%	0.89%	0.55%	0	0	0	0	-	-	-	7	2.00	
9	0.93%	0.58%	0.74%	0	0	0	0	-	-	-	8	2.25	
10	1.56%	1.02%	1.16%	0	0	0	0	-	-	-	9	2.50	
11	0.67%	0.68%	0.69%	0	0	0	0	-	-	-			
12	1.75%	1.20%	1.12%	0	0	0	0	-	-	-			
13	2.28%	1.43%	1.24%	0	0	0	0	-	-	-			
14	1.87%	0.47%	0.46%	0	0	0	0	-	-	-			
15	3.62%	1.93%	1.52%	0	0	0	0	-	-	-			
16	0.76%	0.00%	2.43%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.37%	0	0	0	0	-	-	-			
18	3.56%	3.30%	1.72%	0	1	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	0.86%	0	0	0	0	-	-	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	1.76%	0.91%	0.73%	0	0	0	0	-	-	-			
22	5.59%	0.00%	0.00%	1	0	0	0	-	1.00	(1.00)	2016	-	-
23	0.91%	1.55%	0.49%	0	0	0	0	-	-	-			
24	0.85%	0.96%	0.96%	0	0	0	0	-	-	-	2015	1,139,323	380
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	1.39%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.41%	0.35%	0.31%	0	0	0	0	-	-	-			
40	0.06%	1.47%	0.82%	0	0	0	0	-	-	-		(1,139,323)	(380)
41	3.25%	1.54%	1.50%	0	0	0	0	-	-	-			
42	1.58%	0.73%	0.76%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.42%	1.10%	0.56%	0	0	0	0	-	-	-		-	
44	1.88%	2.14%	1.69%	0	0	0	0	-	-	-		-100.0%	-100.0%
45	5.87%	1.57%	1.70%	1	0	0	0	-	1.00	(1.00)			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.54%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class 30 Relative Range Methodology - PRAC Proposal

Residual

Keen

									Residual	кеер			
	Residu	al Market		Indicated	d Mkt Shar	re Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	Aug-13	Aug-14	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	0.99%	0.64%	0.28%	0	0	0	0	-	-	-	0	0.00	
2	0.86%	0.66%	0.62%	0	0	0	0	-	-	-	1	1.00	
3	0.87%	0.52%	0.53%	0	0	0	0	-	-	-	2	1.00	
4	0.81%	0.51%	0.50%	0	0	0	0	-	-	-	3	1.00	
5	0.97%	0.91%	0.82%	0	0	0	0	-	-	-	4	1.25	
6	1.01%	0.85%	0.77%	0	0	0	0	-	-	-	5	1.50	
7	1.54%	1.13%	0.92%	0	0	0	0	-	-	-	6	1.75	
8	0.93%	1.23%	1.16%	0	0	0	0	-	-	-	7	2.00	
9	1.27%	0.94%	0.56%	0	0	0	0	-	-	-	8	2.25	
10	2.29%	1.49%	1.68%	0	0	0	0	-	-	-	9	2.50	
11	0.97%	1.74%	1.28%	0	0	0	0	-	-	-			
12	1.86%	1.29%	1.29%	0	0	0	0	-	-	-			
13	2.05%	1.29%	1.32%	0	0	0	0	-	-	-			
14	3.24%	3.44%	2.94%	0	1	0	0	-	-	-			
15	5.81%	6.90%	3.55%	1	2	1	1	1.00	1.00	-			
16	7.84%	4.32%	2.23%	2	1	0	1	1.00	1.00	-			
17	1.39%	1.36%	2.31%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	1.55%	0	0	0	0	-	-	-			
20	1.68%	0.00%	1.39%	0	0	0	0	_	_	-	Available	e Credit Prem:	Credit Eligible Exp:
21	2.47%	2.39%	2.15%	0	0	0	0	-	-	-			
22	8.30%	1.27%	2.37%	2	0	0	0	-	1.00	(1.00)	2016	1,010,097	684
23	0.98%	1.55%	0.98%	0	0	0	0	-	-	-			
24	1.21%	1.06%	1.80%	0	0	0	0	-	-	-	2015	809,940	526
25	1.31%	0.80%	0.53%	0	0	0	0	-	-	-		,	
26	4.15%	4.92%	3.09%	0	1	1	1	1.00	-	1.00		Difference:	<u>Difference:</u>
27	0.62%	0.61%	0.38%	0	0	0	0	_	_	-			
40	1.29%	0.97%	0.59%	0	0	0	0	-	-	-		200,157	158
41	1.68%	1.20%	1.22%	0	0	0	0	-	-	-		,	
42	2.10%	1.35%	1.66%	0	0	0	0	-	-	-	Pe	rcent Change:	Percent Change:
43	2.31%	1.26%	2.34%	0	0	0	0	_	_	-		<u>_</u>	
44	4.60%	2.87%	2.77%	0	0	0	0	_	_	-		24.7%	30.1%
45	2.31%	1.05%	0.99%	0	0	0	0	_	_	-			
99	0.00%	2.41%	0.67%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.84%										

- 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 - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group - Operator Class MM Relative Range Methodology - PRAC Proposal

Residual

Keen

											Residual	кеер	
	Residu	al Market			l Mkt Shar	re Range	Selected	2016	2015		Mark Shr	Out	
Terr	<u>Aug-13</u>	<u>Aug-14</u>	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.51%	1.25%	1.04%	0	0	0	0	-	-	-	0	0.00	
2	1.50%	1.38%	1.17%	0	0	0	0	-	-	-	1	1.00	
3	1.84%	1.63%	1.37%	0	0	0	0	-	-	-	2	1.00	
4	1.57%	1.52%	1.21%	0	0	0	0	-	-	-	3	1.00	
5	2.18%	1.81%	1.64%	0	0	0	0	-	-	-	4	1.25	
6	2.36%	1.97%	1.80%	0	0	0	0	-	-	-	5	1.50	
7	2.92%	2.44%	2.08%	0	0	0	0	-	-	-	6	1.75	
8	2.78%	2.60%	2.01%	0	0	0	0	-	-	-	7	2.00	
9	2.91%	2.44%	2.15%	0	0	0	0	-	-	-	8	2.25	
10	4.43%	2.95%	2.41%	0	0	0	0	-	-	-	9	2.50	
11	3.90%	2.96%	1.58%	0	0	0	0	-	-	-			
12	4.32%	3.68%	3.25%	0	1	1	1	1.00	-	1.00			
13	5.08%	4.33%	3.82%	1	1	1	1	1.00	1.00	-			
14	5.67%	4.70%	3.65%	1	1	1	1	1.00	1.00	-			
15	7.59%	7.08%	5.35%	2	3	2	2	1.00	1.00	-			
16	9.92%	8.70%	7.84%	2	3	3	3	1.00	1.00	-			
17	3.40%	3.38%	4.21%	0	1	2	1	1.00	-	1.00			
18	5.43%	5.25%	4.30%	1	2	2	2	1.00	1.00	-			
19	4.14%	3.33%	4.30%	0	1	2	1	1.00	-	1.00			
20	4.03%	4.17%	4.71%	0	1	2	1	1.00	_	1.00	Available	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	7.93%	2	3	3	3	1.00	1.00	-			<u></u> _
22	10.99%	6.03%	4.54%	3	2	2	2	1.00	1.00	-	2016	5,496,011	25,939
23	6.85%	4.79%	3.71%	1	1	1	1	1.00	1.00	-			
24	5.22%	3.74%	1.89%	1	1	0	1	1.00	1.00	-	2015	4,341,789	19,566
25	3.76%	2.63%	3.35%	0	0	1	0	-	-	-		, ,	,
26	8.28%	7.69%	4.56%	2	3	2	2	1.00	1.00	-		Difference:	<u>Difference:</u>
27	1.26%	1.21%	0.92%	0	0	0	0	-	-	-			·
40	8.56%	6.78%	5.93%	2	2	2	2	1.00	1.00	-		1,154,223	6,374
41	5.70%	3.98%	3.70%	1	1	1	1	1.00	1.00	_		, - , -	-,-
42	8.14%	6.17%	5.07%	2	2	2	2	1.00	1.00	_	Pe	rcent Change:	Percent Change:
43	5.84%	4.22%	3.78%	1	1	1	1	1.00	1.00	-			
44	7.90%	7.20%	6.70%	2	3	3	3	1.00	1.00	_		26.6%	32.6%
45	7.16%	5.59%	4.92%	2	2	2	2	1.00	1.00	_			3=.• //
99	1.42%	0.43%	0.40%	0	0	0	0	-	-	_			
Tot	2.66%	2.26%	1.92%	-	-	-	· ·						

- 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.

2016 Proposed Credit Factors Relative Range Methodology - Data Through July, 2015

	Rate Class Group									
Terr	10	15	17	18	20	21	25	26	30	MC/Misc.
1	-	-	-	-	1.00	-	-	-	-	-
2	-	-	-	-	1.00	-	-	-	-	-
3	-	-	-	-	1.00	-	-	-	-	-
4	-	-	-	-	1.00	-	-	-	-	-
5	-	-	-	-	1.00	-	-	-	-	-
6	-	-	-	-	1.00	-	-	-	-	-
7	-	-	1.00	-	1.00	-	-	-	-	-
8	-	-	1.00	-	1.00	-	-	-	-	-
9	-	-	1.00	-	1.00	-	-	-	-	-
10	-	-	1.00	-	1.00	1.00	-	-	-	-
11	-	-	-	-	1.00	-	-	-	-	-
12	-	-	1.00	-	1.00	-	-	-	-	1.00
13	-	-	1.00	-	1.00	1.00	1.00	-	-	1.00
14	-	-	1.00	-	1.25	1.00	1.00	-	-	1.00
15	-	-	1.00	-	1.50	1.00	1.00	-	1.00	1.00
16	1.00	-	1.00	-	2.00	1.00	1.00	-	1.00	1.00
17	_	-	1.00	-	1.25	-	-	-	-	1.00
18	1.00	-	1.00	1.00	1.50	1.00	1.00	-	-	1.00
19	-	-	1.00	-	1.50	1.00	1.00	-	-	1.00
20	1.00	-	1.00	-	1.50	1.00	1.00	-	-	1.00
21	1.00	1.00	1.00	1.00	1.75	1.00	1.00	-	-	1.00
22	1.00	1.00	1.00	1.00	2.00	-	1.00	-	-	1.00
23	-	-	1.00	-	1.00	1.00	1.00	-	-	1.00
24	-	-	-	-	1.00	-	-	-	-	1.00
25	-	-	1.00	-	1.25	-	-	-	-	-
26	-	-	1.00	-	1.50	-	-	-	1.00	1.00
27	-	-	-	-	1.00	-	-	-	-	-
40	1.00	-	1.00	-	1.25	1.00	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	-	1.50	1.00	1.00	-	-	1.00
99	-	-	-	-	-	-	-	-	-	-

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep		
Mark Shr	Out		
Group	Credits	<u>Upper</u>	Lower
0	0.00	0.05	0
0.05	1.00	0.07	0.03
0.07	1.00	0.1	0.05
0.1	1.00	0.16	0.07
0.16	1.25	0.21	0.12
0.21	1.50	0.27	0.16
0.27	1.75	0.33	0.2
0.33	2.00	0.38	0.24
0.38	2.25	0.44	0.28
0.44	2.50	1	0.32

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Summary by Rate Class Two Year Projection Analysis - Current Methodology

4/1/2015 Credit Factors

4/1/16 Indicated - Residual Market Share Group Methodology

Rate <u>Class</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
10	3,079,664	294,536	439,287,056	46,944	-84.1%	88,920,994	-79.8%
15	787,860	8,165	10,951,878	1,923	-76.4%	2,662,891	-75.7%
17	145,779	61,664	116,333,988	12,639	-79.5%	31,047,890	-73.3%
18	55,230	1,208	1,968,996	0	-100.0%	0	-100.0%
20	34,313	33,463	116,383,809	27,734	-17.1%	93,714,892	-19.5%
21	15,514	5,797	14,176,145	215	-96.3%	484,042	-96.6%
25	75,827	4,091	15,262,693	1,602	-60.8%	6,758,723	-55.7%
26	65,048	380	1,139,323	0	-100.0%	0	-100.0%
30	62,120	526	809,940	0	-100.0%	0	-100.0%
M/M	168,786	19,566	4,341,789	4,778	-75.6%	1,177,790	-72.9%
Total	4,490,140	429,395	720,655,617	95,835	-77.7%	224,767,222	-68.8%

% of Total Mkt. Exp.

9.6%

2.1%

Estimated Credits Used Credit Utilization	682,579,167 94.7%	Estimated Credits Used Credit Utilization	205,956,972 91.6%	
		Residual	Keep	
		Mark Share	Out	
		Group	<u>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 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Summary by Territory Two Year Projection Analysis - Current Methodology

4/1/2015 Credit Factors

4/1/16 - Residual Market Share Group

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	179,645	0	0	731	0.0%	1,362,061	0.0%
2	241,632	1,088	2,172,578	0	-100.0%	0	-100.0%
3	519,011	2,359	4,903,494	0	-100.0%	0	-100.0%
4	329,650	1,349	3,191,218	0	-100.0%	0	-100.0%
5	505,909	3,011	6,732,095	3,011	0.0%	6,732,095	0.0%
6	338,514	1,684	4,373,882	1,684	0.0%	4,373,882	0.0%
7	347,953	13,473	22,263,296	2,321	-82.8%	5,856,888	-73.7%
8	198,946	6,854	11,974,908	1,170	-82.9%	3,042,268	-74.6%
9	198,113	8,998	16,805,659	1,622	-82.0%	4,849,507	-71.1%
10	95,743	4,433	8,349,841	695	-84.3%	2,087,562	-75.0%
11	72,383	635	2,110,782	635	0.0%	2,110,782	0.0%
12	194,206	7,252	14,998,854	1,701	-76.6%	5,091,667	-66.1%
13	210,052	18,001	26,373,177	2,759	-84.7%	8,996,442	-65.9%
14	72,381	6,759	14,216,143	3,653	-46.0%	9,817,883	-30.9%
15	25,613	2,608	5,559,235	1,310	-49.8%	2,410,888	-56.6%
16	13,786	12,407	19,439,240	1,366	-89.0%	3,689,684	-81.0%
17	17,276	409	971,286	102	-75.1%	333,501	-65.7%
18	16,051	13,844	20,283,776	671	-95.2%	2,049,026	-89.9%
19	15,574	511	1,386,654	239	-53.2%	847,042	-38.9%
20	17,998	14,796	23,214,158	823	-94.4%	2,900,329	-87.5%
21	47,453	46,303	93,336,130	39,684	-14.3%	82,510,811	-11.6%
22	15,082	15,082	32,284,144	14,331	-5.0%	29,404,644	-8.9%
23	45,098	2,898	7,436,636	663	-77.1%	2,638,825	-64.5%
24	24,791	1,271	2,618,743	466	-63.3%	1,600,660	-38.9%
25	16,590	509	1,431,503	153	-70.1%	547,601	-61.7%
26	21,365	1,639	4,353,093	351	-78.6%	1,302,133	-70.1%
27	412,141	1,664	2,905,935	0	-100.0%	0	-100.0%
40	20,516	16,612	22,547,056	1,725	-89.6%	2,945,328	-86.9%
41	58,739	50,559	60,000,400	1,026	-98.0%	3,070,813	-94.9%
42	73,454	59,665	97,080,594	3,253	-94.5%	6,041,919	-93.8%
43	47,483	39,935	65,821,904	2,519	-93.7%	7,375,700	-88.8%
44	33,690	29,883	39,223,163	3,555	-88.1%	7,054,713	-82.0%
45	50,938	42,902	82,296,042	3,617	-91.6%	13,722,568	-83.3%
99	12,368	0	0	0	0.0%	0	0.0%
Total	4,490,140	429,395	720,655,617	95,835	-77.7%	224,767,222	-68.8%
% of Total I	Mkt. Exp.	9.6%		2.1%			

Residual Keep Mark Share Out Group Credits 0 0.00 1 1.00 1.00 3 4 5 1.00 1.25 1.50 6 7 1.75 2.00 8 2.25 2.50

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Relative Range Methodology Summary by Rate Class

Two Year Projection Analysis - Relative Range Methodology

4/1/2015 Credit Factors

4/1/16 Indicated - Relative Ranges

Rate	Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
<u>Class</u>	Exposures	Exposures	Credit Premium	Exposures	<u>%∆</u>	Credit Premium	<u>%∆</u>
10	3,079,664	294,536	439,287,056	98,793	-66.5%	154,050,150	-64.9%
15	787,860	8,165	10,951,878	8,165	0.0%	10,951,878	0.0%
17	145,779	61,664	116,333,988	31,494	-48.9%	66,746,087	-42.6%
18	55,230	1,208	1,968,996	342	-71.7%	671,348	-65.9%
20	34,313	33,463	116,383,809	31,182	-6.8%	102,061,590	-12.3%
21	15,514	5,797	14,176,145	2,477	-57.3%	5,772,762	-59.3%
25	75,827	4,091	15,262,693	3,454	-15.6%	12,399,940	-18.8%
26	65,048	380	1,139,323	0	-100.0%	0	-100.0%
30	62,120	526	809,940	303	-42.3%	435,670	-46.2%
M/M	168,786	19,566	4,341,789	20,033	2.4%	4,455,024	2.6%
Total	4.490.140	429.395	720.655.617	196.243	-54.3%	357.544.450	-50.4%

% of Total Mkt. Exp. 9.6% 4.4%

	Estimated Cred Credit Utilization		682,579,167 94.7%	Estimated Cred Credit Utilizatio		332,106,761 92.9%	
Original I	Ranges:			Relative Ran	ges:		
Group	Lower	<u>Upper</u>	<u>Factor</u>	Group	Lower	<u>Upper</u>	<u>Factor</u>
0	0	0.05	0	0	0	0.035	0
1	0.05	0.08	1	1	0.035	0.065	1
2	0.08	0.11	1	2	0.065	0.095	1
3	0.11	0.17	1	3	0.095	0.155	1
4	0.17	0.23	1.25	4	0.155	0.215	1.25
5	0.23	0.29	1.5	5	0.215	0.275	1.5
6	0.29	0.35	1.75	6	0.275	0.335	1.75
7	0.35	0.41	2	7	0.335	0.395	2
8	0.41	0.47	2.25	8	0.395	0.455	2.25
9	0.47	1	2.5	9	0.455	1	2.5

1.34%	Current Residual	Market Rate	Using Data	Through July, 2015	5

^{2.0%} Target Cession Rate From 2012 Division of Insurance Decision (Bulletin 953)

Relative Range Calculation:

- 1. Divide the actual overall residual market share by the target (1.34 / 2.0) = .67
- 2. Round the result from 1. above to the nearest 10th = .7
- 3. Multiply the result from 2. above by the original average residual market share threshold (.7 x .05) =3.5
- 4. Use the same increment for bands as original methodology: .03 for first two bands, .06 for all remaining bands

^{5.0%} Residual Market rate Threshold Point, Credits were given for 5.0% and above (2012-2015)

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Summary by Territory Two Year Projection Analysis - Relative Range Methodology

4/1/2015 Credit Factors

4/1/16 - Relative Ranges

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential <u>Credit Premium</u>	<u>%∆</u>
1	179,645	0	0	731	0.0%	1,362,061	0.0%
2	241,632	1,088	2,172,578	1,088	0.0%	2,172,578	0.0%
3	519,011	2,359	4,903,494	2,359	0.0%	4,903,494	0.0%
4	329,650	1,349	3,191,218	0	-100.0%	0	-100.0%
5	505,909	3,011	6,732,095	3,011	0.0%	6,732,095	0.0%
6	338,514	1,684	4,373,882	1,684	0.0%	4,373,882	0.0%
7	347,953	13,473	22,263,296	2,321	-82.8%	5,856,888	-73.7%
8	198,946	6,854	11,974,908	1,170	-82.9%	3,042,268	-74.6%
9	198,113	8,998	16,805,659	1,622	-82.0%	4,849,507	-71.1%
10	95,743	4,433	8,349,841	695	-84.3%	2,087,562	-75.0%
11	72,383	635	2,110,782	635	0.0%	2,110,782	0.0%
12	194,206	7,252	14,998,854	7,252	0.0%	14,998,854	0.0%
13	210,052	18,001	26,373,177	18,001	0.0%	26,373,177	0.0%
14	72,381	6,759	14,216,143	5,444	-19.5%	10,187,814	-28.3%
15	25,613	2,608	5,559,235	2,463	-5.6%	4,855,514	-12.7%
16	13,786	12,407	19,439,240	1,366	-89.0%	3,689,684	-81.0%
17	17,276	409	971,286	407	-0.5%	405,839	-58.2%
18	16,051	13,844	20,283,776	13,844	0.0%	20,108,257	-0.9%
19	15,574	511	1,386,654	830	62.5%	1,532,349	10.5%
20	17,998	14,796	23,214,158	15,128	2.2%	22,994,805	-0.9%
21	47,453	46,303	93,336,130	45,926	-0.8%	90,799,798	-2.7%
22	15,082	15,082	32,284,144	14,711	-2.5%	29,825,915	-7.6%
23	45,098	2,898	7,436,636	2,693	-7.1%	6,033,531	-18.9%
24	24,791	1,271	2,618,743	466	-63.3%	1,600,660	-38.9%
25	16,590	509	1,431,503	153	-70.1%	547,601	-61.7%
26	21,365	1,639	4,353,093	1,341	-18.2%	2,808,377	-35.5%
27	412,141	1,664	2,905,935	0	-100.0%	0	-100.0%
40	20,516	16,612	22,547,056	1,725	-89.6%	2,945,328	-86.9%
41	58,739	50,559	60,000,400	6,290	-87.6%	10,858,788	-81.9%
42	73,454	59,665	97,080,594	3,253	-94.5%	6,041,919	-93.8%
43	47,483	39,935	65,821,904	4,446	-88.9%	9,660,727	-85.3%
44	33,690	29,883	39,223,163	29,883	0.0%	37,504,512	-4.4%
45	50,938	42,902	82,296,042	5,305	-87.6%	16,279,883	-80.2%
99	12,368	0	0	0	0.0%	0	0.0%
Total	4,490,140	429,395	720,655,617	196,243	-54.3%	357,544,450	-50.4%
0/ (T / II		0.00/		4 40/			

% of Total Mkt. Exp. 9.6% 4.4%

Original R	langes:			Relative F	Ranges:		
Group	Lower	<u>Upper</u>	<u>Factor</u>	<u>Group</u>	Lower	<u>Upper</u>	<u>Factor</u>
0	0	0.05	0	0	0	0.035	0
1	0.05	0.08	1	1	0.035	0.065	1
2	0.08	0.11	1	2	0.065	0.095	1
3	0.11	0.17	1	3	0.095	0.155	1
4	0.17	0.23	1.25	4	0.155	0.215	1.25
5	0.23	0.29	1.5	5	0.215	0.275	1.5
6	0.29	0.35	1.75	6	0.275	0.335	1.75
7	0.35	0.41	2	7	0.335	0.395	2
8	0.41	0.47	2.25	8	0.395	0.455	2.25
9	0.47	1	2.5	9	0.455	1	2.5

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Relative Range Methodology - PRAC Proposal Summary by Rate Class Two Year Projection Analysis - PRAC Proposal

4/1/2015 Credit Factors

4/1/16 Indicated - Relative Ranges (PRAC Proposal)

Rate Class	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
10	3.079.664	294.536	439.287.056	109.696	-62.8%	169.249.188	-61.5%
15	787.860	8.165	10.951.878	8.165	0.0%	10.951.878	0.0%
17	145,779	61,664	116,333,988	43,541	-29.4%	90,819,574	-21.9%
18	55,230	1,208	1,968,996	853	-29.4%	1,891,734	-3.9%
20	34,313	33,463	116,383,809	31,182	-6.8%	121,583,196	4.5%
21	15,514	5,797	14,176,145	3,962	-31.7%	9,639,227	-32.0%
25	75,827	4,091	15,262,693	6,598	61.3%	22,013,329	44.2%
26	65,048	380	1,139,323	0	-100.0%	0	-100.0%
30	62,120	526	809,940	546	3.9%	788,440	-2.7%
M/M	168,786	19,566	4,341,789	25,724	31.5%	5,439,516	25.3%
Total	4,490,140	429,395	720,655,617	230,266	-46.4%	432,376,083	-40.0%

% of Total Mkt. Exp. 9.6% 5.1%

Estimated Credits Used 682,579,167 Estimated Credits Used 401,408,396 Credit Utilization 94.7% Credit Utilization 92.8%

		Original (20	12) Ranges	2014 R	Ranges	2015 R	langes	2016 R	anges
Group	<u>Factor</u>	Lower	<u>Upper</u>	Lower	<u>Upper</u>	Lower	<u>Upper</u>	<u>Lower</u>	Upper
0	0	0.00	0.05	0.00	0.03	0.00	0.03	0.00	0.03
1	1	0.05	0.08	0.03	0.04	0.03	0.04	0.03	0.04
2	1	0.08	0.11	0.04	0.06	0.04	0.06	0.04	0.06
3	1	0.11	0.17	0.06	0.09	0.06	0.09	0.06	0.09
4	1.25	0.17	0.23	0.09	0.12	0.09	0.12	0.09	0.12
5	1.5	0.23	0.29	0.12	0.16	0.12	0.16	0.12	0.16
6	1.75	0.29	0.35	0.16	0.19	0.16	0.19	0.16	0.19
7	2	0.35	0.41	0.19	0.22	0.19	0.22	0.19	0.22
8	2.25	0.41	0.47	0.22	0.25	0.22	0.25	0.22	0.25
9	2.5	0.47	1.00	0.25	1.00	0.25	1.00	0.25	1.00
MAIP \	/olume		2.48%		1.34%		1.34%		1.34%

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Summary by Territory Two Year Look Forward - Quincy Mutual

4/1/2015 Credit Factors

4/1/16 - Relative Ranges (PRAC Proposal)

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	e <u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	179,645	0	0	731	0.0%	1,362,061	0.0%
2	241,632	1,088	2,172,578	1,088	0.0%	2,172,578	0.0%
3	519,011	2,359	4,903,494	2,359	0.0%	4,903,494	0.0%
4	329,650	1,349	3,191,218	0	-100.0%	0	-100.0%
5	505,909	3,011	6,732,095	3,011	0.0%	6,732,095	0.0%
6	338,514	1,684	4,373,882	1,684	0.0%	4,373,882	0.0%
7	347,953	13,473	22,263,296	2,321	-82.8%	5,856,888	-73.7%
8	198,946	6,854	11,974,908	6,854	0.0%	11,974,908	0.0%
9	198,113	8,998	16,805,659	1,622	-82.0%	4,849,507	-71.1%
10	95,743	4,433	8,349,841	4,433	0.0%	8,349,841	0.0%
11	72,383	635	2,110,782	635	0.0%	2,110,782	0.0%
12	194,206	7,252	14,998,854	12,677	74.8%	15,929,118	6.2%
13	210,052	18,001	26,373,177	20,804	15.6%	34,646,791	31.4%
14	72,381	6,759	14,216,143	6,000	-11.2%	12,662,016	-10.9%
15	25,613	2,608	5,559,235	2,463	-5.6%	5,517,986	-0.7%
16	13,786	12,407	19,439,240	12,269	-1.1%	19,875,305	2.2%
17	17,276	409	971,286	714	74.6%	1,043,624	7.4%
18	16,051	13,844	20,283,776	13,844	0.0%	20,459,296	0.9%
19	15,574	511	1,386,654	830	62.5%	1,895,553	36.7%
20	17,998	14,796	23,214,158	15,128	2.2%	24,249,539	4.5%
21	47,453	46,303	93,336,130	46,814	1.1%	98,559,886	5.6%
22	15,082	15,082	32,284,144	14,830	-1.7%	32,669,867	1.2%
23	45,098	2,898	7,436,636	2,918	0.7%	6,588,535	-11.4%
24	24,791	1,271	2,618,743	466	-63.3%	1,600,660	-38.9%
25	16,590	509	1,431,503	419	-17.8%	875,630	-38.8%
26	21,365	1,639	4,353,093	1,583	-3.4%	3,812,214	-12.4%
27	412,141	1,664	2,905,935	0	-100.0%	0	-100.0%
40	20,516	16,612	22,547,056	1,949	-88.3%	3,927,036	-82.6%
41	58,739	50,559	60,000,400	6,290	-87.6%	11,626,491	-80.6%
42	73,454	59,665	97,080,594	5,897	-90.1%	14,214,239	-85.4%
43	47,483	39,935	65,821,904	4,446	-88.9%	11,491,964	-82.5%
44	33,690	29,883	39,223,163	29,883	0.0%	39,223,163	0.0%
45	50,938	42,902	82,296,042	5,305	-87.6%	18,821,135	-77.1%
99	12,368	0	0	0	0.0%	0	0.0%
Total	4,490,140	429,395	720,655,617	230,266	-46.4%	432,376,083	-40.0%
% of Total	Mkt. Exp.	9.6%		5.1%			

Summary for Key Territories cited by the Division of Insurance

Total 400,504 329,783 539,595,923 144,394 -56.2% 278,470,839 -48.4%

Commonwealth Automobile Reinsurers Actuarial Committee Summary of Credit Indications for April 1, 2016 (Data Through July, 2015)

<u>(</u>	Current Formulai	ic Methodolog	<u>1V</u>		<u>Relative</u>	Range			PRAC Propos	al (Relative)	
	Potential Cred Eligible Exp % Total	<u>July</u> 113,620 2.5%	<u>May</u> 112,815 2.5%		Potential Cred Eligible Exp % Total	<u>July</u> 332,204 7.4%	<u>May</u> 329,286 7.4%		Potential Cred Eligible Exp % Total	<u>July</u> 438,496 9.8%	<u>May</u> 421,103 9.4%
	Potential Prem	259.7 M	258.4 M		Potential Prem	566.1 M	562.1 M		Potential Prem	733.8 M	705.7 M
	$\frac{\text{Indicated } \Delta:}{\Delta \text{ Exposures}}$ $\Delta \text{ Premium}$	-73.5% -64.0%	-73.6% -64.0%		$\frac{\text{Indicated }\Delta:}{\Delta \text{ Exposures}}$ $\Delta \text{ Premium}$	-22.6% -21.4%	-22.8% -21.7%		Indicated Δ : Δ Exposures Δ Premium	2.1% 1.8%	-1.3% -1.6%
# 0	Cells With Credit	74	73	# (Cells With Credit	126	124	# C	Cells With Credit	127	110
Factor 0 1 1 1 1.25 1.5 1.75 2 2.25 2.5	Lower 0 0.050 0.080 0.110 0.170 0.230 0.290 0.350 0.410 0.470	Upper 0.050 0.080 0.110 0.170 0.230 0.290 0.350 0.410 0.470	Group 0 1 2 3 4 5 6 7 8 9	Factor 0 1 1 1 1.25 1.5 1.75 2 2.25 2.5	Lower 0 0.035 0.065 0.095 0.155 0.215 0.275 0.335 0.395 0.455	Upper 0.035 0.065 0.095 0.155 0.215 0.275 0.335 0.395 0.455 1	Group 0 1 2 3 4 5 6 7 8 9	Factor 0 1 1 1 1.25 1.75 2 2.25 2.5	Lower 0.00 0.03 0.04 0.06 0.09 0.12 0.16 0.19 0.22 0.25	Upper 0.03 0.04 0.06 0.09 0.12 0.16 0.19 0.22 0.25 1.00	Group 0 1 2 3 4 5 6 7 8 9
2 Year I	Look Forward Indicated Δ: Δ Exposures Δ Premium	-77.7% -68.8%		2 Year	Look Forward Indicated Δ: Δ Exposures Δ Premium	-54.3% -50.4%		2 Year I	Look Forward Indicated Δ: Δ Exposures Δ Premium	-46.4% -40.0%	
Key Terr	ritories Cited By ∆ Exposures ∆ Premium	/ DOI ∆: -76.1% -68.1%		Key Ter	ritories Cited By Δ Exposures Δ Premium	y DOI: -35.1% -32.1%		Key Terr	ritories Cited By Δ Exposures Δ Premium	v DOI: 0.1% 0.5%	

Commonwealth Automobile Reinsurers Voluntary 3 Year Loss Ratio (CAR ID 8) Data through March, 2015 Excluding Progressive

	Rate Class (Group									
Territory	10	15	17	18	20	21	25	26	30	MC/Misc.	Total
1	57.59%	69.65%	70.23%	55.77%	60.16%	49.82%	65.48%	46.61%	60.51%	33.49%	59.24%
2	58.18%	71.06%	71.16%	52.65%	61.92%	60.75%	59.05%	51.14%	62.38%	32.05%	59.73%
3	59.81%	66.73%	63.89%	61.16%	64.68%	49.56%	59.99%	53.00%	61.68%	34.48%	60.18%
4	61.00%	69.07%	61.34%	54.72%	67.33%	62.81%	62.55%	50.36%	59.03%	39.21%	61.36%
5	61.85%	66.59%	67.83%	66.52%	51.49%	55.43%	60.44%	53.50%	64.88%	39.98%	61.90%
6	59.74%	71.07%	64.40%	65.86%	57.76%	54.16%	56.63%	48.46%	61.04%	38.78%	60.54%
7	59.84%	67.82%	64.92%	55.49%	57.26%	47.38%	61.07%	53.76%	61.82%	34.93%	60.39%
8	61.62%	70.72%	62.78%	55.26%	61.62%	55.64%	64.71%	53.52%	63.58%	43.23%	62.28%
9	61.52%	65.30%	63.11%	68.38%	57.70%	51.38%	62.63%	55.90%	66.97%	32.82%	61.51%
10	61.59%	72.57%	58.92%	54.94%	70.22%	74.08%	66.02%	48.50%	55.90%	30.89%	62.14%
11	56.56%	81.21%	54.70%	59.44%	54.58%	59.28%	47.92%	41.48%	53.07%	45.95%	58.86%
12	60.89%	70.16%	58.97%	58.97%	58.52%	55.02%	61.25%	52.53%	63.27%	51.19%	61.47%
13	66.74%	75.91%	61.88%	60.46%	62.74%	59.61%	67.64%	57.70%	68.48%	37.62%	66.75%
14	67.10%	70.61%	62.69%	58.63%	68.76%	48.09%	71.59%	55.01%	59.35%	80.45%	66.81%
15	65.13%	67.90%	58.71%	53.48%	74.73%	73.20%	78.48%	71.32%	72.25%	65.51%	65.75%
16	65.75%	62.70%	58.12%	60.57%	58.76%	60.26%	61.24%	79.12%	70.57%	32.31%	64.54%
17	62.39%	76.41%	68.47%	53.68%	107.91%	30.44%	68.77%	46.95%	87.81%	32.44%	64.21%
18	68.33%	72.70%	60.85%	81.09%	108.39%	39.31%	77.54%	61.01%	65.78%	51.35%	68.85%
19	49.81%	64.29%	60.03%	86.51%	75.73%	45.02%	58.62%	64.79%	25.92%	37.21%	52.08%
20	74.06%	77.45%	62.10%	90.07%	111.36%	67.43%	75.22%	54.36%	68.62%	48.34%	74.21%
21	73.20%	72.94%	76.39%	64.44%	76.72%	88.08%	74.58%	75.74%	52.54%	87.10%	73.40%
22	75.71%	78.66%	64.19%	86.68%	77.77%	63.41%	78.88%	47.26%	30.45%	105.03%	74.98%
23	52.85%	74.23%	68.82%	55.62%	71.40%	57.55%	54.14%	46.51%	44.04%	28.83%	55.48%
24	53.95%	76.31%	50.78%	58.82%	40.98%	46.75%	61.15%	55.49%	68.93%	28.20%	54.92%
25	46.49%	61.50%	74.44%	46.79%	75.63%	28.54%	38.53%	48.15%	57.01%	31.03%	48.17%
26	55.88%	79.46%	67.55%	67.73%	58.71%	35.17%	86.26%	71.97%	53.39%	45.75%	58.60%
27	59.64%	63.65%	64.33%	61.25%	59.54%	57.34%	61.61%	56.92%	57.49%	27.54%	59.58%
40	56.09%	63.56%	52.55%	54.87%	50.99%	63.61%	70.40%	45.82%	47.90%	37.34%	56.60%
41	57.85%	63.81%	57.87%	58.67%	62.72%	59.38%	57.70%	55.54%	81.60%	35.95%	58.39%
42	64.94%	68.77%	63.37%	67.29%	74.61%	63.05%	72.44%	61.69%	54.00%	45.38%	65.36%
43	68.88%	63.64%	71.66%	58.75%	59.89%	79.14%	57.28%	57.80%	70.35%	31.28%	67.31%
44	69.97%	81.78%	60.67%	74.49%	67.71%	56.18%	67.12%	58.02%	44.18%	32.62%	69.05%
45	78.93%	73.85%	82.78%	74.53%	115.44%	73.80%	87.05%	74.70%	50.37%	34.80%	78.92%
99	73.37%	64.77%	52.95%	64.26%	25.65%	62.17%	43.73%	51.97%	54.37%	55.79%	61.63%
Total	61.60%	69.14%	64.20%	60.76%	64.39%	57.28%	61.78%	52.94%	61.16%	37.66%	61.98%

Notes:

- (1) Earned Premium: reflects policies effective April 2012 March 2015 valued at March, 2015
- (2) Reported Incurred Losses: reflects policies effective April 2012 March 2015 valued at March, 2015

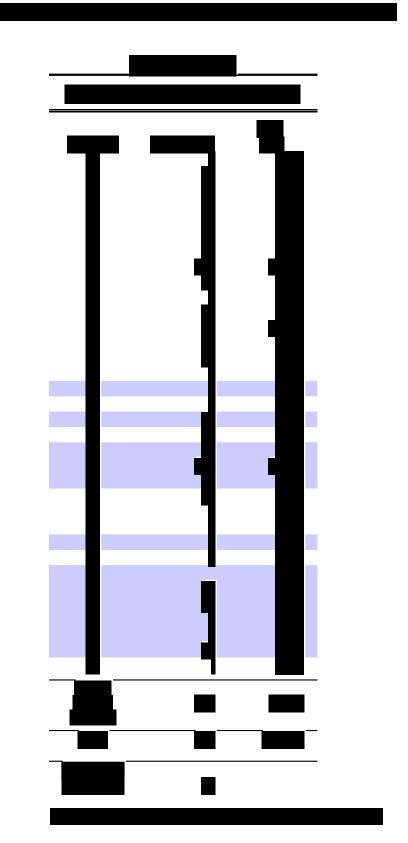
Commonwealth Automobile Reinsurers MAIP

3 Years Loss Ratio data through March, 2015

	Rate Class	Group									
Territory	10	15	17	18	20	21	25	26	30	MC/Misc.	Total
1	75.17%	152.42%	110.97%	86.80%	126.81%	44.10%	37.42%	25.13%	85.81%	163.66%	83.16%
2	82.08%	84.63%	80.29%	30.06%	50.07%	33.46%	111.05%	8.85%	64.62%	93.76%	80.69%
3	86.46%	139.37%	86.88%	105.48%	57.50%	95.27%	84.00%	48.40%	53.25%	120.40%	87.55%
4	92.66%	92.36%	67.54%	37.56%	57.74%	92.22%	68.01%	59.31%	144.95%	103.85%	87.24%
5	84.32%	144.85%	65.25%	65.66%	63.46%	118.35%	78.42%	69.87%	115.30%	66.82%	83.03%
6	81.24%	99.67%	74.64%	97.19%	73.09%	29.28%	54.97%	79.57%	65.75%	78.65%	79.36%
7	86.43%	115.57%	66.44%	65.89%	68.65%	63.06%	67.87%	48.60%	80.05%	171.83%	84.71%
8	86.45%	97.10%	87.20%	47.67%	74.94%	59.82%	63.74%	83.42%	112.13%	80.18%	85.10%
9	83.99%	81.25%	75.94%	103.88%	97.07%	87.97%	30.32%	86.96%	34.84%	94.26%	82.05%
10	78.84%	41.04%	65.48%	25.81%	61.92%	116.58%	63.51%	170.07%	102.10%	125.56%	76.83%
11	94.06%	55.22%	70.91%	115.33%	93.45%	67.59%	46.39%	15.76%	77.42%	79.54%	87.13%
12	85.02%	81.91%	85.50%	125.45%	67.20%	56.20%	110.53%	91.45%	148.17%	95.79%	85.57%
13	83.40%	115.07%	73.24%	93.88%	68.01%	63.79%	67.35%	58.73%	46.65%	88.22%	81.99%
14	84.23%	80.92%	82.98%	60.42%	72.73%	85.80%	73.00%	11.68%	91.96%	148.41%	82.93%
15	85.37%	86.52%	51.20%	31.19%	58.93%	104.94%	42.86%	63.91%	96.69%	95.39%	78.53%
16	81.96%	45.35%	43.96%	0.00%	44.18%	40.23%	156.60%	0.00%	25.37%	116.65%	70.85%
17	80.85%	93.53%	148.97%	160.47%	28.20%	41.55%	31.47%	22.55%	157.44%	93.37%	86.14%
18	113.47%	97.52%	76.08%	54.48%	69.65%	3.62%	35.71%	48.30%	39.63%	375.36%	104.04%
19	102.18%	69.48%	61.47%	13.32%	156.82%	6.33%	55.99%	0.00%	14.73%	115.47%	97.99%
20	109.12%	206.07%	102.25%	236.25%	78.39%	54.12%	85.80%	93.24%	119.00%	72.05%	109.65%
21	90.26%	94.27%	90.25%	87.31%	86.99%	104.47%	118.33%	24.30%	41.69%	191.06%	90.90%
22	85.13%	96.66%	89.32%	118.20%	103.84%	149.58%	43.60%	346.44%	16.30%	64.11%	88.77%
23	104.50%	127.54%	39.82%	329.52%	69.66%	186.47%	57.90%	33.41%	124.19%	216.51%	98.91%
24	93.14%	110.46%	56.27%	11.42%	55.31%	85.15%	189.63%	84.14%	82.05%	261.89%	90.34%
25	70.55%	67.70%	108.59%	74.85%	96.55%	62.33%	8.03%	0.00%	0.00%	270.79%	75.28%
26	68.82%	207.86%	56.09%	140.64%	76.38%	6.07%	133.40%	37.65%	339.15%	82.75%	77.74%
27	75.93%	94.01%	92.17%	106.70%	84.37%	154.17%	61.69%	64.87%	96.34%	49.11%	78.82%
40	68.55%	104.34%	57.66%	9.23%	75.36%	20.96%	37.99%	401.38%	74.41%	80.56%	69.46%
41	68.09%	148.35%	44.75%	67.00%	57.93%	65.93%	106.51%	72.76%	10.82%	104.59%	67.54%
42	86.96%	134.01%	61.70%	66.85%	96.32%	17.84%	55.64%	208.66%	97.54%	155.28%	88.93%
43	87.26%	181.69%	48.34%	34.02%	77.42%	86.34%	101.28%	38.13%	0.00%	200.35%	86.30%
44	65.43%	92.65%	49.82%	129.30%	72.77%	49.57%	86.29%	66.25%	1.09%	157.52%	66.91%
45	109.14%	104.07%	128.08%	126.30%	144.44%	153.27%	95.53%	159.07%	86.24%	103.88%	115.18%
99	151.58%	255.30%	36.54%	549.70%	0.00%	0.00%	63.79%	0.00%	76.82%	0.00%	111.99%
Total	85.64%	107.59%	75.53%	88.00%	78.75%	77.84%	72.91%	70.60%	88.58%	113.15%	84.98%

Notes:

Residual Market Share is >= 2 and < 3 times of statewide average Residual Market Share is >= 3 and < 4 times of statewide average Residual Market Share is >= 4 and < 5 times of statewide average Residual Market Share is > 5 times of statewide average 2014 Credit Eligible





COMMONWEALTH AUTOMOBILE REINSURERS

225 Franklin Street Boston, Massachusetts 02110
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RECORDS OF MEETING

ACTUARIAL COMMITTEE – OCTOBER 7, 2015

Members Present

Mr. Joseph F. Cofield – Chair

Mr. Geoffrey H. Arnold

Mr. Jonathan E. Blake

Mr. Alex F. Butensky

Mr. Christopher Dupill

Mr. Glenn R. Hiltpold

Mr. John V. Kelly

Mr. Michael Petrarca, Jr.

Ms. Lynellen Ramirez

Mr. John P. Tierney

Ms. Meredith M. Woodcock

The Norfolk & Dedham Group EM Freedman Insurance Agence

The Hanover Insurance Company

EM Freedman Insurance Agency, Inc.

Metropolitan P & C Insurance Company

Plymouth Rock Assurance Corporation

Safety Insurance Company MAPFRE U.S.A. Corporation

Amica Mutual Insurance Company

Arbella Insurance Group Quincy Mutual Group

Liberty Mutual Group

Substituted for:

N/A

Not in Attendance:

N/A

15.01 Records of Previous Meeting

The Committee unanimously voted to approve the Records of the Actuarial Committee meeting of September 2, 2015. The Records have been distributed and are on file with CAR's Secretary.

15.03 Quota Share Credits for Policies Effective April 1, 2016 and Later

CAR Counsel, Mr. Matthew Henning, advised the Committee relative to the conflict of interest policy recently adopted by the Governing Committee. He noted that a question had been raised regarding the discussion of credits by those members engaging in the buying and selling of excess credits. Mr. Henning explained that all Members share a common financial interest in participating in the residual market, although each company will employ its unique business model to fulfill its residual market obligation. While company members may opt to disclose whether they engage in the transfer of excess credits, they are not precluded from discussion and vote on the credit offer.

The Committee then continued discussion regarding an April 1, 2016 credit offer by considering several alternative credit models as follows:

- The current methodology as codified in Rule 29: Staff updated this model using data reported through July 2015. This model currently projects a 74% reduction in credit eligible exposures and 64% reduction in available credit premium.
- Relative Range Methodology: This model, which was presented at the September 2 meeting, estimates 23% reduction in credit eligible exposures and 21% reduction in available credit premium.
- Plymouth Rock Assurance Corporation (PRAC) Proposal: This model was modified slightly by PRAC subsequent to the September 2 meeting to apply the adjusted market-need threshold to all 3 years underlying the credit indication. The model estimates a 2.1% increase in credit eligible exposures and a 1.8% reduction in available credit premium.
- Allstate Proposal: Mr. Hall Crowder presented a model that retains the algorithm of the current methodology and introduces a transition period of 2 to 4 years such that a credit factor of 1.0 is reduced by a fraction in instances where a credit is indicated to be eliminated.
- Hanover Proposal: Mr. Jonathan Blake presented a proposal which considers the residual market loss ratio of cells which are otherwise indicated to eliminate credit eligibility.

Mr. Geoffrey Arnold distributed a memorandum discussing the goal of keep out credits, the volume of such credits in the quota share model, and his proposed benchmark for determining the threshold for disproportionate representation in the residual market. Mr. Arnold emphasized that a recommended credit offer should ensure the continuation of credits in the eleven territories noted by the Commissioner of Insurance in two previous credit decisions.

In discussing the proposals, several members favored the original formulaic approach, suggesting that its use of three year results is sufficiently self-correcting and addresses concern about potential repopulation of those cells indicated for elimination of credit. Those members also suggested that the continued depopulation is driven more by the competitive market than by the available credits, and argued that companies will actively compete for business in those areas.

Other members noted the marked depopulation of the residual market since 2009 and expressed concern that certain cells will repopulate due to the elimination of credits. Some suggested that while the formula is self-correcting, it is disruptive. Those members noted that the Allstate proposal to transition the elimination of credit would avoid market disruption and allow for reevaluation after one year.

Most committee members agreed that the Relative Range model identified a reasonable residual market threshold, and allowed for a substantive decrease in credit eligible premium while minimizing the number of impacted cells. Mr. Arnold, however, continued to express concern that this model eliminates credits in territories previously noted as areas of interest by the Commissioner of Insurance. After considerable discussion, the Committee voted with 8 members in favor and 2 opposed (PRAC and Liberty Mutual) to recommend adoption of the Relative Range credit model.

The Committee directed staff to draft amendments to the factor tables included in Rule 29 using data reported through August 2015 and to present Rule 29 to the Governing Committee for consideration at its November 2015 meeting.



TIMOTHY F. GALLIGAN Financial Services Coordinator

Boston, Massachusetts November 6, 2015

ATTACHMENT LISTING

Docket #AC15.02, Exhibit #3 Attendance Listing

Docket #AC15.03, Exhibit #25 Allstate Credit Model Proposal

Docket #AC15.03, Exhibit #26 Hanover Credit Proposal

Docket #AC15.03, Exhibit #27 PRAC Keep-Out Credit Memorandum

ACTUARIAL COMMITTEE MEETING SIGN-IN SHEET October 7, 2015

Company / Agency
Metropolitan
CAR
Marison Manay LLP
Safety Insuance
Plymonth Rock
QUINCH MUTUAL
AMICA
Arbella
Norfolk & Dedham
Liberty Mutual Insurance
EM Freedman Insurance
MARFRE USA
travoria ins Grup
CAR
CAR

ACTUARIAL COMMITTEE MEETING SIGN-IN SHEET October 7, 2015

Individual's Name	Company / Agency
Dan Penza	Norfolk & Dedhan
Sean Thompson	Hanover
Ken Willis	PRAC
Bruce Cregger. HALL CAUNDA	P.Igra
Bruce Cregger	Encompass Ins.
HACE (NONDY	ALLSTATES
Marian Adgate	CAR
Wendy Bowne	CAR
Katu Robbins	CAR
1), Ihomon	A60
B. Feinberg	
A.Chaves	Arbella
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	·



10/5/2015

Members of the CAR Actuarial Committee:

In the near future, your committee will recommend a credit structure for 2016 that attempts to balance the success of an increasingly depopulated residual market against the instability that rapid change could bring. The balance point is not obvious and several scenarios have been raised as an alternative to the indicated math which suggests that a mitigated approach is desired by several committee members.

Over the last few years, the application of the algorithmic structure proposed by the DOI (Bulletin 953) has resulted in a steady reduction of credits in the approximate range of 5-10% each year as the residual market share has diminished. By and large, it appears the market has been able to absorb changes of this magnitude without harm to the overall market: residual market continues to shrink and new assignments have remained at volumes near historic lows. In short, the program has worked.

One especially attractive element to the DOI algorithm that has been understated in recent discussions is how one is able to predict with some confidence where the direction of credits will go in the future. This predictive element is essential to providing a stable market that encourages companies, agents, regulators, and other interested parties to deploy tactics and strategies that help ensure a small residual market over time. Any new method considered by the Committee should be evaluated in this context.

To that end, and having considered all that has been raised publicly to date, Allstate would suggest the committee consider retaining the predictable structure already in place but temper the rate of falloff in recognition that modest decreases in recent history have resulted in a gradually reduced residual market. The following is proposed for consideration:

- Retain the DOI algorithm as the foundational algorithm as it has proven its ability to provide a transparent, stable and predictable platform for managing credits...i.e....retain the 5% residual market share threshold (2% target + 1 standard deviation equating to 3%)
- With respect to 1) introducing a credit, 2) increasing credits where a credit already exists, and 3) lowering a credit to 1.0 from a higher value, the current application of the algorithm would continue to apply.
- With respect to removing a 1.0 credit completely, the indication would be considered a "trigger" that begins a removal of the credit at a steady, defined path so as to completely remove the credit in a period of time to be determined by the committee. For examples:
 - O A three year fall off would result in credits of 0.67 in year one, 0.33 in year two, and 0.0 in year three

O A four year fall off would result in credits of 0.75 in year one, 0.50 in year two, 0.25 in year three, and 0.0 in year four

Once triggered and on the defined path, the credit would continue to decline unless the conditions for reinstating a credit are met, at which point the credit would be reintroduce at 1.0.

• The responsibility of the committee is as simple as agreeing to the number of years that a credit would fall off once triggered for removal.

Based on the latest data evaluation from CAR, applying this procedure over several first-year falloff rates would yield the following results:

Falloff	Applied	Exposure	Premium
Scenario	Factor	Weighted	Weighted
DOI Method	n/a	-73.5%	-64.0%
2-year falloff	-0.50	0.0%	-32.6%
3-year falloff	-0.33	0.0%	-21.9%
4-year falloff	-0.25	0.0%	-17.0%
5-year falloff	-0.20	0.0%	-13.8%

Allstate is hopeful this alternative is seriously considered as a means to retain most of what has worked so well over the last few years but that also recognizes that continued, predictable steps toward eliminating credits is likely the best course of action to promote a healthy and stable market.

Thank you.

Hall D. Crowder Allstate

-18.8%

-50.3%

-13.2%

657,326

2,155,779

625,630,349

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) **Summary by Rate Class Hanover Proposal**

				w/ Filter on S	tateWide Vol LR	
Total Mkt	Credit Eligible	Potential	Credit Eligible		Potential	
Exposures	Exposures	Credit Premium	Exposures	<u>%∆</u>	Credit Premium	<u>%∆</u>
3,079,664	294,536	439,287,056	235,491	-20.0%	370,345,678	-15.7%
787,860	8,165	10,951,878	8,165	0.0%	10,951,878	0.0%
145,779	61,664	116,333,988	52,700	-14.5%	100,854,461	-13.3%
55,230	1,208	1,968,996	342	-71.7%	671,348	-65.9%
34,313	33,463	116,383,809	33,463	0.0%	115,180,603	-1.0%
15,514	5,797	14,176,145	3,711	-36.0%	9,451,635	-33.3%
75,827	4,091	15,262,693	3,839	-6.1%	14,372,306	-5.8%
65,048	380	1,139,323	334	-12.1%	989,334	-13.2%

441

8,885

347,371

% of Total Mkt. Exp. 9.6% 7.7%

526

19,566

429,395

4/1/2015 Credit Factors

Rate **Class**

10

15 17

18

20

21 25

26

30

M/M

Total

62,120

168,786

4,490,140

Estimated Credits Used Estimated Credits Used 682,579,167 590,719,882 94.7% **Credit Utilization Credit Utilization** 94.4%

809,940

4,341,789

720,655,617

Residual Mark Share <u>Group</u>	Keep Out <u>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	

-16.0%

-54.6%

-19.1%

4/1/16 Indicated - Residual Market Share Group Methodology

Commonwealth Automobile Reinsurers 4/1/2016 Credit Offer - Data Through July, 2015 (2013 Rates) Summary by Territory

4/1/2015 Credit Factors

4/1/16 - Residual Market Share Group

<u>Territory</u>	Total Mkt Exposures	Credit Eligible Exposures	Potential Credit Premium	Credit Eligible Exposures	<u>%∆</u>	Potential Credit Premium	<u>%∆</u>
1	179,645	0	0	0	0.0%	0	0.0%
2	241,632	1,088	2,172,578	1,088	0.0%	2,172,578	0.0%
3	519,011	2,359	4,903,494	2,359	0.0%	4,903,494	0.0%
4	329,650	1,349	3,191,218	1,349	0.0%	3,191,218	0.0%
5	505,909	3,011	6,732,095	3,011	0.0%	6,732,095	0.0%
6	338,514	1,684	4,373,882	1,684	0.0%	4,373,882	0.0%
7	347,953	13,473	22,263,296	13,473	0.0%	22,263,296	0.0%
8	198,946	6,854	11,974,908	6,854	0.0%	11,974,908	0.0%
9	198,113	8,998	16,805,659	8,281	-8.0%	15,452,882	-8.0%
10	95,743	4,433	8,349,841	1,022	-77.0%	2,777,501	-66.7%
11	72,383	635	2,110,782	635	0.0%	2,110,782	0.0%
12	194,206	7,252	14,998,854	1,701	-76.6%	5,091,667	-66.1%
13	210,052	18,001	26,373,177	11,394	-36.7%	25,110,917	-4.8%
14	72,381	6,759	14,216,143	6,203	-8.2%	12,788,372	-10.0%
15	25,613	2,608	5,559,235	2,608	0.0%	5,559,235	0.0%
16	13,786	12,407	19,439,240	12,407	0.0%	19,439,240	0.0%
17	17,276	409	971,286	409	0.0%	971,286	0.0%
18	16,051	13,844	20,283,776	13,760	-0.6%	20,067,001	-1.1%
19	15,574	511	1,386,654	447	-12.6%	1,222,766	-11.8%
20	17,998	14,796	23,214,158	14,796	0.0%	23,214,158	0.0%
21	47,453	46,303	93,336,130	46,303	0.0%	93,336,130	0.0%
22	15,082	15,082	32,284,144	14,952	-0.9%	31,981,542	-0.9%
23	45,098	2,898	7,436,636	2,006	-30.8%	6,544,321	-12.0%
24	24,791	1,271	2,618,743	643	-49.4%	2,151,987	-17.8%
25	16,590	509	1,431,503	463	-9.1%	1,284,515	-10.3%
26	21,365	1,639	4,353,093	1,500	-8.5%	3,344,133	-23.2%
27	412,141	1,664	2,905,935	1,664	0.0%	2,905,935	0.0%
40	20,516	16,612	22,547,056	1,725	-89.6%	2,945,328	-86.9%
41	58,739	50,559	60,000,400	4,007	-92.1%	8,467,491	-85.9%
42	73,454	59,665	97,080,594	59,665	0.0%	97,080,594	0.0%
43	47,483	39,935	65,821,904	38,557	-3.5%	65,501,264	-0.5%
44	33,690	29,883	39,223,163	29,503	-1.3%	38,373,791	-2.2%
45	50,938	42,902	82,296,042	42,902	0.0%	82,296,042	0.0%
99	12,368	0	0	0	0.0%	0	0.0%
Total	4,490,140	429,395	720,655,617	347,371	-19.1%	625,630,349	-13.2%
% of Total I	Иkt. Exp.	9.6%		7.7%			

Residual Keep Mark Share Out Group **Credits** 0 0.00 1 1.00 2 1.00 3 4 5 6 7 8 1.00 1.25 1.50 1.75 2.00 2.25 2.50

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
Terr	Aug-13	Aug-14	<u>Jul-15</u>	2014	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.17%	0.90%	0.73%	0	0	0	0	-	-	-	0	0.00	
2	1.19%	0.92%	0.77%	0	0	0	0	-	-	-	1	1.00	
3	1.45%	1.06%	0.80%	0	0	0	0	-	-	-	2	1.00	
4	1.27%	0.98%	0.79%	0	0	0	0	-	-	-	3	1.00	
5	1.91%	1.44%	1.07%	0	0	0	0	-	-	-	4	1.25	
6	1.91%	1.46%	1.15%	0	0	0	0	-	-	-	5	1.50	
7	2.46%	1.81%	1.39%	0	0	0	0	-	-	-	6	1.75	
8	2.25%	1.64%	1.29%	0	0	0	0	-	-	-	7	2.00	
9	2.87%	2.03%	1.44%	0	0	0	0	-	-	-	8	2.25	
10	2.92%	2.18%	1.71%	0	0	0	0	-	-	-	9	2.50	
11	1.99%	1.51%	1.24%	0	0	0	0	-	-	-			
12	2.50%	1.93%	1.57%	0	0	0	0	-	-	-			
13	4.32%	3.11%	2.43%	0	0	0	0	-	-	-			
14	3.84%	2.79%	2.30%	0	0	0	0	-	-	-			
15	4.35%	2.67%	2.11%	0	0	0	0	-	-	-			
16	6.39%	4.97%	3.44%	1	0	0	1	1.00	1.00	-			
17	2.20%	1.81%	1.70%	0	0	0	0	-	-	-			
18	5.22%	4.24%	3.74%	1	0	0	1	1.00	1.00	-			
19	3.68%	3.20%	2.65%	0	0	0	0	-	-	-			
20	6.23%	4.87%	4.63%	1	0	0	1	1.00	1.00	-	<u>Availab</u>	le Credit Prem:	Credit Eligible Exp:
21	7.66%	5.93%	5.14%	1	1	1	2	1.00	1.00	-			
22	9.85%	6.82%	5.74%	2	1	1	2	1.00	1.00	-	2016	370,345,678	235,491
23	3.63%	2.49%	1.76%	0	0	0	0	-	-	-			
24	2.15%	1.75%	1.39%	0	0	0	0	-	-	-	2015	439,287,056	294,536
25	2.15%	1.50%	1.20%	0	0	0	0	-	-	-			
26	3.65%	2.47%	2.05%	0	0	0	0	-	-	-		<u>Difference:</u>	<u>Difference:</u>
27	0.93%	0.77%	0.62%	0	0	0	0	-	-	-			
40	7.63%	4.08%	2.65%	1	0	0	0	-	1.00	(1.00)		(68,941,379)	(59,046)
41	5.88%	3.11%	2.48%	1	0	0	0	-	1.00	(1.00)			
42	6.48%	4.37%	2.74%	1	0	0	1	1.00	1.00	-	<u>P</u> 6	ercent Change:	Percent Change:
43	5.28%	3.09%	2.44%	1	0	0	1	1.00	1.00	-	_	 _	 _
44	7.95%	4.99%	4.32%	1	0	0	1	1.00	1.00	-		-15.7%	-20.0%
45	6.64%	3.49%	2.79%	1	0	0	1	1.00	1.00	-			
99	0.70%	0.56%	0.62%	0	0	0	0	-	-	-			
Tot	2.45%	1.77%	1.39%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
Terr	Aug-13	Aug-14	<u>Jul-15</u>	2014	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	0.32%	0.27%	0.29%	0	0	0	0	-	-	-	0	0.00	
2	0.29%	0.29%	0.28%	0	0	0	0	-	-	-	1	1.00	
3	0.38%	0.29%	0.26%	0	0	0	0	-	-	-	2	1.00	
4	0.30%	0.29%	0.26%	0	0	0	0	-	-	-	3	1.00	
5	0.44%	0.38%	0.32%	0	0	0	0	-	-	-	4	1.25	
6	0.58%	0.53%	0.43%	0	0	0	0	-	-	-	5	1.50	
7	0.56%	0.46%	0.41%	0	0	0	0	-	-	-	6	1.75	
8	0.78%	0.67%	0.60%	0	0	0	0	-	-	-	7	2.00	
9	0.78%	0.63%	0.49%	0	0	0	0	-	-	-	8	2.25	
10	0.71%	0.62%	0.53%	0	0	0	0	-	-	-	9	2.50	
11	1.12%	0.88%	0.72%	0	0	0	0	-	-	-			
12	0.88%	0.86%	0.76%	0	0	0	0	-	-	-			
13	1.46%	1.17%	0.91%	0	0	0	0	-	-	-			
14	1.65%	1.32%	1.16%	0	0	0	0	-	-	-			
15	1.42%	1.43%	1.28%	0	0	0	0	-	-	-			
16	2.97%	2.27%	2.07%	0	0	0	0	-	-	-			
17	0.79%	0.76%	0.91%	0	0	0	0	-	-	-			
18	2.45%	2.07%	1.93%	0	0	0	0	-	-	-			
19	2.18%	2.18%	1.94%	0	0	0	0	-	-	-			
20	2.70%	2.39%	2.57%	0	0	0	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	5.32%	4.42%	4.20%	1	0	0	1	1.00	1.00	-			
22	8.10%	6.62%	5.59%	2	1	1	2	1.00	1.00	-	2016	10,951,878	8,165
23	2.82%	1.98%	1.40%	0	0	0	0	-	-	-			
24	2.99%	2.98%	2.47%	0	0	0	0	-	-	-	2015	10,951,878	8,165
25	1.73%	1.28%	1.12%	0	0	0	0	-	-	-			
26	1.99%	1.56%	1.45%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.26%	0.24%	0.20%	0	0	0	0	-	-	-			
40	2.44%	1.80%	0.95%	0	0	0	0	-	-	-		-	-
41	1.68%	1.28%	0.96%	0	0	0	0	-	-	-			
42	3.10%	3.10%	2.28%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	1.59%	1.06%	0.88%	0	0	0	0	-	-	-		 _	 _
44	3.16%	2.11%	1.97%	0	0	0	0	-	-	-		0.0%	0.0%
45	2.38%	1.83%	1.45%	0	0	0	0	-	-	-			
99	0.36%	0.26%	0.19%	0	0	0	0	-	-	-			
Tot	0.73%	0.62%	0.53%										

- 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.

											Residual	Keep	
	Residu	al Market			Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	<u>Aug-14</u>	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	3.25%	2.47%	2.04%	0	0	0	0	-	-	-	0	0.00	
2	2.96%	2.03%	1.95%	0	0	0	0	-	-	-	1	1.00	
3	4.05%	2.61%	2.06%	0	0	0	0	-	-	-	2	1.00	
4	3.21%	2.63%	1.94%	0	0	0	0	-	-	-	3	1.00	
5	4.26%	3.06%	2.38%	0	0	0	0	-	-	-	4	1.25	
6	4.40%	3.57%	2.96%	0	0	0	0	-	-	-	5	1.50	
7	5.00%	3.57%	2.81%	1	0	0	1	1.00	1.00	-	6	1.75	
8	5.01%	3.58%	3.29%	1	0	0	1	1.00	1.00	-	7	2.00	
9	5.05%	3.56%	2.92%	1	0	0	1	1.00	1.00	-	8	2.25	
10	5.55%	3.98%	3.09%	1	0	0	0	-	1.00	(1.00)	9	2.50	
11	4.60%	3.99%	2.51%	0	0	0	0	-	-	-			
12	5.90%	4.74%	3.88%	1	0	0	0	-	1.00	(1.00)			
13	7.34%	5.15%	4.50%	1	1	0	2	1.00	1.00	-			
14	8.44%	5.78%	5.23%	2	1	1	2	1.00	1.00	-			
15	8.90%	6.45%	4.34%	2	1	0	1	1.00	1.00	-			
16	14.02%	9.76%	6.38%	3	2	1	2	1.00	1.00	-			
17	6.51%	5.57%	3.47%	1	1	0	2	1.00	1.00	-			
18	10.10%	7.78%	7.06%	2	1	1	2	1.00	1.00	-			
19	11.66%	7.72%	4.77%	3	1	0	2	1.00	1.00	-			
20	12.72%	10.84%	9.55%	3	2	2	3	1.00	1.00	-	<u>Availa</u>	ble Credit Prem:	Credit Eligible Exp:
21	15.41%	11.31%	9.45%	3	3	2	4	1.00	1.00	-			
22	14.23%	10.75%	9.36%	3	2	2	3	1.00	1.00	-	2016	100,854,461	52,700
23	8.79%	6.11%	4.96%	2	1	0	2	1.00	1.00	-			
24	4.64%	3.61%	2.78%	0	0	0	0	-	-	-	2015	116,333,988	61,664
25	6.65%	4.56%	2.66%	1	0	0	1	1.00	1.00	-			
26	8.63%	5.64%	4.22%	2	1	0	2	1.00	1.00	-		Difference:	<u>Difference:</u>
27	2.51%	2.07%	1.50%	0	0	0	0	-	-	-			
40	12.55%	7.28%	5.09%	3	1	1	1	1.00	1.00	-		(15,479,527)	(8,963)
41	12.06%	6.14%	4.61%	3	1	0	1	1.00	1.00	-			
42	9.55%	4.71%	3.40%	2	0	0	1	1.00	1.00	-	<u> </u>	Percent Change:	Percent Change:
43	8.81%	5.59%	6.17%	2	1	1	2	1.00	1.00	-			
44	11.57%	6.62%	6.40%	3	1	1	2	1.00	1.00	-		-13.3%	-14.5%
45	12.13%	6.63%	6.25%	3	1	1	2	1.00	1.00	-			
99	0.83%	0.39%	0.42%	0	0	0	0	-	-	-			
Tot	5.17%	3.64%	2.98%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
Terr	Aug-13	Aug-14	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	2016	Range*	Credits	Credits	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	1.12%	0.63%	0.70%	0	0	0	0	-	-	-	0	0.00	
2	0.84%	0.55%	0.42%	0	0	0	0	-	-	-	1	1.00	
3	1.34%	0.92%	0.72%	0	0	0	0	-	-	-	2	1.00	
4	1.14%	0.86%	0.47%	0	0	0	0	-	-	-	3	1.00	
5	1.75%	1.26%	0.96%	0	0	0	0	-	-	-	4	1.25	
6	1.10%	1.13%	0.74%	0	0	0	0	-	-	-	5	1.50	
7	1.98%	1.31%	0.85%	0	0	0	0	-	-	-	6	1.75	
8	1.08%	0.94%	0.98%	0	0	0	0	-	-	-	7	2.00	
9	2.17%	1.57%	0.99%	0	0	0	0	-	-	-	8	2.25	
10	1.83%	1.02%	1.57%	0	0	0	0	-	-	-	9	2.50	
11	1.24%	0.77%	1.04%	0	0	0	0	-	-	-			
12	2.44%	1.85%	1.34%	0	0	0	0	-	-	-			
13	2.71%	1.96%	1.79%	0	0	0	0	-	-	-			
14	3.53%	2.39%	2.02%	0	0	0	0	-	-	-			
15	4.75%	4.06%	2.60%	0	0	0	0	-	-	-			
16	1.75%	0.00%	1.03%	0	0	0	0	-	-	-			
17	2.14%	1.13%	0.80%	0	0	0	0	-	-	-			
18	5.63%	5.10%	3.98%	1	1	0	2	1.00	1.00	-			
19	3.16%	2.04%	0.84%	0	0	0	0	-	-	-			
20	3.59%	4.15%	1.81%	0	0	0	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	4.86%	3.05%	3.37%	0	0	0	0	-	-	-			
22	9.76%	4.32%	3.76%	2	0	0	1	1.00	1.00	-	2016	671,348	342
23	2.12%	1.27%	1.63%	0	0	0	0	-	-	-			
24	3.56%	0.43%	2.37%	0	0	0	0	-	-	-	2015	1,968,996	1,208
25	0.15%	1.68%	0.85%	0	0	0	0	-	-	-			
26	4.20%	3.21%	1.80%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.89%	0.72%	0.53%	0	0	0	0	-	-	-			
40	5.77%	2.78%	0.40%	1	0	0	0	-	1.00	(1.00)		(1,297,648)	(866)
41	7.29%	1.64%	1.36%	1	0	0	0	-	1.00	(1.00)			
42	2.50%	1.69%	1.07%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	3.03%	3.04%	1.92%	0	0	0	0	-	-	-		-	
44	1.80%	2.70%	2.12%	0	0	0	0	-	-	-		-65.9%	-71.7%
45	4.86%	3.11%	2.89%	0	0	0	0	-	-	-			
99	1.96%	0.51%	0.43%	0	0	0	0	-	-	-			
Tot	1.72%	1.21%	0.95%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
<u>Terr</u>	<u>Aug-13</u>	<u>Aug-14</u>	<u>Jul-15</u>	2014	<u>2015</u>	<u>2016</u>	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	4.03%	3.98%	5.86%	0	0	1	0	-	-	-	0	0.00	
2	5.82%	4.31%	3.79%	1	0	0	1	1.00	1.00	-	1	1.00	
3	7.69%	3.82%	4.09%	1	0	0	1	1.00	1.00	-	2	1.00	
4	5.70%	3.32%	2.39%	1	0	0	1	1.00	1.00	-	3	1.00	
5	7.89%	6.27%	5.51%	1	1	1	1	1.00	1.00	-	4	1.25	
6	8.17%	5.21%	5.64%	2	1	1	1	1.00	1.00	-	5	1.50	
7	8.07%	5.93%	5.72%	2	1	1	1	1.00	1.00	-	6	1.75	
8	12.69%	6.65%	6.37%	3	1	1	2	1.00	1.00	-	7	2.00	
9	8.51%	6.58%	6.38%	2	1	1	1	1.00	1.00	-	8	2.25	
10	11.91%	6.98%	5.64%	3	1	1	2	1.00	1.00	-	9	2.50	
11	10.13%	5.85%	5.06%	2	1	1	1	1.00	1.00	-			
12	12.77%	7.55%	6.51%	3	1	1	1	1.00	1.00	-			
13	11.99%	8.85%	8.20%	3	2	2	3	1.00	1.00	-			
14	15.28%	13.10%	11.54%	3	3	3	4	1.00	1.00	-			
15	21.15%	13.01%	12.37%	4	3	3	4.25	1.25	1.25	-			
16	26.59%	25.13%	20.50%	5	5	4	5	1.50	1.50	-			
17	19.61%	9.89%	9.66%	4	2	2	3.25	1.25	1.25	-			
18	20.86%	22.51%	12.89%	4	4	3	5.25	1.25	1.25	-			
19	15.29%	16.67%	15.33%	3	3	3	4	1.00	1.00	-			
20	24.66%	18.55%	20.05%	5	4	4	5.5	1.50	1.50	-	<u>Availab</u>	e Credit Prem:	Credit Eligible Exp:
21	32.61%	23.95%	24.30%	6	5	5	6.75	1.75	1.75	-			
22	33.75%	22.17%	20.19%	6	4	4	5.75	1.75	1.75	-	2016	115,180,603	33,463
23	18.35%	10.83%	8.91%	4	2	2	3.25	1.25	1.25	-			
24	8.54%	5.71%	5.99%	2	1	1	1	1.00	1.00	-	2015	116,383,809	33,463
25	13.28%	13.16%	13.22%	3	3	3	4	1.00	1.00	-			
26	23.56%	13.76%	13.36%	5	3	3	3	1.00	1.50	(0.50)		Difference:	<u>Difference:</u>
27	5.26%	3.54%	2.51%	1	0	0	1	1.00	1.00	-			
40	24.85%	11.38%	10.14%	5	3	2	3	1.00	1.50	(0.50)		(1,203,206)	-
41	14.09%	9.23%	9.28%	3	2	2	3	1.00	1.00	-			
42	18.64%	12.38%	9.20%	4	3	2	4.25	1.25	1.25	-	<u>Pe</u>	ercent Change:	Percent Change:
43	19.22%	14.80%	12.44%	4	3	3	4.25	1.25	1.25	-			
44	24.27%	16.44%	14.59%	5	3	3	4.5	1.50	1.50	-		-1.0%	0.0%
45	20.07%	18.11%	16.01%	4	4	3	5.25	1.25	1.25	-			
99	2.48%	3.08%	1.75%	0	0	0	0	-	-	-			
Tot	12.86%	8.91%	8.12%										

- 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.

	Posidu	al Market	Shara	Indicator	l Mkt Shar	ro Pango	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	Jul-15	2014	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	1.87%	1.52%	0.75%	0	0	0	0	-	-	<u>-</u>	<u>0.04p</u> 0	0.00	
2	2.29%	1.29%	0.97%	0	0	0	0	_	-	_	1	1.00	
3	2.90%	1.82%	1.46%	0	0	0	0	_	-	-	2	1.00	
4	2.49%	2.11%	0.94%	0	0	0	0	_	-	-	3	1.00	
5	4.05%	2.57%	2.49%	0	0	0	0	-	-	-	4	1.25	
6	3.80%	3.28%	2.05%	0	0	0	0	-	-	-	5	1.50	
7	2.70%	2.76%	2.41%	0	0	0	0	-	-	-	6	1.75	
8	4.32%	1.96%	2.18%	0	0	0	0	-	-	-	7	2.00	
9	5.47%	2.97%	1.96%	1	0	0	0	-	1.00	(1.00)	8	2.25	
10	9.63%	4.03%	3.11%	2	0	0	1	1.00	1.00	-	9	2.50	
11	3.08%	2.33%	1.63%	0	0	0	0	-	-	-			
12	4.79%	3.88%	2.51%	0	0	0	0	-	-	-			
13	10.29%	3.92%	4.18%	2	0	0	1	1.00	1.00	-			
14	5.89%	4.05%	3.36%	1	0	0	0	-	1.00	(1.00)			
15	10.82%	4.90%	2.81%	2	0	0	1	1.00	1.00	-			
16	13.13%	13.16%	6.32%	3	3	1	4	1.00	1.00	-			
17	5.11%	0.00%	0.00%	1	0	0	0	-	-	-			
18	5.32%	3.61%	3.86%	1	0	0	0	-	1.00	(1.00)			
19	5.62%	4.17%	1.29%	1	0	0	0	-	1.00	(1.00)			
20	11.09%	6.02%	4.70%	3	1	0	2	1.00	1.00	-	<u>Availabl</u>	e Credit Prem:	Credit Eligible Exp:
21	10.53%	4.35%	3.20%	2	0	0	1	1.00	1.00	-			
22	9.88%	2.86%	1.84%	2	0	0	1	1.00	1.00	-	2016	9,451,635	3,711
23	4.67%	4.48%	3.04%	0	0	0	0	-	-	-			
24	6.40%	2.76%	0.46%	1	0	0	0	-	1.00	(1.00)	2015	14,176,145	5,797
25	2.60%	0.00%	1.88%	0	0	0	0	-	-	-			
26	6.32%	1.47%	0.96%	1	0	0	0	-	1.00	(1.00)		<u>Difference:</u>	<u>Difference:</u>
27	2.55%	1.88%	1.44%	0	0	0	0	-	-	-			
40	13.69%	7.00%	6.03%	3	1	1	2	1.00	1.00	-		(4,724,509)	(2,086)
41	12.53%	5.33%	4.65%	3	1	0	2	1.00	1.00	-			
42	6.17%	3.86%	1.49%	1	0	0	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.66%	3.59%	2.47%	1	0	0	1	1.00	1.00	-			
44	8.43%	3.35%	3.96%	2	0	0	0	-	1.00	(1.00)		-33.3%	-36.0%
45	10.32%	2.31%	3.78%	2	0	0	1	1.00	1.00	-			
99	0.38%	0.00%	-4.98%	0	0	0	0	-	-	-			
Tot	5.15%	2.98%	2.35%										

- 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.

	Posidu	al Market	Shara	Indicator	d Mkt Shai	ro Pango	Selected	2016	2015		Residual Mark Shr	Keep Out	
<u>Terr</u>	Aug-13	Aug-14	Jul-15	2014	2015	2016	Range*	Credits	Credits	Change	Group	<u>Credits</u>	
1	1.88%	1.37%	1.36%	0	0	0	0	-	<u>-</u>	<u>-</u>	0	0.00	
2	1.61%	1.23%	1.16%	0	0	0	0	_	_	-	1	1.00	
3	1.84%	1.26%	0.89%	0	0	0	0	-	-	-	2	1.00	
4	1.75%	1.27%	1.16%	0	0	0	0	-	-	-	3	1.00	
5	2.37%	2.09%	1.65%	0	0	0	0	-	-	-	4	1.25	
6	2.57%	1.99%	1.65%	0	0	0	0	-	-	-	5	1.50	
7	2.53%	1.92%	1.58%	0	0	0	0	-	-	-	6	1.75	
8	3.30%	2.48%	2.28%	0	0	0	0	-	-	-	7	2.00	
9	2.62%	2.15%	2.18%	0	0	0	0	-	-	-	8	2.25	
10	3.19%	3.31%	2.20%	0	0	0	0	-	-	-	9	2.50	
11	2.54%	1.31%	2.28%	0	0	0	0	-	-	-			
12	4.04%	3.41%	2.75%	0	0	0	0	-	-	-			
13	3.75%	3.40%	3.16%	0	0	0	0	-	-	-			
14	6.81%	5.30%	2.93%	1	1	0	2	1.00	1.00	-			
15	11.71%	4.46%	5.06%	3	0	1	2	1.00	1.00	-			
16	17.01%	4.90%	5.70%	4	0	1	2	1.00	1.00	-			
17	3.23%	3.64%	1.84%	0	0	0	0	-	-	-			
18	9.96%	5.00%	6.07%	2	1	1	2	1.00	1.00	-			
19	4.46%	11.43%	9.12%	0	3	2	2	-	-	-			
20	8.81%	5.74%	4.85%	2	1	0	2	1.00	1.00	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	8.56%	5.86%	6.48%	2	1	1	2	1.00	1.00	-			
22	10.69%	8.39%	3.15%	2	2	0	3	1.00	1.00	-	2016	14,372,306	3,839
23	6.30%	3.39%	0.53%	1	0	0	0	-	1.00	(1.00)			
24	5.30%	2.03%	0.24%	1	0	0	1	1.00	1.00	-	2015	15,262,693	4,091
25	8.64%	0.00%	2.51%	2	0	0	0	-	1.00	(1.00)			
26	9.20%	2.76%	2.83%	2	0	0	1	1.00	1.00	-		<u>Difference:</u>	<u>Difference:</u>
27	1.33%	0.88%	0.63%	0	0	0	0	-	-	-			
40	3.61%	3.64%	3.47%	0	0	0	0	-	-	-		(890,387)	(251)
41	4.94%	4.21%	4.61%	0	0	0	0	-	-	-	_		
42	4.47%	4.14%	2.42%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	7.06%	6.52%	3.65%	1	1	0	1	1.00	1.00	-			
44	10.75%	4.27%	4.07%	2	0	0	1	1.00	1.00	-		-5.8%	-6.1%
45	7.15%	5.62%	6.59%	1	1	1	2	1.00	1.00	-			
99	0.52%	0.40%	0.31%	0	0	0	0	-	-	-			
Tot	2.55%	1.97%	1.66%										

- 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.

	- Bartila	- I B 4 I - 1 - 1	21	L. P. de	LMLCOL		Oalastad	0040	0045		Residual	Keep	
Torr	Aug-13	al Market : Aug-14	Jul-15	2014	d Mkt Sha 2015	2016	Selected <u>Range*</u>	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
<u>Terr</u> 1	0.85%	0.56%	0.41%	0	0	0	0	<u>Credits</u>	<u>Credits</u>	Change -	<u>G10up</u> 0	0.00	
2	0.52%	0.36%	0.39%	0	0	0	0	_	_	_	1	1.00	
3	0.84%	0.58%	0.41%	0	0	0	0	_	_	_	2	1.00	
4	0.67%	0.55%	0.41%	0	0	0	0	_	_	_	3	1.00	
5	0.93%	0.92%	0.46%	0	0	0	0	_	_	_	4	1.25	
6	0.81%	0.67%	0.56%	0	0	0	0	_	_	-	5	1.50	
7	0.92%	0.68%	0.52%	0	0	0	0	_	-	-	6	1.75	
8	0.95%	0.89%	0.55%	0	0	0	0	_	-	-	7	2.00	
9	0.93%	0.58%	0.74%	0	0	0	0	-	-	-	8	2.25	
10	1.56%	1.02%	1.16%	0	0	0	0	-	-	-	9	2.50	
11	0.67%	0.68%	0.69%	0	0	0	0	-	-	-			
12	1.75%	1.20%	1.12%	0	0	0	0	-	-	-			
13	2.28%	1.43%	1.24%	0	0	0	0	-	-	-			
14	1.87%	0.47%	0.46%	0	0	0	0	-	-	-			
15	3.62%	1.93%	1.52%	0	0	0	0	-	-	-			
16	0.76%	0.00%	2.43%	0	0	0	0	-	-	-			
17	1.40%	0.70%	0.37%	0	0	0	0	-	-	-			
18	3.56%	3.30%	1.72%	0	0	0	0	-	-	-			
19	2.14%	0.00%	0.00%	0	0	0	0	-	-	-			
20	0.80%	0.77%	0.86%	0	0	0	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	1.76%	0.91%	0.73%	0	0	0	0	-	-	-			
22	5.59%	0.00%	0.00%	1	0	0	0	-	1.00	(1.00)	2016	989,334	334
23	0.91%	1.55%	0.49%	0	0	0	0	-	-	-			
24	0.85%	0.96%	0.96%	0	0	0	0	-	-	-	2015	1,139,323	380
25	1.39%	0.00%	0.00%	0	0	0	0	-	-	-			
26	0.96%	2.02%	1.39%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.41%	0.35%	0.31%	0	0	0	0	-	-	-			
40	0.06%	1.47%	0.82%	0	0	0	0	-	-	-		(149,989)	(46)
41	3.25%	1.54%	1.50%	0	0	0	0	-	-	-			
42	1.58%	0.73%	0.76%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.42%	1.10%	0.56%	0	0	0	0	-	-	-			
44	1.88%	2.14%	1.69%	0	0	0	0	-	-	-		-13.2%	-12.1%
45	5.87%	1.57%	1.70%	1	0	0	1	1.00	1.00	-			
99	0.00%	0.00%	0.00%	0	0	0	0	-	-	-			
Tot	0.94%	0.69%	0.54%										

- 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.

											Residual	Keep	
	Residu	al Market	Share	Indicated	d Mkt Shar	e Range	Selected	2016	2015		Mark Shr	Out	
Terr	Aug-13	Aug-14	<u>Jul-15</u>	<u>2014</u>	<u>2015</u>	2016	Range*	<u>Credits</u>	<u>Credits</u>	<u>Change</u>	<u>Group</u>	<u>Credits</u>	
1	0.99%	0.64%	0.28%	0	0	0	0	-	-	-	0	0.00	
2	0.86%	0.66%	0.62%	0	0	0	0	-	-	-	1	1.00	
3	0.87%	0.52%	0.53%	0	0	0	0	-	-	-	2	1.00	
4	0.81%	0.51%	0.50%	0	0	0	0	-	-	-	3	1.00	
5	0.97%	0.91%	0.82%	0	0	0	0	-	-	-	4	1.25	
6	1.01%	0.85%	0.77%	0	0	0	0	-	-	-	5	1.50	
7	1.54%	1.13%	0.92%	0	0	0	0	-	-	-	6	1.75	
8	0.93%	1.23%	1.16%	0	0	0	0	-	-	-	7	2.00	
9	1.27%	0.94%	0.56%	0	0	0	0	-	-	-	8	2.25	
10	2.29%	1.49%	1.68%	0	0	0	0	-	-	-	9	2.50	
11	0.97%	1.74%	1.28%	0	0	0	0	-	-	-			
12	1.86%	1.29%	1.29%	0	0	0	0	-	-	-			
13	2.05%	1.29%	1.32%	0	0	0	0	-	-	-			
14	3.24%	3.44%	2.94%	0	0	0	0	-	-	-			
15	5.81%	6.90%	3.55%	1	1	0	2	1.00	1.00	-			
16	7.84%	4.32%	2.23%	1	0	0	1	1.00	1.00	-			
17	1.39%	1.36%	2.31%	0	0	0	0	-	-	-			
18	1.04%	2.13%	0.86%	0	0	0	0	-	-	-			
19	1.49%	1.93%	1.55%	0	0	0	0	-	-	-			
20	1.68%	0.00%	1.39%	0	0	0	0	-	-	-	<u>Available</u>	Credit Prem:	Credit Eligible Exp:
21	2.47%	2.39%	2.15%	0	0	0	0	-	-	-			
22	8.30%	1.27%	2.37%	2	0	0	0	-	1.00	(1.00)	2016	657,326	441
23	0.98%	1.55%	0.98%	0	0	0	0	-	-	-			
24	1.21%	1.06%	1.80%	0	0	0	0	-	-	-	2015	809,940	526
25	1.31%	0.80%	0.53%	0	0	0	0	-	-	-			
26	4.15%	4.92%	3.09%	0	0	0	0	-	-	-		Difference:	<u>Difference:</u>
27	0.62%	0.61%	0.38%	0	0	0	0	-	-	-			
40	1.29%	0.97%	0.59%	0	0	0	0	-	-	-		(152,613)	(84)
41	1.68%	1.20%	1.22%	0	0	0	0	-	-	-			
42	2.10%	1.35%	1.66%	0	0	0	0	-	-	-	<u>Pe</u>	rcent Change:	Percent Change:
43	2.31%	1.26%	2.34%	0	0	0	0	-	-	-		_	-
44	4.60%	2.87%	2.77%	0	0	0	0	-	-	-		-18.8%	-16.0%
45	2.31%	1.05%	0.99%	0	0	0	0	-	-	-			
99	0.00%	2.41%	0.67%	0	0	0	0	-	-	-			
Tot	1.20%	0.97%	0.84%										

- 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.

	Deside	al Mauliat	Ola a va	Indicates	l Mix Char	D	Calastad	0040	0045		Residual	Keep	
Torr	Aug-13	al Market Aug-14	Jul-15	2014	Mkt Shar 2015	2016	Selected <u>Range*</u>	2016 Credits	2015 Credits	Change	Mark Shr <u>Group</u>	Out <u>Credits</u>	
<u>Terr</u> 1	1.51%	1.25%	1.04%	0	0	0	0	<u>Credits</u>	<u>Credits</u>	Change -	<u>G10up</u> 0	0.00	
2	1.50%	1.38%	1.17%	0	0	0	0	_	_	_	1	1.00	
3	1.84%	1.63%	1.37%	0	0	0	0	_	_	_	2	1.00	
4	1.57%	1.52%	1.21%	0	0	0	0	_	_	_	3	1.00	
5	2.18%	1.81%	1.64%	0	0	0	0	_	_	_	4	1.25	
6	2.36%	1.97%	1.80%	0	0	0	0	_	_	-	5	1.50	
7	2.92%	2.44%	2.08%	0	0	0	0	_	-	-	6	1.75	
8	2.78%	2.60%	2.01%	0	0	0	0	_	-	-	7	2.00	
9	2.91%	2.44%	2.15%	0	0	0	0	-	-	-	8	2.25	
10	4.43%	2.95%	2.41%	0	0	0	0	-	-	-	9	2.50	
11	3.90%	2.96%	1.58%	0	0	0	0	-	-	-			
12	4.32%	3.68%	3.25%	0	0	0	0	-	-	-			
13	5.08%	4.33%	3.82%	1	0	0	0	-	1.00	(1.00)			
14	5.67%	4.70%	3.65%	1	0	0	1	1.00	1.00	-			
15	7.59%	7.08%	5.35%	1	1	1	2	1.00	1.00	-			
16	9.92%	8.70%	7.84%	2	2	1	2	1.00	1.00	-			
17	3.40%	3.38%	4.21%	0	0	0	0	-	-	-			
18	5.43%	5.25%	4.30%	1	1	0	1	1.00	1.00	-			
19	4.14%	3.33%	4.30%	0	0	0	0	-	-	-			
20	4.03%	4.17%	4.71%	0	0	0	0	-	-	-	<u>Available</u>	e Credit Prem:	Credit Eligible Exp:
21	9.96%	8.17%	7.93%	2	2	1	3	1.00	1.00	-			
22	10.99%	6.03%	4.54%	2	1	0	2	1.00	1.00	-	2016	2,155,779	8,885
23	6.85%	4.79%	3.71%	1	0	0	0	-	1.00	(1.00)			
24	5.22%	3.74%	1.89%	1	0	0	0	-	1.00	(1.00)	2015	4,341,789	19,566
25	3.76%	2.63%	3.35%	0	0	0	0	-	-	-			
26	8.28%	7.69%	4.56%	2	1	0	1	1.00	1.00	-		Difference:	<u>Difference:</u>
27	1.26%	1.21%	0.92%	0	0	0	0	-	-	-			
40	8.56%	6.78%	5.93%	2	1	1	1	1.00	1.00	-		(2,186,010)	(10,681)
41	5.70%	3.98%	3.70%	1	0	0	0	-	1.00	(1.00)			
42	8.14%	6.17%	5.07%	2	1	1	1	1.00	1.00	-	<u>Pe</u>	rcent Change:	Percent Change:
43	5.84%	4.22%	3.78%	1	0	0	0	-	1.00	(1.00)			
44	7.90%	7.20%	6.70%	1	1	1	1	1.00	1.00	-		-50.3%	-54.6%
45	7.16%	5.59%	4.92%	1	1	0	1	1.00	1.00	-			
99	1.42%	0.43%	0.40%	0	0	0	0	-	-	-			
Tot	2.66%	2.26%	1.92%										

- 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.

2016 Proposed Credit Factors - Data Through July, 2015

	Rate Clas	s Group								
Terr	10	15	17	18	20	21	25	26	30	MC/Misc.
1	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	1.00	-	-	-	-	-
3	-	-	-	-	1.00	-	-	-	-	-
4	-	-	-	-	1.00	-	-	-	-	-
5	-	-	-	-	1.00	-	-	-	-	-
6	-	-	-	-	1.00	-	-	-	-	-
7	-	-	1.00	-	1.00	-	-	-	-	-
8	-	-	1.00	-	1.00	-	-	-	-	-
9	-	-	1.00	-	1.00	-	-	-	-	-
10	-	-	-	-	1.00	1.00	-	-	-	-
11	-	-	-	-	1.00	-	-	-	-	-
12	-	-	-	-	1.00	-	-	-	-	-
13	-	-	1.00	-	1.00	1.00	-	-	-	-
14	-	-	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
19	-	-	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
23	-	-	1.00	-	1.25	-	-	-	-	-
24	-	-	-	-	1.00	-	1.00	-	-	-
25	-	-	1.00	-	1.00	-		-	-	4.00
26 27	-	-	1.00	-	1.00	-	1.00	-	-	1.00
40		-	1.00	-	1.00 1.00	1.00	-	-	-	1.00
40 41	-	-	1.00	-	1.00	1.00	-	-	-	1.00
42	1.00	-	1.00	-	1.00	1.00	-	-	-	1.00
42 43	1.00	-	1.00	-	1.25	1.00	1.00	-	-	1.00
43 44	1.00	_	1.00	_	1.50	-	1.00	-	_	1.00
45	1.00	_	1.00	_	1.25	1.00	1.00	1.00	_	1.00
99	1.00	-	1.00		-	-	-	-	_	1.00
33	-	-	-	-	-	-	-	-	-	-

Highlighted 4/1/2015 Credit Eligible Cells

Residual	Keep
Mark Shr	Out
<u>Group</u>	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

Commonwealth Automobile Reinsurers Voluntary 3 Year Loss Ratio (CAR ID 1,8) Data through March, 2015

	Rate Class 0	Group									
Territory	10	15	17	18	20	21	25	26	30	MC/Misc.	Total
1	57.59%	69.65%	70.23%	55.77%	60.16%	49.82%	65.48%	46.61%	60.51%	33.49%	59.24%
2	58.18%	71.06%	71.16%	52.65%	61.92%	60.75%	59.05%	51.14%	62.38%	32.05%	59.73%
3	59.81%	66.73%	63.89%	61.16%	64.68%	49.56%	59.99%	53.00%	61.68%	34.48%	60.18%
4	61.00%	69.07%	61.34%	54.72%	67.33%	62.81%	62.55%	50.36%	59.03%	39.21%	61.36%
5	61.85%	66.59%	67.83%	66.52%	51.49%	55.43%	60.44%	53.50%	64.88%	39.98%	61.90%
6	59.74%	71.07%	64.40%	65.86%	57.76%	54.16%	56.63%	48.46%	61.04%	38.78%	60.54%
7	59.84%	67.82%	64.92%	55.49%	57.26%	47.38%	61.07%	53.76%	61.82%	34.93%	60.39%
8	61.62%	70.72%	62.78%	55.26%	61.62%	55.64%	64.71%	53.52%	63.58%	43.23%	62.28%
9	61.52%	65.30%	63.11%	68.38%	57.70%	51.38%	62.63%	55.90%	66.97%	32.82%	61.51%
10	61.59%	72.57%	58.92%	54.94%	70.22%	74.08%	66.02%	48.50%	55.90%	30.89%	62.14%
11	56.56%	81.21%	54.70%	59.44%	54.58%	59.28%	47.92%	41.48%	53.07%	45.95%	58.86%
12	60.89%	70.16%	58.97%	58.97%	58.52%	55.02%	61.25%	52.53%	63.27%	51.19%	61.47%
13	66.74%	75.91%	61.88%	60.46%	62.74%	59.61%	67.64%	57.70%	68.48%	37.62%	66.75%
14	67.10%	70.61%	62.69%	58.63%	68.76%	48.09%	71.59%	55.01%	59.35%	80.45%	66.81%
15	65.13%	67.90%	58.71%	53.48%	74.73%	73.20%	78.48%	71.32%	72.25%	65.51%	65.75%
16	65.75%	62.70%	58.12%	60.57%	58.76%	60.26%	61.24%	79.12%	70.57%	32.31%	64.54%
17	62.39%	76.41%	68.47%	53.68%	107.91%	30.44%	68.77%	46.95%	87.81%	32.44%	64.21%
18	68.33%	72.70%	60.85%	81.09%	108.39%	39.31%	77.54%	61.01%	65.78%	51.35%	68.85%
19	49.81%	64.29%	60.03%	86.51%	75.73%	45.02%	58.62%	64.79%	25.92%	37.21%	52.08%
20	74.06%	77.45%	62.10%	90.07%	111.36%	67.43%	75.22%	54.36%	68.62%	48.34%	74.21%
21	73.20%	72.94%	76.39%	64.44%	76.72%	88.08%	74.58%	75.74%	52.54%	87.10%	73.40%
22	75.71%	78.66%	64.19%	86.68%	77.77%	63.41%	78.88%	47.26%	30.45%	105.03%	74.98%
23	52.85%	74.23%	68.82%	55.62%	71.40%	57.55%	54.14%	46.51%	44.04%	28.83%	55.48%
24	53.95%	76.31%	50.78%	58.82%	40.98%	46.75%	61.15%	55.49%	68.93%	28.20%	54.92%
25	46.49%	61.50%	74.44%	46.79%	75.63%	28.54%	38.53%	48.15%	57.01%	31.03%	48.17%
26	55.88%	79.46%	67.55%	67.73%	58.71%	35.17%	86.26%	71.97%	53.39%	45.75%	58.60%
27	59.64%	63.65%	64.33%	61.25%	59.54%	57.34%	61.61%	56.92%	57.49%	27.54%	59.58%
40	56.09%	63.56%	52.55%	54.87%	50.99%	63.61%	70.40%	45.82%	47.90%	37.34%	56.60%
41	57.85%	63.81%	57.87%	58.67%	62.72%	59.38%	57.70%	55.54%	81.60%	35.95%	58.39%
42	64.94%	68.77%	63.37%	67.29%	74.61%	63.05%	72.44%	61.69%	54.00%	45.38%	65.36%
43	68.88%	63.64%	71.66%	58.75%	59.89%	79.14%	57.28%	57.80%	70.35%	31.28%	67.31%
44	69.97%	81.78%	60.67%	74.49%	67.71%	56.18%	67.12%	58.02%	44.18%	32.62%	69.05%
45	78.93%	73.85%	82.78%	74.53%	115.44%	73.80%	87.05%	74.70%	50.37%	34.80%	78.92%
99	73.37%	64.77%	52.95%	64.26%	25.65%	62.17%	43.73%	51.97%	54.37%	55.79%	61.63%
Total	61.60%	69.14%	64.20%	60.76%	64.39%	57.28%	61.78%	52.94%	61.16%	37.66%	61.98%

LR threshold 59.0% 59.0% 59.0% 59.0% 59.0% 59.0% 59.0% 59.0% 59.0% 59.0%

Red cells should retain credits

Notes:

- (1) Earned Premium: reflects policies effective April 2012 March 2015 valued at March, 2015
- (2) Reported Incurred Losses: reflects policies effective April 2012 March 2015 valued at March, 2015

Commonwealth Automobile Reinsurers Voluntary 3 Year Loss Ratio (CAR ID 1,8)

Data through March, 2015

	_	_		_			_	_			
	2	3	4	5	6	7	8	9	10	11	
	Rate Class										
Territory	10	15	17	18	20	21	25	26	30		Total
1	0	0	0	0	0	0	0	0	0	0	59.24%
2	0	0	0	0	1	0	0	0	0	0	59.73%
3	0	0	0	0	1	0	0	0	0	0	60.18%
4	0	0	0	0	1	0	0	0	0	0	61.36%
5	0	0	0	0	0	0	0	0	0	0	61.90%
6	0	0	0	0	0	0	0	0	0	0	60.54%
7	0	0	1	0	0	0	0	0	0	0	60.39%
8	0	0	1	0	1	0	0	0	0	0	62.28%
9	0	0	1	0	0	0	0	0	0	0	61.51%
10	0	0	0	0	1	1	0	0	0	0	62.14%
11	0	0	0	0	0	0	0	0	0	0	58.86%
12	0	0	0	0	0	0	0	0	0	0	61.47%
13	0	0	1	0	1	1	0	0	0	0	66.75%
14	0	0	1	0	1	0	1	0	0	1	66.81%
15	0	0	0	0	1.25	1	1	0	1	1	65.75%
16	1	0	0	0	0	1	1	0	1	0	64.54%
17	0	0	1	0	1.25	0	0	0	0	0	64.21%
18	1	0	1	1	1.25	0	1	0	0	0	68.85%
19	0	0	1	0	1	0	0	0	0	0	52.08%
20	1	0	1	0	1.5	1	1	0	0	0	74.21%
21	1	1	1	0	1.75	1	1	0	0	1	73.40%
22	1	1	1	1	1.75	1	1	0	0	1	74.98%
23	0	0	1	0	1.25	0	0	0	0	0	55.48%
24	0	0	0	0	0	0	1	0	0	0	54.92%
25	0	0	1	0	1	0	0	0	0	0	48.17%
26	0	0	1	0	0	0	1	0	0	0	58.60%
27	0	0	0	0	1	0	0	0	0	0	59.58%
40	0	0	0	0	0	1	0	0	0	0	56.60%
41	0	0	0	0	1	1	0	0	0	0	58.39%
42	1	0	1	0	1.25	1	0	0	0	0	65.36%
43	1	0	1	0	1.25	1	0	0	0	0	67.31%
44	1	0	1	0	1.5	0	1	0	0	0	69.05%
45	1	0	1	0	1.25	1	1	1	0	0	78.92%
99	0	0	0	0	0	0	0	0	0	0	61.63%
Total	61.60%	69.14%	64.20%	60.76%	64.39%	57.28%	61.78%	52.94%	61.16%	37.66%	61.98%

Red cells should <u>retain</u> 2015 credits due to LR performance poorer than Std Dev threshold (no New credits)

Notes:

- (1) Earned Premium: reflects policies effective April 2012 March 2015 valued at March, 2015
- (2) Reported Incurred Losses: reflects policies effective April 2012 March 2015 valued at March, 2015

MEMORANDUM October 7, 2015

TO: CAR Actuarial Committee

FROM: Geoff Arnold RE: 2016 Credit Offer

As the CAR Actuarial Committee continues its discussion of the MAIP Quota Share credit offer for policies effective April 1, 2016 through March 31, 2017, it seems appropriate to address a few unresolved issues that have arisen to date. The following topics may help to focus the Committee's deliberations and enhance our ability to reach agreement.

• The Goal of Keep-Out Credits – M.G.L. c. 175, §113H governs assigned risk plans in Massachusetts, including MAIP. It states: "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".

The statutory language contains references both to the "size of the population" and to "disproportionate representation" of territories and classifications. In order to comply with the statute, CAR's credit offer must address both of these elements. Given the current size of the plan, it is clear that a credit offer at the current (April 1, 2015 through March 31, 2016) level should be adequate to control the *size* of the plan. That being the case, our work in developing the 2016-2017 credit offer must focus on the other requirement of the statute – enhancing the prospect that no classification or territory be disproportionately represented.

The eleven territories which the Commissioner of Insurance has twice asked us to use as a benchmark remain disproportionately represented in the plan – at fully three times the rate of the other twenty-two territories (3.7% and 1.2% respectively). In order to comply with the statute, we must develop a credit offer that will enhance the prospects that MAIP volume in those eleven territories be reduced to a level that is less out of proportion with the rest of the state.

• The Volume of Keep-Out Credits – There has been a great deal of concern expressed about the volume of credit premium that is currently being used (\$739.8 million for the most recent twelve months), particularly in comparison to the volume of MAIP premium assigned over the same period (\$92.2 million). Some have suggested that this will destabilize the system and/or lead to other distortions in the market, now that companies are using competitively set rates.

However, there is actually no *a priori* relationship between MAIP volume and overall credit volume that one can point to as being inappropriate. The "right" volume of credits is that which "enhance[s] the prospects that no classification or territory is disproportionately represented in the plan," irrespective of the size of the plan itself. Credits – at any level – do not introduce instability into the system. Instead they shift the same total residual market burden to a lesser or to a greater degree. The approach to credits that CAR has had in place since the MAIP was established is designed to make voluntary business more attractive in credit-eligible territories and classifications

relative to that in non-credit-eligible territories and classifications. We can be entirely comfortable setting them at whatever level the current degree of disproportionate representation demands. This level would be zero if the level of disproportionate representation were also zero, and this would be true irrespective of the size of the plan itself. Conversely, the current level of disproportionate representation (3:1) demands a fairly high level of credits, a fact which is not changed by the current small MAIP volume.

• The Benchmark for Setting Keep-Out Credits – In order to comply with the statutory requirement that we set credits to "enhance the prospects that no classification or territory is disproportionately represented in the plan," we should focus on measured historical levels of disproportionate representation as compared to some normative goal. One way to do this is to pick a completely exogenous goal – 2% has been suggested – and to calculate the relationship between MAIP usage and that goal. However, when we are as successful in reducing the size of the residual market as has been the case in Massachusetts, it is possible to have cells which are simultaneously below a 2% goal and considerably above the 1.2% that characterizes the twenty-two "non-credit" territories.

This contradiction can be resolved by defining disproportionate in relative terms (a concept which of course is inherent in the idea of "disproportionate" itself). This permits permanent use of the levels adopted when the Market Share Group methodology was established.

Market Share	Relative to	Relative to Average							
Group	>	≤	Credits						
0	0.0	1.8	0.00						
1	1.8	2.9	1.00						
2	2.9	4.0	1.00						
3	4.0	6.2	1.00						
4	6.2	8.4	1.25						
5	8.4	10.6	1.50						
6	10.6	12.7	1.75						
7	12.7	14.9	2.00						
8	14.9	17.1	2.25						
9	17.1	∞	2.50						

Conclusion

For these reasons I believe that a relative range approach using the historical (2012) relativities tabulated above would permit CAR to fulfill its statutory obligation. Not only would this result in a smaller and more stable residual market, but the increased competition for voluntary business in credit territories would also benefit consumers by providing more of them with the opportunity to be written in the voluntary market at lower rates.

TRANSCRIPT OF

GOVERNING COMMITTEE MEETING

A meeting of the Governing Committee was held at the offices of Commonwealth Automobile Reinsurers, 225 Franklin Street, Boston, Massachusetts, on

WEDNESDAY, NOVEMBER 18, 2015 AT 11:00 A.M.

Committee Members present –

Mr. M. John Olivieri, Jr. - Chair J.K. Olivieri Insurance Agency, Inc.

Liberty Mutual Group Mr. Paolo V. Abelli Mr. William J. Cahill, Jr. The Hanover Insurance Company Meridian Insurance Agency, LLC Mr. Thomas C. DePaulo EM Freedman Insurance Agency, Inc. Mr. Christopher D. Dupill Mr. Sumner D. Gilman Economy Insurance Agency, Inc. Ms. Paula W. Gold Plymouth Rock Assurance Corporation Mr. James S. Hyatt Arbella Insurance Group Mr. Christopher Jarrard **GEICO** Mr. John V. Kelly MAPFRE U.S.A. Corporation

Mr. Joseph P. Leahy, Jr. Leahy & Brown Insurance and Realty Ms. Marie-Armel Theodat R. Theodat Insurance Agency, Inc. Mr. John P. Tierney

Quincy Mutual Group

Substituted for:

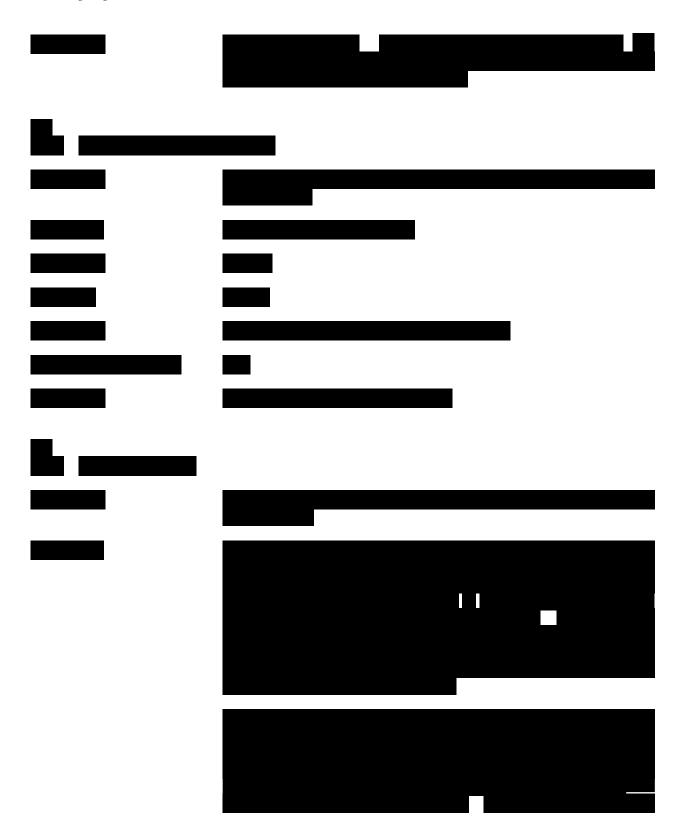
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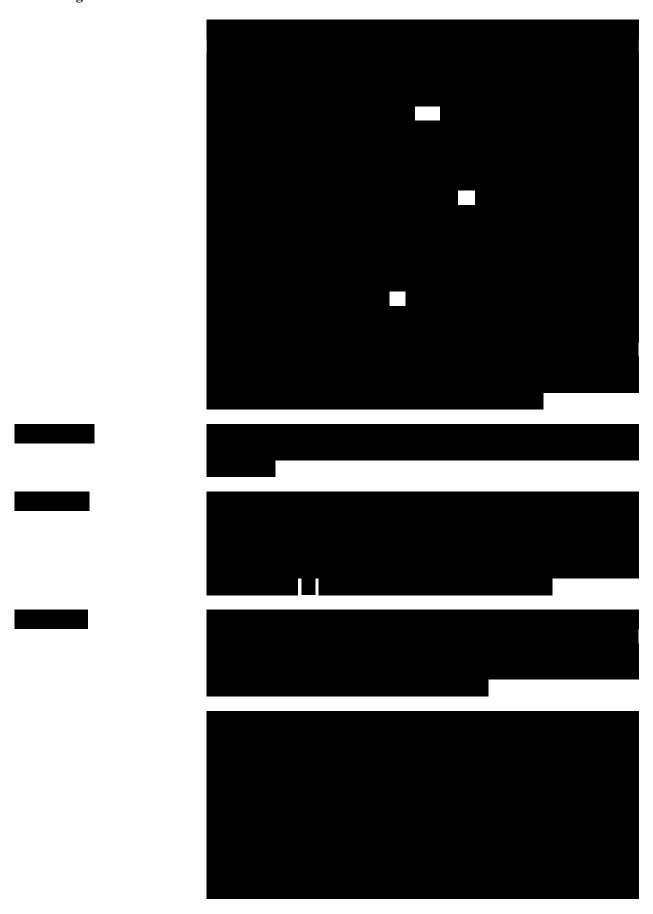
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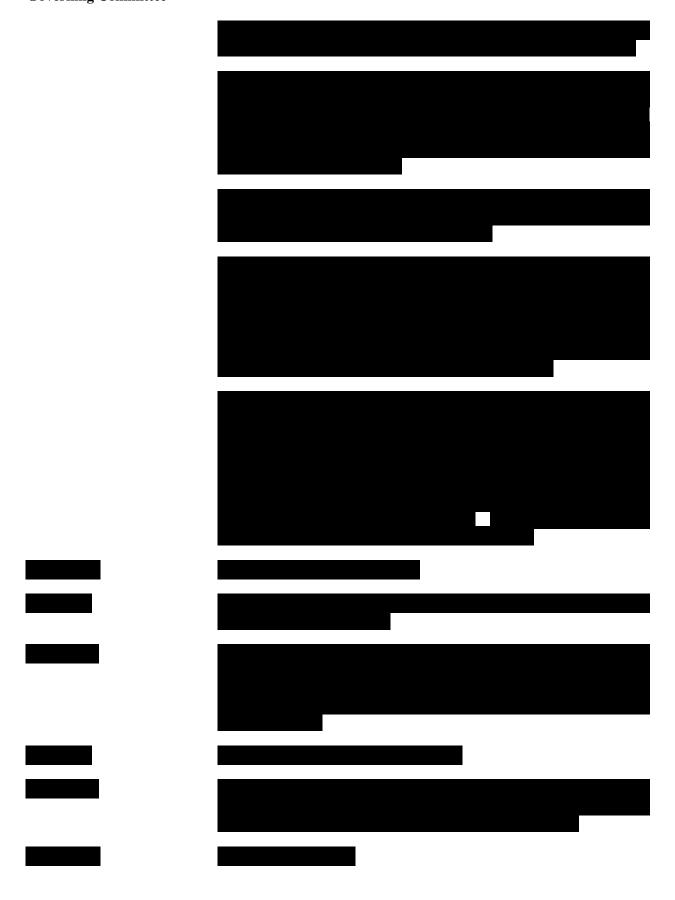
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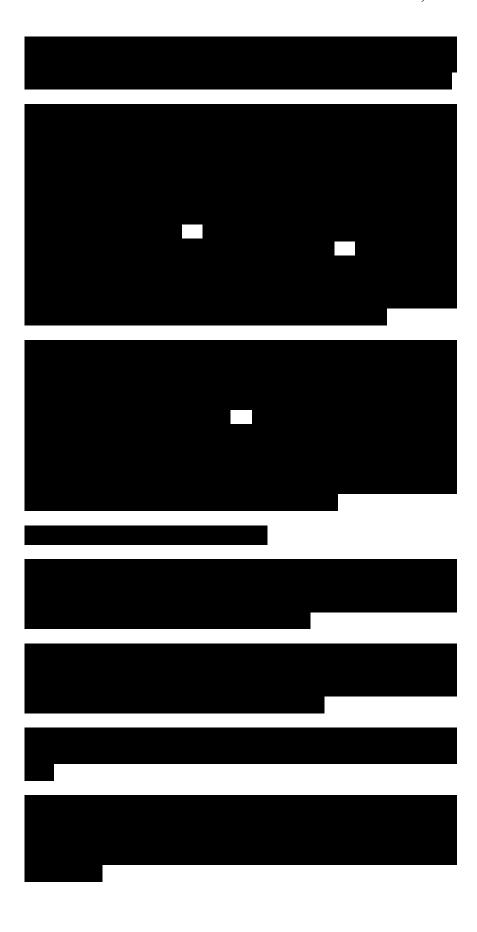
PROCEEDINGS

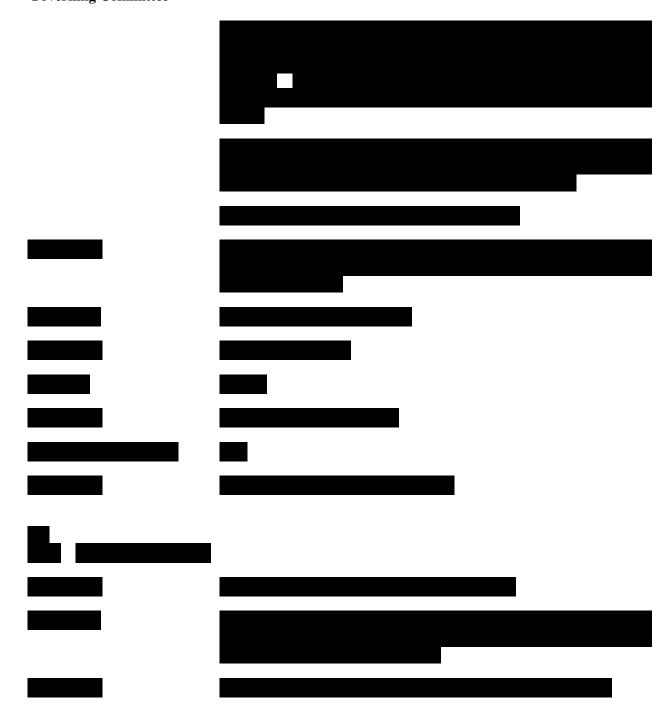
(Meeting began at 11:00 a.m.)











GC 15.15 Actuarial Committee

Mr. Olivieri: The next agenda item, which I know there'll be some discussion on is

Actuarial Committee. Natalie, are you going to be giving this report?

Ms. Hubley: Yes. The Actuarial Committee has two items for you today. The quota

share credits for policies effective April 1, 2016 and later,

I'm going to take the second agenda item first as I think the first agenda

item may generate some discussion.

Mr. Olivieri: Do you want to waive the 10-day now or wait until we get to the

additional?

Ms. Hubley: Either way.

Mr. Olivieri: I'm just going to interject for one second thanks to my Vice Chair

reminding me. There was some additional information sent out within the 10-day period in regards to some of the discussions that we're going to be having on Actuarial. So I'd like to just be safe here and get a

motion to waive the 10-day Notice.

Mr. Gilman: So moved.

Mr. Tierney: Second.

Mr. Olivieri: Any discussion? All in favor?

All Committee Members: Aye.

Mr. Olivieri: Opposed? Motion carries. Thank you.

Ms. Hubley:

The next agenda item would be the quota share credits for policies effective April 1, 2016 and later. The Committee met four times during the spring and the summer to discuss this issue. They considered several

models and different approaches to this issue. The indicated credits as codified in the current Rules would indicate a reduction of 64 percent of the potential credit premium within the model and a corresponding decrease in the number of credit-eligible exposures. Several Committee members favored allowing that formulaic approach as codified in the Rule to play out. Many of those Committee members pointed out that the size of the residual market is more influenced by adequate voluntary rating in the competitive market and less influenced by the credit and the credit usage. Companies also suggested that they have easier accessibility to buying and selling of the excess credit premium because of the amount of credit premium in the system which reduces companies' participation in the assignment sharing process. Members also opined that with the smaller residual market, companies are better incented to write the remaining business voluntarily by strengthening the take-out credits rather than adjusting the formula for determining the keep-out credits, and as the size of the residual market decreases so does the need for credits. Finally, several members pointed out that the current formula works well and that the mechanism was designed to be self-correcting in the event that there are any swings in the population of the residual market.

Several members that favored a change to the formula or perhaps even a freezing of credit factors suggested that the volume of exposures that would no longer be eligible for credit is extreme and that if implemented would cause repopulation of the residual market. Members suggested that the significant reduction in the credit-eligible cells would be disruptive to companies that are strategically writing risks in these areas. They also pointed out that the Division of Insurance in two prior credit Decisions has expressed concern about certain territories that it considers likely to be over-represented in the residual market. They argued that although the model is self-correcting that it's overly responsive and therefore disruptive to the marketplace.

In all, the Committee considered seven alternative models giving thoughtful consideration. Some of those models considered mitigated the large indicated decrease by freezing credits in certain cells or transitioning the decrease over time. Others attempted to recalibrate the threshold which defines the disproportionate representation in the residual market and one tied that threshold as currently defined by the residual market size to the loss ratio observed in those cells. After considerable discussion, the Actuarial Committee ultimately voted with eight members in favor and two opposed to recommend the approach that calibrates the measure of disproportionate representation to 70 percent of the current threshold comparing the current statewide residual market of 1.38 percent to the target of 2 percent as defined by the Commissioner of Insurance in the Decision that promulgated the current methodology that we have today.

With that recommendation, the Committee directed CAR staff to draft amendments to the factors in the tables included in Rule 29 using data reported through August 2015 and to present the Rule 29 draft modifications to the Governing Committee at this time. In order to

implement the recommendation of the Actuarial Committee relating to quota share credits, there were proposed Rule amendments attached to the Governing Committee notice. They are also reflected in Exhibit 3 of Docket Number 15.15 – and, I'm going to bring you to those – beginning on Page 4 of 20 of that attachment. The Rule amendments are modified simply to bring the dates current to the 2016 recommendation. On Page 9 of 20 of that exhibit and Page 6 of 12 of Rule 29 begin the more substantive changes relating to the Actuarial Committee's recommendation. It codifies the scale as recommended by the Actuarial Committee that defines or identifies that threshold for disproportionate representation in the residual market. Page 10 of 12 of Rule 29 identifies those credit factors that would result from the Actuarial Committee's recommendation. That would be an action item for your consideration after, I'm sure, some discussion.

Mr. Henning:

That's quite a motion.

Mr. Olivieri:

I don't want to have to repeat it. Obviously, I'm sure there's going to be some discussion regarding this agenda item. What I'd possibly like to do first is we have a number of Governing Committee members who served on the Actuarial Committee. If they would like to add anything initially and then I'll open it up to the entire table for discussion and see if somebody wants to make a motion or where it will go. John.

Mr. Kelly:

I can make some comments. I participated in those meetings. There was a lot of good discussion, a lot of detailed discussion, over the market itself and how credits work. It was unanimous at the Committee that nobody wants to see the residual market grow. I think that everyone agreed that that's the ultimate goal. There really has been great success in driving the size of the residual market down over the last several years. In addition, I voiced my support or my comments that it's a very healthy, competitive marketplace too. There is great competition for writing risks in all of these towns out there. When you look at the Class 10 business in Brockton and the residual market share is less than 3 percent, that's a far cry for those of us who were around when the residual market was two-thirds of the whole market in the old days. Great success there. I think that this recommendation really is a good one in that no one was happy with it coming out of the Committee really. I was of the opinion that we have used the formula that was in place for many years and we should stick with that formula. It did have a dramatic change in the number of credits but I think that what drives the marketplace out there now is not credits. We don't look at credits as a significant factor in competing for business in the marketplace at all. It's really a healthy marketplace out there in these territories that we're talking about. We compete in them. A lot of focus was placed on Brockton and Lowell and Lynn. Today, we have over 450 voluntary agents writing policies with us today in those towns and very profitable agents that are competing, several agents on this board here that have risks written in those towns. Very competitive marketplace out there.

The recommendation is one that is a compromise. It is really a compromise that went from – the numbers have changed a little bit, but I

think the potential credits from the formula-based approach was in the minus 70 range or high 60 range. With this approach, it's down in the 20s, a reduction of 20 percent. That sounds like a big number. Last year, we reduced credits in the 10 percent range and we saw that the residual market shrunk. That really kind of supported the fact that credits aren't a driving factor in driving the size of the residual market down out there in the marketplace today. I think it was great work by the Actuarial Committee to come up with this recommendation. It is a compromise. It is one that saw a dramatic reduction in what the formula would have spitted out. So I think it gets us in the right direction and it's something that we support fully.

Mr. Olivieri:

John.

Mr. Tierney:

I also want to add to what John just said regarding the Committee. John complimented the Committee on its hard work, but I also think significant credit – sorry for the pun – should be given to CAR staff for helping to get us to the consensus. There was a lot of good analysis on trying to emulate what the Commissioner had done a number of years ago in a different scenario and that's what we ultimately voted for as the compromise approach. I think we'd still be meeting if it wasn't for the efforts of CAR staff to try and focus us on a common ground. So credit needs to go to them for their hard work.

Mr. Olivieri:

Thank you for your comments. At this point, do we have any other comments or questions in regards to this portion of the Actuarial Committee's agenda item? Paula.

Ms. Gold:

I appreciate the hard work of the Actuarial Committee. I know it was a compromise. However, there is a statute. The credits are not set just to keep residual market small. It's been a success. The residual market is small but credits deal with disproportionality. You have a letter here from the AG and you have a memo from me. If you look at the AG's letter, I'll start with that. I'm not going to read the letter but there are some things I want to highlight: "Despite the depopulation of the residual market, a number of territories remain substantially overrepresented in the MAIP." That's what the statute is supposed to deal with. Then it goes through the 11 territories that the Commissioner has looked at before. They are still substantially overrepresented. He states the elimination of these credits - the credits will affect those territories. That is not in keeping with what the statute has asked us to do. Then I think the most important point is 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.

My memo to you basically talks about the same kinds of issues and really highlight three communities where you can see the dramatic impact it has. I think that, to be consistent with the statute, and the statute is independent of the size of the residual market, it's directed at disproportionality. If you look at some of the statistics in the letter of the Attorney General, Roxbury, although it's a small number, is 453 percent.

- 14 -

It's dramatic data. I don't see how anybody can say that if we pass what was recommended – and I think it was a good faith effort – that we are in compliance with the statute. I would like to suggest that we amend the recommendation of the Committee and we freeze the credit, the credit at today's level, where there is an indicated decrease, in particular, the territories of Chelsea, Hyde Park, Dorchester, Roxbury, Charlestown, East Boston, Holyoke, Lowell, and Springfield. As an aside, there's a reason that those communities have been targeted for us to look at. They are the communities that have the lowest income, most minority, non-English speaking. This is not a question of the size of the residual market. It is to look at the smaller aspects and how it affects people in those communities and give them the best chance possible to have options for auto insurance which they are required to buy if they want to drive a car. I would like to make that a motion.

Mr. Henning:

Procedurally, we should treat that as a separate motion and not an amendment of the Committee.

Mr. Olivieri:

We don't have a motion at this point. There's no motion yet on the table.

Mr. Abelli:

Can I – just so I understand your motion. Is it to freeze credits just in those territories you listed or to maintain this year's credit program into 2016?

Ms. Gold:

To freeze credits in those territories if, in fact, they were – if there's an indicated decrease in particular in those territories.

Mr. Olivier:

Go ahead, Paolo.

Mr. Abelli:

Are we still in discussion or do we need to address her motion?

Mr. Olivieri:

Have you made a motion, Paula, I guess is the question? We don't have a motion on the table at this point. There was a recommendation from the Actuarial Committee.

Ms. Gold:

I'm happy to have more discussion or if I'm impeding discussion by making the motion.

Mr. Olivieri:

Why don't we hold motions at this point? Paolo, do you have a question?

Mr. Abelli:

I had just a comment. From our perspective, I would echo what's already been said, that the current methodology has been extraordinarily successful in reducing the size of the involuntary market as well as the fact there is much freer competition for companies to innovate a price and so on. I think we should not lose sight that this has been an extraordinarily successful transition. Kind of like John was saying, I think some of these areas probably – I don't have the data – I'd love to see the data – but may have been just as disproportionate in the past as they potentially are now. Maybe we've gotten better. That said, I do believe that the current methodology, given where we're at, does have some unintended consequences. We also talked about the rapid

reduction. It's not something that we would like to see so dramatically happen. The compromise solution that's on the table is a compromise. It's a step in the right direction, but Liberty doesn't believe that that's enough. What we would like to see is, frankly, just more study. I know the Committee has met a lot and it's done a lot of work, but we would suggest freezing the current program, which we know works, in its entirety. I'm not clear if it's the same thing that Paula is saying or not, but basically taking what we have today and saying, let's extend that for a year and give this some more thought, have more chance to do analysis, maybe even at the territorial level, and so on, and then come back and make a decision. In the meantime, keep what we have.

Mr. Olivieri:

Bill.

Mr. Cahill:

I appreciate all the comments that have been offered. I also want to thank the Actuarial Committee and staff for all the effort that's gone into this. It is sort of remarkable to think that there have been four meetings on the topic over the course of many months. But it's a very important piece. I'm coming at this from a substantive perspective then also from a procedural standpoint. I think where I'm leading would suggest is we might find somewhere in-between the two ideas that have been brought forth. The idea of the Committee that was the recommendation to the Governing Committee from the Actuarial Committee would lead us in one direction. Paula's suggestion would sort of take us in another. I'm actually thinking what we ought to do is recognize that from a substantive standpoint a very fair question has been raised about whether or not the current proposal actually is consistent with the statutory requirements with regard to credits to be offered by the residual auto market. I don't know how extensively that was discussed at the Actuarial Committee. I feel it's a fair point to actually refer this back to the Actuarial Committee with a very specific charge to ask for a response to that topic, particularly recognizing that it's being raised as a potential flaw in the recommendation. That's my substantive point.

From a procedural standpoint, I'm feeling very old as I'm thinking back to having served on this Committee for – this is my 12th year. We've had to deal with a lot of hotly contested issues. Based on my experience, the times when we've been the most successful as far as being able to move forward a proposal that ultimately is allowed and accepted from a regulatory standpoint as meeting all the various criteria is when we've been very thoughtful and deliberate about the process. I don't think we should be concerned that meetings have already occurred four times or that we're getting close to a drop-dead date for when this program has to actually be put in place. I do feel like we've been asked, as a Governing Committee, by the Office of the Attorney General to specifically look at this. I think it's a timely request unlike sometimes in the past when the requests have come maybe after this body has even acted so it's out of our hands. I do think it's a timely request. As I say, I feel like taking the time to just ensure that all the various questions have been addressed we may end up with exactly the same recommendation coming back here. But I would feel more comfortable voting in favor of it if we have the Mr. Olivieri:

Mr. Cahill:

information that this question that's been raised from a statutory standpoint has been met.

I'll probably vote against anything that would allow the recommendation from the Actuarial Committee to go forward in favor of trying to get to a motion that would say, let's refer this back to the Actuarial Committee with a very specific charge.

Mr. Olivieri: John.

Mr. Tierney: The Actuarial Committee was aware of the statutory requirements. We

had them in front of us at a couple of different meetings. So we were aware of the whole issue of disproportionality. My comments earlier about the effort that was made by CAR staff related to that because CAR staff took what the Commissioner gave us a number of years ago in a different size market and applied that same approach for the specific purpose of addressing the disproportionality. It comes out in some cases, like Class 10 in Brockton, that that particular class and that particular territory doesn't meet the threshold that the Commissioner established a number of years ago. I'm very comfortable that the Committee did its work, followed the charge, had the appropriate information in front of it - that's why we took four meetings to get to where we were - but then came forward with something that we think follows the approach that the

regulator had previously given us.

I think Joe had his hand up.

In listening to the different arguments, I tend to agree with John here that Mr. Leahy:

competition and not credits is keeping the residual market smaller. Quite frankly, if you look at these communities that we've been talking about, given those statistics, obviously credits aren't working there. There's another reason for it. Coming from an agency that is in one of these communities, I can tell you right now, there is plenty of opportunity. Companies are looking at drivers based on their record and other factors. My agency alone has one policy in the MAIP and we come from Springfield. So the argument can't be made that companies don't want to write policies in these communities voluntarily. That, in addition to the amount of work that the Actuarial Committee had done and the overwhelming support that they came up with for this plan I intend to

greater chance of being successful, to be ultimately implemented,

support it.

Mr. Olivieri: Bill and then Marie.

I appreciate, John, your comments, really, for being a participant on the Committee. But what I would suggest to you is I think maybe it actually makes it a fairly easy exercise to go back because I don't think we actually have in front of us a record that reflects that extensive discussion and debate. If you bring back a record or if a record is established, that this question has been fully vetted and you do feel every confidence that it's been addressed, I would feel much more comfortable in voting in favor of it. I feel like then we've actually sent along a proposal that has a recognizing any of these things are going to be referred as Rule changes, have to go up to the Division, potentially going to have to withstand a hearing process at the Division. I just feel like we are shortsighted if we don't end up ensuring there is an appropriate record that has been built.

Ms. Theodat:

Given that I am one of the agents that services more than 50 percent of these disproportionate communities, I do not feel comfortable in supporting the proposal that's been brought up from the Actuarial Committee. Part of it may be because we may not have looked at the – probably the contracts that have been given to some of these agents that service a lot of these communities, voluntary contracts. That may ultimately give a market to see that there might be a decrease, but I feel that the Actuarial Committee should take a look at that. I wouldn't feel comfortable about supporting that right now especially given that it will adversely affect a lot of these communities.

Mr. Olivieri: Jim.

Mr. Hyatt: I just wanted to again thank everybody that's been involved. I know it

was a lot of work and a lot of time. My impression from afar, since I wasn't at the meetings, is that I agree with John Tierney. It sounded like there was an awful lot of debate and review about the statute and it was debated from all angles a number of times over. I felt comfortable, I guess, in the proposal as it came out of the Actuarial Committee. Again, we applaud this self-correcting formula that has worked and it would seem that it should continue to work in the future. I also, personally, got comfort that if, for whatever reason, something happened in the next calendar year, that the formula again is self-correcting and would take that into account. I think also there was some discussion that it does not have to be always an annual review of the credit offer and if something seemed to be going in a direction that no one was comfortable with we could do something midterm if we wanted to. I just wanted to throw that

out.

Mr. Olivieri: Paolo.

Mr. Abelli: Could I just ask a question? Should the Committee not vote on this

proposal, do the existing credits just continue or do we have to affirmatively push those forward? Do you know what I mean? I'm just

kind of fuzzy on that procedural detail.

Mr. Olivieri: I'm going to look to my right.

Mr. Henning: I believe they continue on.

Mr. Olivieri: Bill.

Mr. Cahill: I think, for clarity, if we don't change anything in the Rule we're going

to have a 70 percent – whatever the percentage is – reduction which will

go into place, right, the Rule language as it currently reads?

Mr. Henning: As it currently stands, correct.

Mr. Cahill: We have to act in order to intervene if you want to change the reduction.

Mr. Abelli: Doing nothing, if we...

Mr. Olivieri: Hang on second. Do we have consensus on the...

Mr. Cahill: Am I correct in that?

Mr. Olivieri: I don't know. I'm going to tell you right now, I don't know. I want to

get a straight answer for that first. So let's go to staff.

Ms. Hubley: The Rule as written indicates that the table of credit factors are valid for

policies effective April 1, 2015 and subsequent. If nothing were to occur and that we're ok for nothing to occur then the credits would stay as they

are today.

Mr. Abelli: So there would be no reduction, just to be clear? It would just continue

with the current credits?

Mr. Olivieri: Based on that comment – John wants to add to that.

Mr. Tierney: I agree with Natalie. My understanding is that there is a protocol that we

were given by the Division of Insurance a number of years ago for calculating the indicated credits which then find their way into the Rating Manual after this Committee votes. So until this Committee votes to change the credit factors in the Rating Manual, they stay in-force

indefinitely.

Ms. Gold: Which would reduce the...

Mr. Abelli: No, no. This is so...

Mr. Olivieri: Hang on a second, everyone.

Mr. DePaulo: Given that there's some confusion...

Mr. Olivieri: Let me consult with Counsel just for a second.

Mr. DePaulo: I was going to suggest a five-minute recess.

Mr. Olivieri: I want to make sure they can do it in five minutes. Hang on. Just give

me a second.

Mr. Olivieri: We're going to break for 5 to 10 minutes. So everyone come back in

five minutes and we'll get going as soon as we can.

(The Committee recessed from 11:55 a.m. to 12:03 p.m.)

Mr. Olivieri: Thank you. We're going to reconvene the meeting. After staff and

Counsel have reviewed the Rules there appears to be a little bit of inconsistency. But the ultimate bottom line is we do not have the option

not to take any action. The Rules mandate that we have to do something. If we leave it the way it is, it's not an option that's on the table. We either need to move something forward and make a decision today or, to Bill's point, if we wanted to send it back to the Actuarial Committee we do have that option but we need to act in short order and we probably could potentially end up having a Special Governing Committee meeting in January, which we may need to do anyway, but that's another agenda item. Any further clarification on that needed?

Mr. Abelli:

No, that's helpful. I guess what I would comment is given that and given some of the points raised and, as usual, Bill often says things better than I do, but given some of the things that have happened I think it's worthwhile for this Committee to ask the Actuarial Committee to go back – and this is by no means a comment on the quality of work done to date. I want to be very clear about that. I have full faith that Committee has done some great work so far and considered all these issues. But I would just be more comfortable if the Committee went back and considered these issues head-on, it became part of the Record as Bill said. Frankly, if that can be done quickly, great. If that takes longer then I would suggest we also have a motion to affirmatively freeze what we have in place now until the Actuarial Committee can come back with something.

Mr. Olivieri:

Before I ask for any additional comments from the table here, I do know we have some extra folks out in the audience. Does anyone from the audience want to make a comment in regards to the topic? OK. Just wanted to cover that. Paula.

Ms. Gold:

As I said before, I appreciate all the work that the Actuarial Committee has done. The fact that it has been stated that they considered disproportionality and now we have a recommendation and we can see what the recommendation does in those 11 territories, I think it's really clearly before us whether that is disproportionate or not. I think it may take some time for the Actuarial Committee to deal with this so I could support freezing the credits for a year. If the Actuarial Committee comes back before then with a recommendation we can act on it and we can act that way, picking up on what Paolo said.

My concern is that it's going to come back with the same recommendation with more justifications for it and we'll be back exactly where we are now which is, there is a statute. I have no doubt that everybody is trying to act in good faith, but is the market reduction in credits in the 11 territories that have been of interest to the Department in keeping with the statute. If people want to take more time to think about that then freeze the credits and send it back. I don't think it's going to take a month. They've already met four times. We have heard that this has been considered. This has been considered. They tried to come to a compromise in terms of applying the standard methodology and there may be more questions now that that methodology doesn't work consistent with the statute when the MAIP is this small. As the Attorney General said, this board is not relieved of its responsibility to set credits when the MAIP is small. It has been a success and everybody's done a

very good job but we're at a different point now. I would say that I have obviously no objection if people want to re-look at it and re-study but if it's going to re-study it and come up with 14 reasons why this is not disproportionate then we're just delaying dealing with that issue. But I would support a motion that Paolo made that we return and frozen for a year.

Mr. Olivieri:

My suggestion is if it does go back to Committee, you would probably want to show up at the Actuarial Committee and make your point heard. Having said that, John.

Mr. Kelly:

I would just say if it comes back with this justification for the current recommendation, it's because it's a good recommendation. I can support the Actuarial Committee's recommendation. I think we, with CAR staff, did great work there. I'd be happy to vote on that today. If the Committee feels more comfortable sending it back to the Actuarial Committee to address and provide more information, I can support that if we do that quickly. I think freezing is just kind of a transparent process of keeping credits high. The last thing I would say is everyone should look at the Quota Share Report. It's not like credits are going away. We have so many credits in the system. That's what we're trying to address here. If you look at the Quota Share Report, you have – rough numbers off the top of my head – something like 700 million credits and \$100 million of MAIP premium. I mean 700 million credits. We're reducing that down. It's not even close to the size of the MAIP premium out there. So it's not like credits are going away in this process. Credits are still being given in these territories out there. Again, I would support the recommendation that the Actuarial Committee made. If we want to bring it back to the Actuarial Committee for more information, that's fine. I would just be specific, Mr. Chairman, on what they're supposed to look at because it's a little fuzzy to me as to what is it that they're supposed to be addressing.

Mr. Olivieri:

John.

Mr. Tierney:

I just want to add one additional comment. I'm agreeing with John but if the Actuarial Committee comes back feeling strongly that their current recommendation is the appropriate one and that it addresses all of this, I think we then have to vote up or down on it and resolve it and not keep sending it back until we get a different answer. Ultimately, the ultimate determinator of whether this works or not is the Division of Insurance. I have no problem sending what the Actuarial Committee recommended to the Division of Insurance because I believe we worked very hard to address what we had been instructed to do. If the Commissioner says, you did a wonderful job, great. If the Commissioner says, you did a wonderful job but, we'll hear from him in very clear language as to what we did right and what we could have done better as opposed to us debating this or putting it off for years because keeping the status quo works for some and doesn't work for others.

Mr. Olivieri:

Jim, I just want to address one point John said. I can guarantee you this, if it does get put back to Actuarial, if that's the consensus of the

Committee, I will do everything in my power to get a vote out of this group at the next Special Governing Committee meeting because that's what we'd end up having to do. As I said, we don't have an option. Option C is off the table.

Mr. Henning: And there are time considerations.

Mr. Olivieri: There are time considerations. John, to your point, if it does come back,

we'll have to vote one way or the other. That's not going to be an issue.

Mr. Olivieri: Jim.

Mr. Hyatt: That was just my question. Practically, just for the Committee, what is

the timeframe where a decision would need to be made?

Mr. Henning: I would say we'd have to do it – when do we think for the special

meeting, January?

Mr. Olivieri: I would think it's January.

Mr. Henning: We'd have to have a vote in order to send – it would be a Rule

amendment that would have to be sent to the DOI, give them enough time to see if an appeal is filed. Even then that's – because it has to be in

place by the time the old one runs out.

Mr. Olivieri: Again, I'm making some assumptions here but if it were to go that route

- I'm not saying it's going to, whatever the Committee's decision is - I'd charge the Actuarial specifically what to look at, meet in December, get a report back, and we'd have something in the first half of January so we'd

have time to meet all of our deadlines. Joe.

Mr. Leahy: I just have one question for John. John, you've been through this whole

process, do you see any changes? If we do send it back to Actuarial, do you realistically see any changes? Knowing everything that has been vetted, that in the end it was a 9 to 2 vote, do you really see any changes

forthcoming from Actuarial.

Mr. Tierney: One correction. It was an 8 to 2 vote.

Mr. Leahy: I'm sorry, 8 to 2.

Mr. Tierney: I'm good with numbers. I don't see it changing because I sincerely

believe that the Committee did the work that it was supposed to do. That's why it took so many meetings. There is, and Bill mentioned this earlier, if there is a need for better documentation from the Committee as to what they did, how they did it, and how they got to where we are, that's a worthwhile exercise. But I don't necessarily see us getting together and coming up with a brand new piece of paper with a whole

different formula on it.

Mr. Henning: Can I just – Maryellen...

Transcript of Meeting Governing Committee

Mr. Olivieri: Counsel and then Bill.

Mr. Henning: Maryellen, do you have concerns if we weren't able to take the vote until

January? Would that back you guys to get it done by March?

Ms. Thompson: I don't think it's us that updates them.

Mr. Henning: Right. But what I'm saying is assuming that we would get the Rule

amendments to you guys.

Ms. Gold: Then there was a hearing.

Ms. Thompson: That's the concern. If someone asks for hearing there's no guarantee of

any timeframe whatsoever.

Mr. Olivieri: I'm going to take this in order. Bill.

Mr. Cahill: I appreciate all the comments. I think that what I would definitely

suggest is that we refer it back. I don't want to predict what the Actuarial Committee is actually going to do. I don't want to try to foresee. I would actually leave it to them other than, John, do you have a specific question? I feel like we've got a question that's all around the statutory issue. It's been raise by Governing Committee members. It's been raised by the Attorney General's Office. I think that's really the main point here. Does the Actuarial Committee feel that the proposal that's coming back addresses this particular requirement? The only other thing I would suggest is I'm happy to make a motion but I wouldn't include an alternative about keeping the existing credit program in place. I actually feel like it's a good thing from a time constraint standpoint to require us to get a backup here or deal with it in January. It sounds like the Budget Committee, which we'll get to in a little bit, we may end up needing a January meeting anyway. My thought is to leave that part out, Paolo. I know you had raised that. My thought is it's good to have the time pressure to make sure it comes back up and then we're forced to

deal with it.

Mr. Olivieri: Paula had her hand up. Did somebody else have their hand up? Paula,

Paolo, and then I'd like to see if we can get a motion.

Ms. Gold: Don't we have a transcript of the Actuarial Committee? Is there a

transcript of those Committee meetings?

Ms. Hubley: We have a recording. We can create a transcript.

Ms. Gold: It wasn't indicated here that that was fully looked at in those meetings.

So I just point that out that to the extent that you want a full Record,

there are transcripts of four meeting that could be made available.

Mr. Olivieri: Paolo and then Bill.

Mr. Abelli: Just to try and draw this to a conclusion, I'm with Bill. I feel like we

should remand this - and, again, like I'm saying, it's no judgment on the

Mr. Olivieri:

Mr. Hyatt:

Mr. Leahy:

Mr. Olivieri:

work that was done. The reason I think it's good to have a credit program is more of a backstop. Let's say we cannot get ourselves organized and let's say there's a hearing, et cetera, at least we have a credit program that's in place. I think we're sort of pretty close or on the same page as Bill and I in terms of, let's get this back, and I favor that kind of motion. I prefer to have a backstop of at least we voted on this credit program so if things slide we can do that in January too.

Mr. Olivieri: Bill, make a comment and then I'm going to move this along.

Mr. Cahill: I was just going to make a motion.

was just going to make a motion.

Before you make a motion, I think it's in this organization's best interest at this point – there's been a number of different comments. In talking with Counsel and my Vice Chair, I think the safer route for us to go at this point - and I think the work that was done by actuarial staff and whatnot is very good. I think it's potentially at this point because we're probably not going to have a very one-sided vote at this point anyways for us to send it back to Actuarial, focus on the territories that basically we're talking about are being addressed, and make sure that we have vetted those, go through the transcript, get out as much information we can to the Governing Committee because I'm not sure of the dates yet. But we are going to have to react to this relatively quickly. It's probably going to be very early in January that we're going to have to have a Special Governing Committee meeting. Like I said, we don't have an option to do nothing. We have to do something and I want to make sure we do it the right way. It's better if we have everybody or the vast majority of the folks around this table on board. Having said that, if anybody wants to speak against my plan please feel free to do so.

The only comment I would make is I think John had mentioned this a little bit earlier, if this goes back to the Actuarial Committee is to look at the statistics and the data and not just at a snapshot in time. Let's look at it over a number of years ago to today. Let's really understand the trends in those territories and see if that sheds any additional light on the direction we should go.

Mr. Olivieri: Joe.

The only thing I would ask is that, I mean, we're all here today in theory that we were going to vote on this, moving it to January that at least an effort can be made in advance to try to find a common date which we all

can be here. I think that's the fairest way.

We're going to – I will make sure that everyone is notified as early in advance for their availability and then we'll go with the largest number of participants serving on the Committee that can make the date. You'll probably get that email very shortly. We'll schedule this one far enough in advance. OK. Actuarial Committee is going to schedule a meeting as soon as possible. We'll get some dates out for a Special Governing Committee meeting. Like I said, not to be repetitive, but we need to get this done much sooner rather than later.

Mr. Cahill: John, do you need a motion? Are you electing based upon the discussion

to refer it back as Chair?

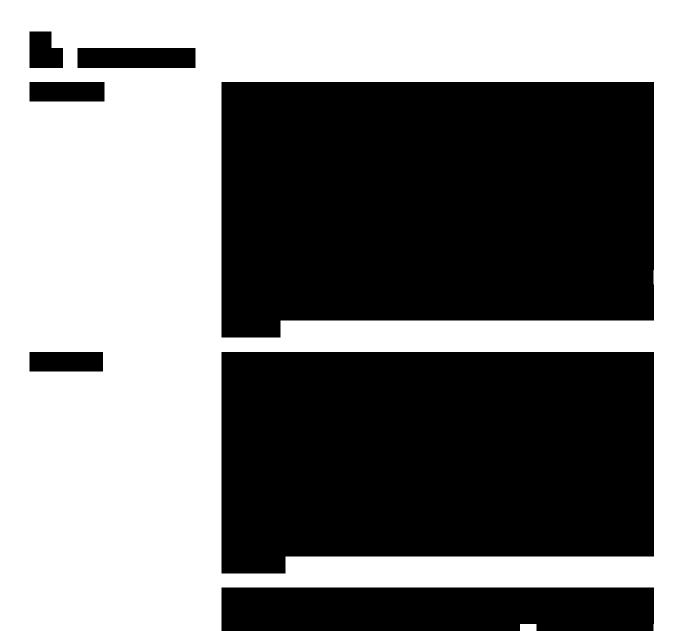
I'm just going to refer it back as Chair. That way we don't need a motion. We don't need additional discussion. I haven't entertained a Mr. Olivieri:

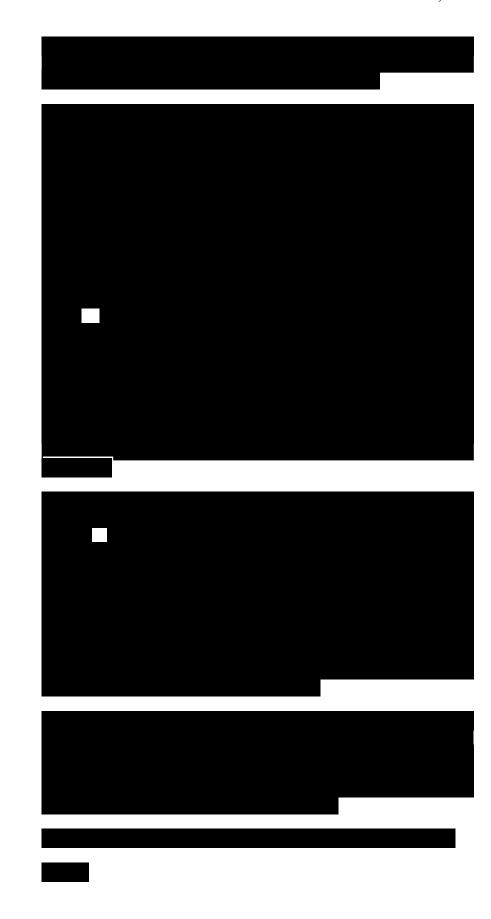
motion to go with the recommendation.

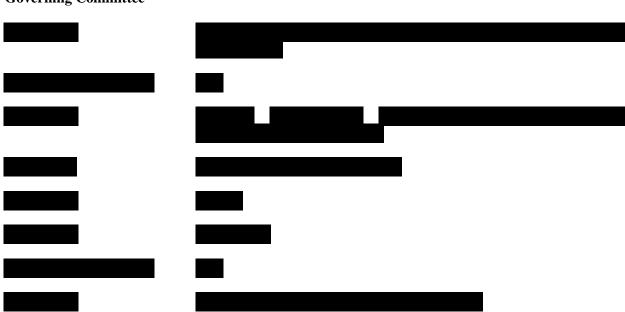
Mr. Cahill: Understood. OK. Very good.

Mr. Olivieri: No problem. Anything else on Actuarial? Who thought Actuarial would

be that exciting other than John Tierney?







(Meeting ended at 12:27 p.m.)

NATALIE A. HUBLEY President

Note: This Transcript has not been approved. It will be considered for approval at the next meeting of the Governing Committee.

Boston, Massachusetts December 14, 2015

The above proceedings have been transcribed in accordance with CAR's guidelines for producing quality transcripts, which provide for the elimination of insignificant material that does not alter the substance of the Committee's discussions, such as sidebar comments, the use of verbal fillers (i.e., uhm's and ah's), and commentary (i.e., "laughter" and "coughing").

ATTACHMENT LISTING

Docket #GC15.02, Exhibit #8

Attendance Listing

GOVERNING COMMITTEE MEETING SIGN-IN SHEET WEDNESDAY, NOVEMBER 18, 2015

Individual's Name

Company / Agency

Individual's Name PLEAS	Company / Agency SE PRINT
Mayor ble ylmasoson	DOT
Mayelle Hungson	& aroult Rode
Aymylen Do Rman	Economy I. A.
Minon Staule	Heridian Ins
William Cahill	Harrar Ins
Chris Jarrard	GEICO
Chris Dupin	EM Freedman Ins.
John Kerly	MAPFRE USA
JOE LEAHY	LEAHY & BROWN
PAOLO ABELLI	LIBERTY MUTUAL
John Tionus	QUINCY MUTUAL
MACIE - ARMEL THEODAT	R. THEODOT INBURANCE AGCY
Ellie Myers	Morrison Manoney LLP
Matt Hom	Marisa Makay CLP
Natalie Hubbles	CAR
Migh always	AG-ENT
Firm Hyget	Arbella
Regina Nagle	CAR
<i>0</i> - 1 - 1 - 1	

GOVERNING COMMITTEE MEETING SIGN-IN SHEET WEDNESDAY, NOVEMBER 18, 2015

Individual's Name

Company / Agency

Individual's Name PLEAS	E PRINT
PETER MCCABE	CAR STAFF
Robin Treges	CAR Staff
Timothy Galligan	CAR
Yarah Clemens	Mapper/Commerce
B. Feinley	AGO
Ken Willis	Plymonth Rock
GEOFF ARNOLL	~~
BARRY Tagen	Pilgrim
Sean Thompson	Hanever
DAVID BAFFAR	HANOVER
Robert A. Alessi	CAR
Shannon Clien	CAR
Koty Robbins	CAR
PAUL COLOMAN	SAFety
Elizabeth Brodeur	Safety
JOHN NETCALFE	CAR
Sin Costar	CIR
HALL CAMPLA	AusTATE
Bruce Cregger	Encompass
Wendy Browne	CAR
marian adgate	CHR
Seve Gartier	CAK
MARK ALUS	CAR
Richard Davion	CAR
DAVID HASSEY	mill (x) JNSU/ML

GOVERNING COMMITTEE MEETING SIGN-IN SHEET WEDNESDAY, NOVEMBER 18, 2015

Individual's Name

Company / Agency

PLEAS)	E PRINT
CARPUL FOLEY	HMOVER



COMMONWEALTH AUTOMOBILE REINSURERS

225 Franklin Street Boston, Massachusetts 02110
www.commauto.com 617-338-4000

NOTICE OF MEETING

ACTUARIAL COMMITTEE

A meeting of the Actuarial Committee will be held at the offices of Commonwealth Automobile Reinsurers, 225 Franklin Street, Boston, on

THURSDAY, DECEMBER 10, 2015 AT 10:00 A.M.

MEMBERS OF THE COMMITTEE

Mr. Joseph F. Cofield – Chair Metropolitan P & C Insurance Company

Plymouth Rock Assurance Corporation Mr. Geoffrey H. Arnold Mr. Jonathan E. Blake The Hanover Insurance Company Mr. Alex F. Butensky The Norfolk & Dedham Group EM Freedman Insurance Agency, Inc. Mr. Christopher Dupill Mr. Glenn R. Hiltpold Safety Insurance Company Mr. John V. Kelly MAPFRE U.S.A. Corporation Mr. Michael Petrarca, Jr. Amica Mutual Insurance Company Ms. Lynellen Ramirez Arbella Insurance Group Mr. John P. Tierney Quincy Mutual Group Liberty Mutual Group Ms. Meredith M. Woodcock

AGENDA

AC

15.01 Records of Previous Meeting

The Records of the Actuarial Committee meeting of October 7, 2015 should be read and approved.

AC

15.03 Quota Share Credits for Policies Effective April 1, 2016 and Later

The Governing Committee has directed the Actuarial Committee to further discuss its quota share credit proposal for policies effective April 1, 2016 and subsequent in order to consider whether and to

what extent the proposal complies with the statutory requirement 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."

An analysis of historical residual market shares by rate class and territory will be distributed as additional information prior to the meeting.

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 F. GALLIGAN Financial Services Coordinator

Boston, Massachusetts November 20, 2015

ADDITIONAL INFORMATION

TO MEMBERS OF THE ACTUARIAL COMMITTEE

FOR THE MEETING OF:

Thursday, December 10, 2015 at 10:00 a.m.

 \mathbf{AC}

15.03 Quota Share Credits for Policies Effective April 1, 2016 and Later

Attached is an analysis of historical residual market shares by rate class and territory relating to this agenda item. (Docket #AC15.03, Exhibit #28)

Also attached is an exhibit displaying historical residual market share relativities to the statewide average, as requested by the Chair. (Docket #AC15.03, Exhibit #29)

Also attached is correspondence from the Office of the Attorney General and Plymouth Rock Assurance Corporation relative to the April 1, 2016 and later credit offer, as presented to the Governing Committee at its November 18, 2015 meeting. (Docket #AC15.03, Exhibits #30 and 31)

TIMOTHY F. GALLIGAN Financial Services Coordinator

Attachments

Boston, Massachusetts December 4, 2015

COMMONWEALTH AUTOMOBILE REINSURERS

225 Franklin Street Boston, Massachusetts 02110

www.commauto.com

617-338-4000

MEMORANDUM

To: Actuarial Committee

From: Tim Galligan

Financial Services Coordinator

Date: December 4, 2015

Re: AC 15.03 Exhibit # 28 - Historical Residual Market Shares

The Governing Committee has directed the Actuarial Committee to further discuss its quota share credit proposal for policies effective April 1, 2016 and subsequent in order to consider whether and to what extent the proposal complies with the statutory requirement 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."

Attached is an analysis of historical residual market shares by rate class (page 1) and territory (pages 2-4) to assist the Committee in its discussion.

The exhibit displays the past six years of "Rolling Twelve Month" residual market shares valued as of March of each year, and calculates relativities to the overall statewide average residual market share. The current year uses the most recent data available, April, 2015 – September, 2015.

The Division of Insurance (DOI) territories shown represent those eleven territories previously noted as areas of interest by the Commissioner of Insurance and include Chelsea (16), Hyde Park (20), Dorchester (21), Roxbury (22), Charlestown and East Boston (26), Holyoke (40), Lowell (41), Springfield (42), Lynn (43), Lawrence (44), and Brockton (45).

The exhibit also includes a summary of data that is credit eligible vs. non-credit eligible, using the following approved credit factors:

<u>Data:</u>	<u>Credit Factors</u>
April, 2015 – Sept., 2015	4/1/2015 Credits
Roll 12 @ March, 2015	4/1/2014 Credits
Roll 12 @ March, 2014	4/1/2013 Credits
Roll 12 @ March, 2013	4/1/2012 Credits
Roll 12 @ March, 2012	4/1/2011 Credits
Roll 12 @ March, 2011	4/1/2010 Credits

Commonwealth Automobile Reinsurers - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group Residual Market Shares Relativities to Statewide Average Summary By Rate Class

Rate		"Roll 12	2" Residu	ıal Marke	t Share		Relative to Statewide Average					DOI Territories Residual Mkt Shr						
<u>Class</u>	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Ap15+	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Ap15+	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Ap15+
10	2.8%	3.0%	2.7%	2.1%	1.5%	1.3%	1.1	1.1	1.1	1.1	1.0	1.0	9.2%	9.1%	7.5%	5.0%	3.5%	3.2%
15	0.6%	0.8%	0.8%	0.7%	0.6%	0.6%	0.2	0.3	0.3	0.3	0.4	0.4	3.0%	3.4%	3.1%	2.7%	2.3%	2.2%
17	6.6%	6.6%	5.7%	4.3%	3.2%	2.8%	2.4	2.4	2.3	2.2	2.2	2.1	16.1%	15.7%	13.6%	8.7%	6.4%	5.9%
18	2.3%	2.3%	2.0%	1.5%	1.0%	0.9%	0.9	0.8	0.8	0.8	0.7	0.7	8.4%	7.5%	6.0%	3.5%	2.2%	1.8%
20	18.8%	18.0%	15.5%	10.4%	8.2%	8.5%	7.0	6.4	6.2	5.4	5.7	6.4	29.3%	30.3%	27.4%	18.8%	15.0%	14.8%
21	7.0%	6.7%	6.3%	3.8%	2.4%	2.5%	2.6	2.4	2.5	2.0	1.7	1.8	15.2%	12.9%	13.1%	5.8%	3.5%	3.8%
25	3.5%	3.0%	2.8%	2.3%	1.8%	1.6%	1.3	1.1	1.1	1.2	1.2	1.2	10.1%	8.4%	8.0%	5.7%	4.4%	3.8%
26	1.0%	1.1%	1.0%	0.8%	0.6%	0.6%	0.4	0.4	0.4	0.4	0.4	0.4	4.4%	3.7%	2.8%	1.7%	1.4%	1.3%
30	1.3%	1.3%	1.2%	1.1%	0.9%	0.7%	0.5	0.5	0.5	0.6	0.6	0.5	3.8%	3.3%	2.9%	2.4%	1.9%	2.0%
MC/Misc.	2.7%	2.8%	2.4%	2.3%	1.9%	2.0%	1.0	1.0	1.0	1.2	1.3	1.5	8.0%	7.7%	6.6%	5.9%	4.8%	5.7%
Total	2.7%	2.8%	2.5%	1.9%	1.4%	1.3%						•	9.1%	8.9%	7.5%	5.1%	3.7%	3.5%
								Cre	dit Eligibl	e Exposi	ıres							
Rate		"Poll 13	2" Posidu	ıal Marke	t Share			Polativ	ve to Stat	towide A	vorage	1		DOI To	rritories F	Posidual	Mkt Shr	1
Class	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Ap15+	Mar-11	Mar-12				Ap15+	Mar-11	Mar-12		Mar-14	Mar-15	Ap15+
10	8.9%	9.0%	7.3%	4.9%	3.4%	3.3%	3.3	3.2	2.9	2.5	2.4	2.5	9.2%	9.1%	7.5%	5.0%	3.5%	3.3%
15	6.6%	7.1%	6.2%	5.1%	4.7%	4.9%	2.5	2.5	2.5	2.6	3.3	3.7	6.6%	7.1%	6.2%	5.1%	4.7%	4.9%
17	9.0%	8.9%	7.6%	5.8%	4.3%	4.1%	3.3	3.2	3.1	3.0	3.0	3.1	16.1%	15.7%	13.6%	8.7%	6.4%	5.9%
18	7.8%	7.4%	5.9%	3.2%	2.2%	2.0%	2.9	2.6	2.4	1.7	1.6	1.5	8.2%	7.5%	6.0%	3.5%	2.1%	1.7%
20	18.8%	18.1%	15.5%	10.3%	8.2%	8.6%	7.0	6.5	6.3	5.4	5.7	6.4	29.3%	30.3%	27.4%	18.8%	15.0%	14.8%
21	9.5%	8.5%	8.3%	4.6%	3.0%	3.1%	3.5	3.0	3.3	2.4	2.1	2.3	15.5%	12.9%	13.1%	5.8%	3.5%	3.8%
25	6.5%	6.0%	5.3%	4.8%	4.2%	3.9%	2.4	2.1	2.1	2.5	2.9	3.0	10.1%	8.4%	8.0%	5.7%	4.4%	4.4%
26	5.2%	4.1%	1.4%	0.4%	2.2%	1.0%	1.9	1.5	0.6	0.2	1.5	0.8	5.2%	4.1%	1.4%	0.4%	2.2%	1.0%
30	5.5%	5.2%	3.2%	2.7%	3.0%	2.6%	2.0	1.9	1.3	1.4	2.1	1.9	5.7%	5.2%	3.4%	2.8%	3.5%	2.4%
MC/Misc.	6.1%	6.5%	5.6%	5.4%	4.3%	4.8%	2.3	2.3	2.2	2.8	3.0	3.6	8.0%	7.7%	6.6%	5.9%	4.8%	5.7%
Total	9.2%	9.2%	7.6%	5.4%	3.9%	3.9%	3.4	3.3	3.1	2.8	2.7	3.0	9.9%	9.7%	8.1%	5.5%	3.9%	3.9%
. 5.6.	0.2,0	0.270	110,0	01170	0.070	0.070	•		redit Elig			0.0	0.070	J., 70	511,70	0.070	0.070	0.070
								NOIT-C	realt Lily	ible Expt	JSules							
Rate		"Roll 12	2" Residu	ıal Marke	t Share			Relativ	ve to Stat	tewide A	verage			DOI Te	rritories F	Residual	Mkt Shr	
<u>Class</u>	Mar-11	Mar-12	Mar-13	Mar-14	<u>Mar-15</u>	<u>Ap15+</u>	Mar-11	Mar-12	Mar-13	Mar-14	<u>Mar-15</u>	Ap15+	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Ap15+
10	2.1%	2.4%	2.1%	1.7%	1.3%	1.1%	8.0	8.0	0.9	0.9	0.9	0.8	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%
15	0.6%	0.7%	0.7%	0.6%	0.5%	0.5%	0.2	0.2	0.3	0.3	0.4	0.4	2.4%	2.7%	2.5%	2.2%	1.8%	1.7%
17	3.5%	3.7%	3.5%	3.1%	2.3%	2.0%	1.3	1.3	1.4	1.6	1.6	1.5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	1.9%	1.9%	1.7%	1.3%	0.9%	0.9%	0.7	0.7	0.7	0.7	0.7	0.7	9.4%	0.0%	0.0%	4.2%	2.3%	1.8%
20	4.9%	3.1%	3.6%	0.0%	0.3%	5.2%	1.8	1.1	1.4	0.0	0.2	3.9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
21	3.8%	4.0%	3.5%	2.3%	1.4%	2.1%	1.4	1.4	1.4	1.2	1.0	1.6	10.2%	0.0%	0.0%	0.0%	0.0%	0.0%
25	2.6%	2.4%	2.2%	1.9%	1.6%	1.5%	1.0	0.9	0.9	1.0	1.1	1.1	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%
26	1.0%	1.1%	1.0%	0.8%	0.6%	0.5%	0.4	0.4	0.4	0.4	0.4	0.4	3.9%	3.6%	3.0%	1.8%	1.3%	1.3%
30	1.1%	1.3%	1.2%	1.0%	0.9%	0.7%	0.4	0.4	0.5	0.5	0.6	0.5	2.4%	2.8%	2.7%	2.1%	1.8%	2.0%
MC/Misc.	2.1%	2.3%	2.0%	1.9%	1.6%	1.7%	8.0	8.0	0.8	1.0	1.1	1.2	0.0%	0.0%	0.0%	0.0%	4.1%	4.9%
Total	1.9%	2.0%	1.9%	1.5%	1.1%	1.0%	0.7	0.7	0.7	8.0	8.0	8.0	2.6%	2.7%	2.6%	2.2%	1.8%	1.9%
Credit/Non-Credit	4.9	4.5	4.1	3.5	3.5	3.8							3.9	3.6	3.2	2.5	2.2	2.1

Commonwealth Automobile Reinsurers - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group Residual Market Shares Relativities to Statewide Average Summary By Territory

All Exposures (Credit Eligible + Non-Credit Eligible)

	R12 Residual Market Share						Relative to Statewide Average						
<u>Territory</u>	<u>Mar-11</u>	<u>Mar-12</u>	<u>Mar-13</u>	<u>Mar-14</u>	<u>Mar-15</u>	<u> Ap15+</u>	<u>Mar-11</u>				<u>Mar-15</u>		
1	1.1%	1.3%	1.2%	1.0%	0.7%	0.7%	0.4	0.4	0.5	0.5	0.5	0.5	
2	1.1%	1.2%	1.2%	1.0%	0.8%	0.7%	0.4	0.4	0.5	0.5	0.5	0.5	
3	1.4%	1.6%	1.5%	1.2%	0.8%	0.8%	0.5	0.6	0.6	0.6	0.6	0.6	
4	1.2%	1.3%	1.2%	1.0%	0.8%	0.7%	0.4	0.4	0.5	0.5	0.6	0.5	
5	1.8%	2.0%	1.9%	1.5%	1.1%	1.0%	0.7	0.7	8.0	8.0	8.0	0.8	
6	1.8%	2.0%	1.9%	1.6%	1.2%	1.0%	0.7	0.7	8.0	8.0	8.0	0.8	
7	2.5%	2.7%	2.3%	1.9%	1.4%	1.3%	0.9	0.9	0.9	1.0	1.0	1.0	
8	2.2%	2.4%	2.2%	1.8%	1.4%	1.2%	0.8	8.0	0.9	0.9	0.9	0.9	
9	3.5%	3.5%	2.9%	2.1%	1.5%	1.5%	1.3	1.3	1.2	1.1	1.0	1.1	
10	2.8%	3.0%	2.9%	2.3%	1.7%	1.6%	1.0	1.1	1.2	1.2	1.2	1.2	
11	2.4%	2.6%	2.2%	1.8%	1.3%	1.1%	0.9	0.9	0.9	0.9	0.9	8.0	
12	2.8%	3.0%	2.6%	2.2%	1.7%	1.6%	1.0	1.1	1.1	1.1	1.2	1.2	
13	4.6%	4.8%	4.4%	3.4%	2.5%	2.3%	1.7	1.7	1.8	1.8	1.8	1.8	
14	4.6%	5.0%	4.3%	3.4%	2.5%	2.5%	1.7	1.8	1.7	1.8	1.7	1.9	
15	5.4%	5.9%	5.1%	3.5%	2.5%	2.6%	2.0	2.1	2.1	1.8	1.7	2.0	
16	9.6%	10.0%	7.9%	6.0%	4.3%	4.4%	3.6	3.6	3.2	3.1	3.0	3.3	
17	2.3%	2.3%	2.1%	1.8%	1.6%	1.7%	0.9	8.0	0.9	1.0	1.1	1.3	
18	6.9%	6.8%	5.8%	4.5%	3.8%	3.5%	2.6	2.4	2.3	2.3	2.7	2.7	
19	4.8%	4.8%	4.0%	3.5%	2.9%	2.4%	1.8	1.7	1.6	1.8	2.0	1.8	
20	8.2%	8.2%	6.6%	5.3%	4.6%	5.3%	3.0	2.9	2.7	2.8	3.2	4.0	
21	10.8%	10.7%	8.9%	7.0%	5.6%	5.8%	4.0	3.8	3.6	3.7	3.9	4.3	
22	12.4%	12.7%	11.2%	8.6%	6.4%	6.2%	4.6	4.5	4.5	4.5	4.4	4.7	
23	4.8%	4.9%	4.2%	3.1%	2.1%	1.8%	1.8	1.7	1.7	1.6	1.5	1.3	
24	3.7%	3.8%	2.8%	2.3%	1.7%	1.5%	1.4	1.3	1.1	1.2	1.2	1.1	
25	3.1%	2.8%	2.6%	1.8%	1.5%	1.3%	1.1	1.0	1.0	1.0	1.0	1.0	
26	5.9%	5.8%	4.5%	3.3%	2.4%	2.5%	2.2	2.1	1.8	1.7	1.7	1.9	
27	0.9%	1.0%	0.9%	0.8%	0.6%	0.6%	0.3	0.3	0.4	0.4	0.4	0.4	
40	12.8%	11.4%	8.4%	5.0%	3.2%	2.4%	4.7	4.1	3.4	2.6	2.2	1.8	
41	7.2%	6.9%	6.7%	4.0%	2.8%	2.5%	2.7	2.5	2.7	2.1	1.9	1.9	
42	9.8%	8.9%	6.9%	5.3%	3.2%	2.4%	3.6	3.2	2.8	2.7	2.3	1.8	
43	7.8%	7.7%	6.1%	3.9%	2.6%	2.7%	2.9	2.7	2.5	2.0	1.8	2.0	
44	9.5%	9.5%	9.1%	6.0%	4.7%	4.9%	3.5	3.4	3.7	3.1	3.3	3.6	
45	9.0%	9.6%	8.0%	4.3%	3.2%	3.3%	3.3	3.4	3.2	2.3	2.3	2.5	
99	0.7%	0.7%	0.6%	0.6%	0.5%	0.3%	0.3	0.3	0.3	0.3	0.4	0.2	
Tot	2.7%	2.8%	2.5%	1.9%	1.4%	1.3%							
DOI Terr	9.1%	8.9%	7.5%	5.1%	3.7%	3.5%	3.4	3.2	3.0	2.7	2.6	2.6	

Commonwealth Automobile Reinsurers - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group Residual Market Shares Relativities to Statewide Average Summary By Territory

Credit Eligible

	R12 Residual Market Share							Relative to Statewide Average						
											<u> </u>			
<u>Territory</u>	<u>Mar-11</u>	Mar-12	Mar-13	Mar-14	<u>Mar-15</u>	<u>Ap15+</u>	<u>Mar-11</u>				<u>Mar-15</u>			
1	10.7%	8.1%	5.2%	4.6%	5.6%	0.0%	4.0	2.9	2.1	2.4	3.9	0.0		
2	10.0%	8.7%	7.0%	4.4%	4.1%	3.6%	3.7	3.1	2.8	2.3	2.9	2.7		
3	10.7%	9.4%	7.9%	5.0%	3.9%	4.1%	4.0	3.4	3.2	2.6	2.7	3.1		
4	8.4%	8.0%	5.8%	4.0%	3.0%	2.6%	3.1	2.9	2.3	2.1	2.1	1.9		
5	5.7%	6.1%	5.1%	6.0%	4.4%	5.9%	2.1	2.2	2.1	3.1	3.1	4.5		
6	11.9%	12.8%	9.3%	7.4%	5.6%	4.8%	4.4	4.6	3.7	3.8	3.9	3.6		
7	7.3%	7.4%	5.8%	4.5%	3.3%	3.5%	2.7	2.6	2.3	2.3	2.3	2.6		
8	6.3%	7.5%	6.9%	5.0%	3.9%	3.4%	2.3	2.7	2.8	2.6	2.7	2.5		
9	8.0%	7.8%	6.0%	4.4%	3.2%	3.6%	3.0	2.8	2.4	2.3	2.2	2.7		
10	8.8%	8.2%	8.0%	5.1%	3.9%	3.4%	3.3	2.9	3.2	2.6	2.7	2.6		
11	8.9%	8.2%	6.1%	4.5%	3.0%	7.4%	3.3	2.9	2.5	2.4	2.1	5.5		
12	6.7%	7.7%	7.2%	5.4%	4.3%	4.9%	2.5	2.8	2.9	2.8	3.0	3.7		
13	8.4%	8.0%	7.4%	5.3%	5.0%	4.7%	3.1	2.8	3.0	2.8	3.5	3.5		
14	9.5%	10.1%	8.8%	7.6%	5.6%	5.0%	3.5	3.6	3.5	3.9	3.9	3.8		
15	6.3%	12.4%	5.8%	3.8%	2.7%	5.8%	2.3	4.4	2.4	2.0	1.9	4.4		
16	10.2%	10.6%	8.4%	6.3%	4.5%	4.6%	3.8	3.8	3.4	3.3	3.2	3.5		
17	8.9%	7.4%	7.1%	5.7%	4.9%	3.9%	3.3	2.6	2.9	3.0	3.4	2.9		
18	7.4%	7.2%	6.1%	4.8%	4.0%	3.7%	2.7	2.6	2.5	2.5	2.8	2.8		
19	11.8%	10.2%	8.5%	8.3%	6.4%	6.9%	4.4	3.7	3.4	4.3	4.5	5.2		
20	8.9%	8.9%	7.2%	5.8%	4.9%	5.8%	3.3	3.2	2.9	3.0	3.5	4.4		
21	10.8%	10.8%	8.9%	7.0%	5.6%	5.8%	4.0	3.8	3.6	3.7	3.9	4.4		
22	12.5%	12.7%	11.2%	8.6%	6.4%	6.2%	4.6	4.5	4.5	4.5	4.5	4.7		
23	14.9%	13.6%	11.2%	7.8%	5.4%	5.6%	5.5	4.8	4.5	4.1	3.8	4.2		
24	8.2%	9.6%	7.3%	4.5%	3.3%	3.2%	3.1	3.4	2.9	2.4	2.3	2.4		
25	12.8%	11.5%	9.3%	6.0%	6.5%	5.2%	4.8	4.1	3.8	3.1	4.5	3.9		
26	6.5%	6.4%	4.9%	3.5%	2.5%	6.4%	2.4	2.3	2.0	1.8	1.7	4.8		
27	10.6%	8.8%	7.0%	4.2%	2.7%	3.5%	3.9	3.2	2.8	2.2	1.9	2.6		
40	14.7%	13.1%	9.7%	5.6%	3.6%	2.5%	5.5	4.7	3.9	2.9	2.5	1.9		
41	7.9%	7.6%	7.3%	4.4%	3.0%	2.7%	2.9	2.7	3.0	2.3	2.1	2.0		
42	11.0%	9.9%	7.7%	5.7%	3.4%	2.5%	4.1	3.5	3.1	3.0	2.4	1.9		
43	8.8%	8.6%	6.9%	4.4%	2.9%	2.9%	3.3	3.1	2.8	2.3	2.0	2.2		
44	10.1%	10.1%	9.7%	6.3%	5.0%	5.1%	3.8	3.6	3.9	3.3	3.5	3.9		
45	10.0%	10.7%	8.8%	4.7%	3.5%	3.5%	3.7	3.8	3.6	2.4	2.5	2.6		
99	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0	0.0	0.0	0.7	0.0	0.0		
Tot	9.2%	9.2%	7.6%	5.4%	3.9%	3.9%	3.4	3.3	3.1	2.8	2.7	3.0		
DOI Terr	9.9%	9.7%	8.1%	5.5%	3.9%	3.9%	3.7	3.5	3.3	2.9	2.7	2.9		

Commonwealth Automobile Reinsurers - 4/1/2016 Credit Offer Indicated Private Passenger Auto Residual Market Share Group Residual Market Shares Relativities to Statewide Average Summary By Territory

Non-Credit Eligible

	R12 Residual Market Share							Relative to Statewide Average							
							-								
<u>Territory</u>	<u>Mar-11</u>	<u>Mar-12</u>	<u>Mar-13</u>	<u>Mar-14</u>	<u>Mar-15</u>	<u>Ap15+</u>	<u>Mar-11</u>				<u>Mar-15</u>				
1	1.1%	1.2%	1.1%	0.9%	0.7%	0.7%	0.4	0.4	0.5	0.5	0.5	0.5			
2	1.1%	1.2%	1.1%	1.0%	0.8%	0.7%	0.4	0.4	0.5	0.5	0.5	0.5			
3	1.4%	1.5%	1.4%	1.1%	0.8%	0.7%	0.5	0.5	0.6	0.6	0.6	0.6			
4	1.1%	1.2%	1.2%	1.0%	0.8%	0.7%	0.4	0.4	0.5	0.5	0.5	0.5			
5	1.6%	1.8%	1.7%	1.5%	1.1%	1.0%	0.6	0.6	0.7	8.0	0.8	0.7			
6	1.8%	2.0%	1.8%	1.5%	1.2%	1.0%	0.7	0.7	0.7	8.0	0.8	0.8			
7	2.2%	2.5%	2.2%	1.8%	1.3%	1.2%	8.0	0.9	0.9	0.9	0.9	0.9			
8	2.0%	2.2%	2.1%	1.7%	1.3%	1.1%	0.7	8.0	8.0	0.9	0.9	0.8			
9	3.2%	3.3%	2.7%	2.0%	1.4%	1.4%	1.2	1.2	1.1	1.1	1.0	1.0			
10	2.5%	2.8%	2.7%	2.2%	1.6%	1.5%	0.9	1.0	1.1	1.2	1.1	1.1			
11	2.1%	2.3%	2.0%	1.6%	1.3%	1.1%	8.0	8.0	8.0	0.9	0.9	8.0			
12	2.5%	2.7%	2.4%	2.0%	1.6%	1.4%	0.9	1.0	1.0	1.1	1.1	1.1			
13	4.3%	4.5%	4.1%	3.2%	2.3%	2.1%	1.6	1.6	1.7	1.7	1.6	1.6			
14	4.1%	4.5%	3.9%	3.0%	2.2%	2.2%	1.5	1.6	1.6	1.5	1.5	1.6			
15	1.2%	5.2%	2.1%	2.1%	1.4%	2.2%	0.5	1.9	8.0	1.1	0.9	1.6			
16	3.0%	3.9%	3.0%	2.5%	2.3%	2.0%	1.1	1.4	1.2	1.3	1.6	1.5			
17	2.1%	2.2%	1.9%	1.7%	1.5%	1.7%	0.8	8.0	8.0	0.9	1.1	1.3			
18	3.7%	4.1%	3.2%	2.6%	2.6%	2.0%	1.4	1.5	1.3	1.4	1.8	1.5			
19	4.4%	4.4%	3.7%	3.3%	2.7%	2.3%	1.6	1.6	1.5	1.7	1.9	1.7			
20	3.0%	3.0%	2.8%	2.5%	2.6%	3.0%	1.1	1.1	1.1	1.3	1.8	2.3			
21	4.3%	3.9%	3.5%	0.8%	2.7%	1.8%	1.6	1.4	1.4	0.4	1.9	1.4			
22	9.4%	8.5%	11.8%	0.0%	0.0%	0.0%	3.5	3.0	4.8	0.0	0.0	0.0			
23	4.2%	4.3%	3.7%	2.8%	1.9%	1.5%	1.6	1.5	1.5	1.4	1.3	1.1			
24	3.4%	3.4%	2.5%	2.2%	1.5%	1.3%	1.2	1.2	1.0	1.1	1.1	1.0			
25	2.8%	2.6%	2.4%	1.7%	1.3%	1.2%	1.0	0.9	1.0	0.9	0.9	0.9			
26	1.5%	1.6%	2.1%	1.9%	1.8%	2.1%	0.5	0.6	0.9	1.0	1.2	1.6			
27	0.8%	0.9%	0.9%	0.8%	0.6%	0.5%	0.3	0.3	0.4	0.4	0.4	0.4			
40	3.4%	2.6%	2.3%	1.9%	1.3%	1.4%	1.3	0.9	0.9	1.0	0.9	1.0			
41	1.6%	1.8%	2.2%	1.6%	1.1%	1.2%	0.6	0.7	0.9	8.0	8.0	0.9			
42	3.1%	3.3%	3.0%	3.2%	2.5%	1.9%	1.2	1.2	1.2	1.7	1.8	1.4			
43	1.5%	1.9%	1.7%	1.3%	1.1%	1.0%	0.6	0.7	0.7	0.7	8.0	8.0			
44	2.3%	3.0%	3.3%	2.6%	2.2%	2.3%	0.9	1.1	1.3	1.4	1.6	1.7			
45	3.1%	3.3%	2.8%	2.1%	1.5%	1.9%	1.1	1.2	1.1	1.1	1.1	1.4			
99	0.7%	0.7%	0.6%	0.6%	0.5%	0.3%	0.3	0.3	0.3	0.3	0.4	0.2			
Tot	1.9%	2.0%	1.9%	1.5%	1.1%	1.0%	0.7	0.7	0.7	8.0	8.0	8.0			
DOI Terr	2.6%	2.7%	2.6%	2.2%	1.8%	1.9%	1.0	1.0	1.0	1.1	1.3	1.4			

COMMONWEALTH AUTOMOBILE REINSURERS

225 Franklin Street Boston, Massachusetts 02110

www.commauto.com

617-338-4000

MEMORANDUM

To: Actuarial Committee

From: Tim Galligan

Financial Services Coordinator

Date: December 4, 2015

Re: AC 15.03 Exhibit # 29 – Residual Market Share Summary – Cell Variations

Attached is an analysis of historical residual market share relativities to the statewide average requested by the Chairman. The relativities are shown for the current year vs. the prior year in credit cell variations as described below.

Cells Remaining Creditless

These residual market share relativities are calculated using data for those class/territory cells that have no credit value in both the current and prior year.

Non-Zero Credits That Stay the Same

These residual market share relativities are calculated using data for those class/territory cells that have the same credit factor in both the current and prior year.

0 Credit Cells That GAIN Credit

These residual market share relativities are calculated using data for those class/territory cells that have no credit value in the prior year and gain a credit in the current year.

Credit Cells That LOSE Credit

These residual market share relativities are calculated using data for those class/territory cells that had a credit in the prior year and lose the entire credit in the current year.

Existing Credit Cells with Increase

These residual market share relativities are calculated using data for those class/territory cells that have a credit in the prior year that is increased in the current year.

Existing Credit Cells with Decrease

These residual market share relativities are calculated using data for those class/territory cells that have a credit in both years, with a lower credit in the current year.

The historical data and associated credit factors used in this exhibit are as follows:

MAIP Year	<u>Data:</u>	Credit Factors
2015-2016	April, 2015 – Sept., 2015	4/1/2015 Credits
2014-2015	Rolling 12 @ March, 2015	4/1/2014 Credits
2013-2014	Rolling 12 @ March, 2014	4/1/2013 Credits
2012-2013	Rolling 12 @ March, 2013	4/1/2012 Credits
2011-2012	Rolling 12 @ March, 2012	4/1/2011 Credits
2010-2011	Rolling 12 @ March, 2011	4/1/2010 Credits

Commonwealth Automobile Reinsurers - 4/1/2016 Credit Offer Residual Market Shares Relativities to Statewide Average Summary By Credit Cell Variation

				Cells Remaining Creditless				0 Credit Cells	that GAIN C	redit
	Credits	MAIP	# of	Res Mkt Ra	tio to Statew	ide Average	# of	Res Mkt Ra	tio to Statewi	ide Average
Data Used	Effective	Year	Cells	Previous	Current	Impact	Cells	Previous	Current	Impact
R12 @ 3/1/2011	4/1/2010	2010-11	129	0.63	0.68	+7.9%	8	2.49	2.35	-5.5%
R12 @ 3/1/2012	4/1/2011	2011-12	171	0.70	0.72	+3.8%	10	2.93	2.42	-17.4%
R12 @ 3/1/2013	4/1/2012	2012-13	177	0.72	0.75	+3.4%	5	2.14	2.08	-3.1%
R12 @ 3/1/2014	4/1/2013	2013-14	172	0.75	0.78	+4.9%	6	1.76	1.42	-19.2%
R12 @ 3/1/2015	4/1/2014	2014-15	178	0.79	0.79	+0.3%	3	2.81	1.97	-29.8%
4/15 - 9/15	4/1/2015	2015-16	191	0.81	0.77	-3.9%	1	4.27	3.89	-8.9%

			Nor	Non-Zero Credits That Stay The Same				redit Cells that	at LOSE ALL	Credit
	Credits	MAIP	# of	Res Mkt Ra	itio to Statewi	de Average	# of	Res Mkt Ra	tio to Statew	ide Average
Data Used	Effective	Year	Cells	Previous	Current	Impact	Cells	Previous	Current	Impact
R12 @ 3/1/2011	4/1/2010	2010-11	27	7.83	5.93	-10.7%	52	1.22	1.12	-8.0%
R12 @ 3/1/2012	4/1/2011	2011-12	99	3.43	3.22	-6.2%	11	1.87	1.89	+1.2%
R12 @ 3/1/2013	4/1/2012	2012-13	5	7.59	7.67	+1.1%	1	1.65	2.36	+43.0%
R12 @ 3/1/2014	4/1/2013	2013-14	132	3.04	2.70	-11.3%	9	1.68	1.73	+3.2%
R12 @ 3/1/2015	4/1/2014	2014-15	127	2.69	2.62	-2.9%	14	1.59	1.85	+16.4%
4/15 - 9/15	4/1/2015	2015-16	112	2.69	2.85	+5.9%	22	1.57	1.77	+12.6%

				Existing Cre	dit With Incre	ase		Existing Cred	dit With Decre	ease
	Credits	MAIP	# of	Res Mkt Ra	atio to Statewi	de Average	# of	Res Mkt Ra	atio to Statewi	de Average
Data Used	Effective	Year	Cells	Previous	Current	Impact	Cells	Previous	Current	Impact
R12 @ 3/1/2011	4/1/2010	2010-11	36	4.79	4.29	-10.3%	88	3.20	2.97	-7.3%
R12 @ 3/1/2012	4/1/2011	2011-12	13	3.60	3.40	-5.6%	36	4.17	4.00	-3.9%
R12 @ 3/1/2013	4/1/2012	2012-13	113	3.06	2.88	-5.9%	39	6.34	6.26	-1.2%
R12 @ 3/1/2014	4/1/2013	2013-14	1	3.78	1.90	-49.7%	20	6.24	5.10	-18.2%
R12 @ 3/1/2015	4/1/2014	2014-15	1	3.80	7.84	+106.4%	17	7.98	8.66	+8.5%
4/15 - 9/15	4/1/2015	2015-16	0	0.00	0.00		14	6.96	7.76	+11.6%

NOTE: MAIP Year 2015-16 data covers 4/2015-9/2015 only. Previous year comparison is to 4/2014-9/2014.



THE COMMONWEALTH OF MASSACHUSETTS OFFICE OF THE ATTORNEY GENERAL

ONE ASHBURTON PLACE BOSTON, MASSACHUSETTS 02108

> TEL: (617) 727-2200 www.mass.gov/ago

November 13, 2015

Governing Committee Commonwealth Automobile Reinsurers 225 Franklin Street Boston, MA 02110

Dear Members of the Governing Committee,

We are writing to express our concern regarding the Actuarial Committee's proposed reduction in quota share credits in certain territories in the Massachusetts Auto Insurance Plan ("MAIP").

Despite the depopulation of the residual market, a number of territories remain substantially overrepresented in the MAIP. These territories are generally low-income areas with significant minority populations. While the percentage of policyholders in these territories who are insured through the MAIP is small (for instance, over 90% of policyholders in Roxbury obtain insurance in the voluntary market), the territories still have more drivers trapped in the residual market than they should. This is particularly evident in territories where there are much higher proportions of MAIP risks than exist on average statewide. For example, the ratio of MAIP market share to statewide market share is 453% in Roxbury, 396% in Dorchester, 333% in Lawrence, 323% in Hyde Park, 304% in Chelsea, 226% in Brockton, 226% in Springfield, 218% in Holyoke, 197% in Lowell, 184% in Lynn, and 166% in East Boston/Charlestown.

Without change, the MAIP's existing credit quota share methodology will result in a substantial elimination and/or reduction of credits for most of the overrepresented territories. While we are pleased that CAR's Actuarial Committee is attempting to revise the existing quota share credit methodology so as to address this problem, we are concerned that the Committee's current proposal, which is estimated to reduce credit-eligible exposures overall by 23% compared to 2015 levels, will yield a significant decrease in credit eligible exposures in many of the overrepresented territories. Consequently, there is a serious risk that these territories will remain substantially overrepresented in the MAIP or become even more overrepresented in the MAIP. A number of carriers on the Actuarial Committee have expressed similar concerns.

¹ This is computed based on year-ending March 2015 exposures and excludes motorcycle and miscellaneous classes. For example, the MAIP market share in Roxbury is 6.4%, which is over four-and-one-half times (453%) greater than the statewide MAIP market share of 1.4%.

² The indicated reduction of eligible credits under the current credit methodology is the result of a decrease in the MAIP market share overall and for credit eligible territories.

General Laws Chapter 175, § 113H, requires the development of a credit system in order to enhance the prospects that no classification or territory is disproportionally represented in the MAIP:

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. See G.L. c. 175, § 113H

MAIP credits provide incentives for carriers to compete for business in credit-eligible territories. Removing and/or reducing credits could reduce that competition, resulting in higher premiums for policyholders in low-income communities and communities of color, many of whom already face high prices for auto insurance. A reduction in available credits could also leave more consumers in these communities in the residual market, which has a variety of disadvantages for those drivers. From a policyholder's perspective, being assigned to the MAIP means: (1) no choice of insurer, (2) fewer payment options, (3) higher installment, cancellation, and late payment fees, and (4) ineligibility for various policy benefits. 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.

We urge CAR to carefully consider its statutory obligations and take steps to enhance the prospect that no classification or territory is disproportionately represented in the MAIP. If we can be of any assistance as CAR considers options related to these credits, please do not hesitate to contact me at 617-963-2453.

Sincerely,

Glenn Kaplan, Chief

Insurance & Financial Services Division

MEMORANDUM

TO: CAR Governing Committee

FROM: Paula Gold

RE: Governing Committee Agenda Item 15.15

Actuarial Committee Proposed 2016 MAIP Quota Share Credit Offer

DATE: November 16, 2015

Background

The 2016 credit proposal approved by the Actuarial Committee on October 7, 2015 is projected to reduce the number of credit-eligible exposures from a current level of 429,355 (9.6% of the market) to 332,145 (7.4% of the market) – a 22.6% reduction overall. The potential credit premium is similarly reduced – by 21.4%.

These measures of the overall reduction in the credit offer, while unprecedented in scale, do not come close to telling the entire story. Because credits are mandated by statute to be set in a manner that will "enhance the prospects that no classification or territory is disproportionately represented in the plan," it is helpful to focus on the specific classifications and territories that have consistently been disproportionately represented in the MAIP.

The current 2015 credit offer is broadly consistent with the statutory goal. Of the 429,355 credit-eligible exposures, 3.9% of them are in the MAIP (September 2014-August 2015 data). Non-credit-eligible exposures are in the MAIP at a rate of 1.1%. Therefore, credit-eligible exposures are 3.7 times as likely to be subject to an involuntary assignment as a whole than are the ineligible exposures. Credits today are certainly being offered where they are most needed.

The Commissioner of Insurance has — on two separate occasions 1— directed CAR to pay particular attention to eleven territories that, while comprising only 8.9% of the total market, currently make up 23.2% of the MAIP. These eleven territories — Chelsea, Hyde Park, Dorchester, Roxbury, Charlestown/East Boston, Holyoke, Lowell, Springfield, Lynn, Lawrence, and Brockton — are now eligible for 76.8% of the available credits. They are clearly the focus of the credit offer, and yet they stand to lose credits at a rate significantly higher than the 22.6% overall statewide reduction in credits. Of the 121,047 people state-wide who will lose their credit eligibility if the Actuarial Committee's recommendation is adopted, 118,481 of these

¹ Letters to CAR President dated December 18, 2009 and December 19, 2011 regarding proposed credit offers for the 2010 and 2012 CAR years, respectively.

people (97.9%) live in one of these eleven territories. The result is a 35.1% overall credit reduction in these territories - more than 50% greater than the market as a whole.

The most extreme effect is concentrated in just three of the eleven territories – Lowell, Lynn, and Brockton. These are three eminently credit-worthy cities. Their relative levels of MAIP representation are 2.1, 2.9, and 2.3 respectively. A resident of any of these cities is at least twice as likely to be insured through the MAIP as other citizens of Massachusetts. And yet Lowell would lose 87.6% of its credits, Lynn would lose 88.0% of its credits, and Brockton would lose 87.6% of its credits. The total volume – 117,804 people in these three territories no longer being helped by CAR's credit offer – make up virtually all of the 118,481 affected people noted above. And the people losing their credit eligibility are already 2.4 times as likely to be in MAIP as others.²

Impact of Credits

The impact of credits goes well beyond simply addressing disproportionate representation in MAIP. Credits operate by making credit-eligible business significantly more attractive to insurers as voluntary than as involuntary business. As a result, companies have an incentive to actively compete for that business by entering into contracts with local agents in these territories. This provides greater access to the additional coverages and programs only available to voluntary customers, such as accident forgiveness, reduced deductibles, roadside assistance, and multiple payment plans. But by far, the most important impact of credits is that companies are able to offer lower voluntary rates to residents of credit-eligible territories than they would without the credits.

Demographics

The disproportionately affected cities of Lowell, Lynn, and Brockton are low income, largely minority communities, with many disadvantages compared to the rest of the state. Poverty rates are well above the state average of 11.4%, with Lowell at 19%, Lynn at 21%, and Brockton at 17.9%. All three cities have significant foreign-born populations. They also have large numbers of households where a language other than English is spoken: 41.9% in Lowell, 44.5% in Lynn, and 36.6% in Brockton, while the Massachusetts average is just 21.9%. These cities also have lower percentages of high school and college graduates, lower rates of homeownership, lower property values, and higher levels of unemployment than the rest of the state.³

² Copies of CAR data relied on in this memo are attached.

³ Demographic, educational, and economic data is drawn from the 2013 American Community Survey. See http://quickfacts.census.gov/qfd/states/25/2537000.html and http://quickfacts.census.gov/qfd/states/25/2537000lk.html and

Conclusion

The 2016 credit proposal approved by the Actuarial Committee resulted from significant efforts by the Committee and CAR Staff. While it may appear at a high level to be a sound methodology that should be satisfactory to all, it is important to look at how the methodology will impact the people on the ground. If the results are not in compliance with the statute, then the methodology must be adjusted.

It is apparent that this proposal will result in a disproportionate negative impact on the communities of Lowell, Lynn and Brockton by reducing credits in those communities by over 87%. But these are exactly the types of communities that need credits in order to improve the opportunity for their residents to buy affordable auto insurance in the voluntary market, with the optional features available in the voluntary market. The statute requires that credits "enhance the prospects that no classification or territory is disproportionately represented in the plan." This credit proposal would actually do the opposite — it would enhance the prospect that territories like Lowell, Lynn and Brockton will be even more disproportionately represented in the MAIP than they are today. Therefore, I urge the Governing Committee to refine the Actuarial Committee's proposal by freezing the level of credits in Lowell, Lynn and Brockton at the same level they are at today.

Thank you for your consideration of these comments.

11 TERRS. OF PARTICULAR INTEREST TO DOI

- 8.9% of total exposures
- 23.2% of MAIP exposures
- 76.8% of credit-eligible exposures
- 97.9% of exposures slated to lose credits
 - 2.4 relative** MAIP usage in areas slated to lose credits

LOWELL, LYNN AND BROCKTON

- 3.5% of total exposures
- 7.1% of MAIP exposures
- 31.1% of credit-eligible exposures
- 97.3% of exposures slated to lose credits
 - 2.4 relative** MAIP usage in areas slated to lose credits

^{**}relative to areas currently ineligible for credits

		Current	(9/2014 -
		8/2015) M	arket Data
Terri-		MAIP Usage	Relative MAIP
tory	Town(s)	Rate	Usage
1	Various (40 towns)	0.7%	0.52
2	Various (33 towns)	0.7%	0.54
3	Various (47 towns)	0.8%	0.55
4	Various (24 towns)	0.7%	0.52
5	Various (29 towns)	1.0%	0.74
6	Various (21 towns)	1.1%	0.81
7	Various (17 towns)	1.3%	0.96
8	Various (11 towns)	1.3%	0.96
9	Various (7 towns)	1.4%	1.05
10	Various (3 towns)	1.6%	1.20
11	Various (4 towns)	1.2%	0.89
12	Various (6 towns)	1.6%	1.22
13	Various (4 towns)	2.3%	1.84
14	Various (3 towns)	2.4%	1.82
15	Revere	2.3%	1.78
16	CHELSEA	4.0%	3.02
17	West Roxbury	1.7%	1.26
18	Roslindale	3.6%	2.72
19	Jamaica Plain	2.6%	1.98
20	HYDE PARK	4.7%	3.56
21	DORCHESTER	5.5%	4.34
22	ROXBURY	6.1%	4.68
23	Boston Central	1.9%	1.45
24	Brighton	1.6%	1.20
25	South Boston	1.3%	1.01
26	CHARLESTOWN + EAST BOSTON	2.4%	1.78
27	Various (93 towns)	0.6%	0.40
40	HOLYOKE	2.6%	2.00
41	LOWELL	2.6%	1.96
42	SPRINGFIELD	2.7%	2.09
43	LÝNN	2.5%	1.94
44	LAWRENCE	4.6%	3.53
45	BROCKTON	3.0%	2.31
99	Out-of-State (7 regions)	0.5%	0.37
Totai		1.3%	#N/A
11 TEI	RRS. OF PARTICULAR INTEREST TO DOI	3.4%	3.08
THRE	MOST AFFECTED BY 2016 PROPOSAL	2.7%	2:12

	2015 Credit Offer							
		Credit	Eligible in 2	015	inel	igible in 201	5	Dispropor-
		Total		MAIP	Total		MAIP	tionate
Terri-		Market	MAIP	Usage	Market	MAIP	Usage	Represen-
tory	Town(s)	Exposures	Exposures	Rate	Exposures	Exposures	Rate	tation
1	Various (40 towns)	0	0	#N/A	179,567	1,264	0.7%	#N/A
2	Various (33 towns)	1,072	38	3.5%	240,463	1,717	0.7%	4.9
3	Various (47 towns)	2,359	93	4.0%	517,217	3,866	0.7%	5.3
4	Various (24 towns)	1,333	33	2.4%	328,606	2,336	0.7%	3.4
5	Various (29 towns)	2,994	156	5.2%	503,186	4,935	1.0%	5.3
6	Various (21 towns)	1,711	96	5.6%	337,053	3,574	1.1%	5.3
7	Various (17 towns)	13,398	429	3.2%	334,570	4,018	1.2%	2.7
8	Various (11 towns)	6,871	258	3.8%	192,207	2,266	1.2%	3.2
9	Various (7 towns)	8,906	305	3.4%	189,325	2,433	1.3%	2.7
10	Various (3 towns)	4,420	147	3.3%	91,391	1,372	1.5%	2.2
11	Various (4 towns)	628	30	4.8%	71,594	825	1.2%	4.1
12	Various (6 towns)	7,248	320	4.4%	187,020	2,775	1.5%	3.0
13	Various (4 towns)	18,036	853	4.7%	192,113	4,078	2.1%	2.2
14	Various (3 towns)	6,785	361	5.3%	65,700	1,360	2.1%	2.6
15	Revere	2,599	144	5.5%	23,048	456	2.0%	2.8
16	CHELSEA	12,418	521	4.2%	1,400	27	1.9%	2.2
17	West Roxbury	404	20	4.8%	16,865	267	1.6%	3.0
18	Roslindale	13,805	531	3.8%	2,214	41	1.9%	2.1
19	Jamaica Plain	506	38	7.5%	15,022	367	2.4%	3.1
20	HYDE PARK	14,820	753	5.1%	3,208	87	2.7%	1.9
21	DORCHESTER	46,304	2,599	5.6%	1,146	30	2.6%	2.2
22	ROXBURY	15,033	918	6.1%	0	0	#N/A	#N/A
23	Boston Central	2,900	162	5.6%	42,124	697	1.7%	3.4
24	Brighton	1,266	37	2.9%	23,410	356	1.5%	1.9
25	South Boston	512	29	5.7%	16,062	193	1.2%	4.8
26	CHARLESTOWN + EAST BOSTON	1,614	98	6.1%	19,745	404	2.0%	3.0
27	Various (93 towns)	1,668	45	2.7%	410,562	2,253	0.5%	4.9
40	HOLYOKE	16,626	497	3.0%	3,917	43	1.1%	2.7
41	LOWELL	50,531	1,391	2.8%	8,207	110	1.3%	2.1
42	SPRINGFIELD	59,710	1,705	2.9%	13,813	290	2.1%	1.4
43	LYNN	40,019	1;136	2.8%	7,565	73	1.0%	2.9
44	LAWRENCE	29,967	1,466	4.9%	3,812	81	2.1%	2.3
45	BROCKTON	42,896	1,418	3.3%	8,045	117	1.5%	2.3
99	Out-of-State (7 regions)	0	0	#N/A	12,670	61	0.5%	#N/A
Total		429,355	16,626	3.9%	4,062,847	42,772	1.1%	3.7
11 TEI	RRS. OF PARTICULAR INTEREST TO DOI	329,938	12,503	3.8%	70,858	1,261	1.8%	2.1
THRE	E MOST AFFECTED BY 2016 PROPOSAL	133,446	3,945	3.0%	23,818	300	1.3%	2.3

	2016 Credit Offer							
		Credit	Eligible in 2	016	Inel	igible in 201	5	Dispropor-
		Total		MAIP	Total		MAIP	tionate
Terri-		Market	MAIP	Usage	Market	MAIP	Usage	Represen-
tory	Town(s)	Exposures	Exposures	Rate	Exposures	Exposures	Rate	tation
1	Various (40 towns)	732	43	5.9%	178,835	1,221	0.7%	8.6
2	Various (33 towns)	1,072	38	3.5%	240,463	1,717	0.7%	4.9
3	Various (47 towns)	2,359	93	4.0%	517,217	3,866	0.7%	5.3
4	Various (24 towns)	0	0	#N/A	329,939	2,369	0.7%	#N/A
5	Various (29 towns)	2,994	156	5.2%	503,186	4,935	1.0%	5.3
6	Various (21 towns)	12,116	409	3.4%	326,647	3,261	1.0%	3.4
7	Various (17 towns)	13,398	429	3.2%	334,570	4,018	1.2%	2.7
8	Various (11 towns)	6,871	258	3.8%	192,207	2,266	1.2%	3.2
9	Various (7 towns)	8,206	291	3.6%	190,025	2,447	1.3%	2.8
10	Various (3 towns)	4,420	147	3.3%	91,391	1,372	1.5%	2.2
11	Various (4 towns)	2,417	76	3.2%	69,805	779	1.1%	2.8
12	Various (6 towns)	13,588	516	3.8%	180,680	2,579	1.4%	2.7
13	Various (4 towns)	18,036	853	4.7%	192,113	4,078	2.1%	2.2
14	Various (3 towns)	6,785	361	5.3%	65,700	1,360	2.1%	2.6
15	Revere	2,903	154	5.3%	22,744	446	2.0%	2.7
16	CHELSEA	12,418	521	4.2%	1,400	27	1.9%	2.2
17	West Roxbury	404	20	4.8%	16,865	267	1.6%	3.0
18	Roslindale	13,805	531	3.8%	2,214	41	1.9%	2.1
19	Jamaica Plain	895	55	6.2%	14,633	350	2.4%	2.6
20	HYDE PARK	15,357	778	5.1%	2,672	63	2.3%	2.2
21	DORCHESTER	46,304	2,599	5.6%	1,146	30	2.6%	2.2
22	ROXBURY	14,786	914	6.2%	246	4	1.6%	3.8
23	Boston Central	2,916	169	5.8%	42,109	690	1.6%	3.5
24	Brighton	1,973	67	3.4%	22,702	325	1.4%	2,4
25	South Boston	512	29	5.7%	16,062	193	1.2%	4.8
26	CHARLESTOWN + EAST BOSTON	1,572	99	6.3%	19,787	403	2.0%	3.1
27	Various (93 towns)	1,668	45	2.7%	410,562	2,253	0.5%	4.9
40	HOLYOKE	16,702	503	3.0%	3,840	37	1.0%	3.1
41	LOWELL	6,257	313	5.0%	52,481	1,189	2.3%	2.2
42	SPRINGFIELD	60,585	1,726	2.8%	12,937	269	2.1%	1.4
43	LYNN	4,818	291	6.0%	42,766	918	2.1%	2.8
44	LAWRENCE	29,967	1,466	4.9%	3,812	81	2.1%	2.3
45	BROCKTON	5,312	396	7.4%	45,630	1,139	2.5%	3.0
99	Out-of-State (7 regions)	0	0	#N/A	12,670	61	0.5%	#N/A
Total		332,145	14,346	4.3%	4,160,056	45,052	1.1%	4.0
11 TEI	RRS. OF PARTICULAR INTEREST TO DOI	214,079	9,606	4.5%	186,717	4,158	2.2%	2.0
THRE	E MOST AFFECTED BY 2016 PROPOSAL	16,387	999	6.1%	140,877	3,246	2.3%	2.6

Changes to Credit Offer

Terri-		Net Change Eligible E			Net Change to I Credit Prem	
tory	Town(s)	Number	Percent		Dollars	Percent
1	Various (40 towns)	732	#N/A	\$	1,363,855	#N/A
2	Various (33 towns)	0	+0.0%	\$	-	+0.0%
3	Various (47 towns)	0	+0.0%	\$	-	+0.0%
4	Various (24 towns)	-1,333	-100.0%	\$	(3,157,843)	-100.0%
5	Various (29 towns)	0	+0.0%	\$	-	+0.0%
6	Various (21 towns)	10,406	+608.3%	\$	14,542,102	+328.0%
7	Various (17 towns)	0	+0.0%	\$	-	+0.0%
8	Various (11 towns)	0	+0.0%	\$	-	+0.0%
9	Various (7 towns)	-700	-7.9%	\$	(1,323,344)	-8.0%
10	Various (3 towns)	0	+0.0%	\$	-	+0.0%
11	Various (4 towns)	1,789	+285.1%	\$	3,623,753	+174.1%
12	Various (6 towns)	6,340	+87.5%	\$	2,877,762	+19.2%
13	Various (4 towns)	0	+0.0%	\$	-	+0.0%
14	Various (3 towns)	0	+0.0%	\$	-	+0.0%
15	Revere	304	+11.7%	\$	173,541	+3.1%
16	CHELSEA	0	+0.0%	\$	-	+0.0%
17	West Roxbury	0	+0.0%	\$	(85,587)	-8.9%
18	Roslindale	0	+0.0%	\$	-	+0.0%
19	Jamaica Plain	389	+76.8%	\$	310,878	+22.8%
20	HYDE PARK	537	+3.6%	\$	135,552	+0.6%
21	DORCHESTER	0	+0.0%	\$	(1,333,346)	-1.4%
22	ROXBURY	-246	-1.6%	\$	(1,260,783)	-3.9%
23	Boston Central	16	+0.5%	\$	(864,802)	-11.6%
24	Brighton	707	+55.9%	\$	1,217,313	+46.2%
25	South Boston	0	+0.0%	\$	-	+0.0%
26	CHARLESTOWN + EAST BOSTON	-42	-2.6%	\$	(1,149,544)	-26.8%
27	Various (93 towns)	0	+0.0%	\$	_	+0.0%
40	HOLYOKE	76	+0.5%	\$	(85,836)	-0.4%
41	LOWELL	-44,274	-87.6%	Ş	(49,100,129)	-82.0%
42	SPRINGFIELD	875	+1.5%	\$	1,904,363	+2.0%
43	LYNN	-35,201	-88.0%	S	3(55,275,675)	-83.8%
44	LAWRENCE	0	+0.0%	\$	(862,285)	-2.2%
45	BROCKTON	-37,584	-87.6%	\$	(65,968,242)	-80.2%
99	Out-of-State (7 regions)	0	#N/A	\$	- 11 - 20 - 14 to 15 to 15 to 15 to 15 to	#N/A
Total		(97,210)	-22.6%	\$	(154,318,297)	-21.4%
11 TEF	RRS. OF PARTICULAR INTEREST TO DOI	(115,859)	-35.1%	\$	(172,995,925)	-32.1%
THREE	MOST AFFECTED BY 2016 PROPOSAL	(117,059)	-87.7%	\$	(170,344,046)	-81.9%

Credit Losses

1 Various (40 towns) 2 Various (33 towns) 3 Various (34 towns) 4 Various (24 towns) 5 Various (29 towns) 6 Various (21 towns) 7 Various (17 towns) 8 Various (17 towns) 9 Various (11 towns) 10 0 0 #N/A 10 Various (31 towns) 10 0 0 #N/A 11 Various (3 towns) 10 Various (3 towns) 10 Various (4 towns) 10 Various (6 towns) 11 Various (6 towns) 12 Various (6 towns) 13 Various (3 towns) 14 Various (3 towns) 15 Revere 10 0 0 #N/A 16 CHELSEA 10 0 0 #N/A 17 West Roxbury 18 Roslindale 19 Jamaica Plain 19 Jamaica Plain 19 Jamaica Plain 20 HYDE PARK 10 0 0 #N/A 21 DORCHESTER 10 0 0 #N/A 22 ROXBURY 23 Boston Central 24 Brighton 25 South Boston 26 CHARLESTOWN + EAST BOSTON 27 Various (93 towns) 28 66 2.1% 27 Various (93 towns) 37,584 4 LAWRENCE 10 0 0 #N/A 45 BROCKTON 37,584 10 0 0 #N/A 45 BROCKTON 37,584 10 0 0 #N/A 45 BROCKTON 37,584 10 0 0 #N/A 46 LAWRENCE 10 0 0 #N/A 47 LYNN 35,201 845 2.276 39 Out-of-State (7 regions) 10 0 m/A 12 121,047 3,037 2.5%	Terri- tory	Town(s)	Total Exposures	Exposures Currently in	MAIP
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COMMONWEALTH AUTOMOBILE REINSURERS

225 Franklin Street Boston, Massachusetts 02110
www.commauto.com 617-338-4000

RECORDS OF MEETING

ACTUARIAL COMMITTEE - DECEMBER 10, 2015

Members Present

Mr. Joseph F. Cofield – Chair Mr. Geoffrey H. Arnold Mr. Jonathan E. Blake Mr. Alex F. Butensky Mr. Christopher Dupill Mr. Glenn R. Hiltpold Mr. John V. Kelly Mr. Michael Petrarca, Jr. Ms. Lynellen Ramirez Mr. John P. Tierney Metropolitan P & C Insurance Company Plymouth Rock Assurance Corporation The Hanover Insurance Company The Norfolk & Dedham Group EM Freedman Insurance Agency, Inc. Safety Insurance Company MAPFRE U.S.A. Corporation Amica Mutual Insurance Company Arbella Insurance Group Quincy Mutual Group

Substituted for:

N/A

Not in Attendance:

Ms. Meredith M. Woodcock, Liberty Mutual Group

15.01 Records of Previous Meeting

The Committee unanimously voted to approve the Records of the Actuarial Committee meeting of October 7, 2015. The Records have been distributed and are on file with CAR's Secretary.

15.03 Quota Share Credits for Policies Effective April 1, 2016 and Later

CAR Counsel, Mr. Matthew Henning, advised the Committee relative to the Governing Committee remand of the recommended April 1, 2016 credit proposal to the Actuarial Committee to consider whether and to what extent the proposal complies with the statutory requirements of G.L. c. 175, §113H to enhance the prospects that no classification or territory is disproportionately represented in the plan. Mr. Henning noted that the remand was requested to give the Governing Committee a better understanding of the discussions at the Actuarial Committee level as to the consistency with the statute, establishing a record of the deliberations.

Mr. Henning also advised that in terms of meeting procedure, discussion is allowed for alternate credit proposals, but reminded the Committee that the primary task should be to consider whether and to what extent the current proposal complies with the statutory requirement.

Mr. Henning addressed the conflict of interest policy reviewed at the previous meeting. He noted that he has received questions regarding disclosure by those Committee members engaging in the buying and selling of excess credits. While company members may opt to disclose whether they engage in the transfer of excess credits, they are not precluded from discussion and vote on the credit offer.

Mr. Timothy Galligan reviewed an analysis of historical residual market shares by rate class and territory, as well as historical residual market share relativities to the statewide average, as requested by the Chair. Mr. Galligan also noted that attached to the agenda was correspondence from the Office of the Attorney General and Plymouth Rock Assurance Corporation relative to the April 1, 2016 and later credit offer, as presented to the Governing Committee at its November 18, 2015 meeting.

The Committee then began discussion regarding its credit proposal.

Mr. John Kelly noted his support for the Actuarial Committee's original recommendation to the Governing Committee, the so-called "Relative Range" methodology. He observed that the majority of the 21.7% (\$169.5 million) decrease to potential credit premium comes from the elimination of rate class 10 credits in Lowell, Lynn, and Brockton. Mr. Kelly noted that based on the latest year results, Lowell's rate class 10 residual market share is 2.48%, Lynn's is 2.44%, and Brockton's is 2.79%. He opined that these results are not dramatically different from the statewide rate class 10 residual market share of 1.39%.

Mr. Kelly addressed the 11 territories of interest previously noted by the Division of Insurance. He noted that some of the 11 territories have a proposed increase to potential credit premium, while others have a slight decrease. Further, he pointed out that the Actuarial Committee's recommendation continues to provide substantive credits for non-rate class 10 business in Lowell, Lynn, and Brockton.

Mr. Kelly also noted that last year's credit offer called for a reduction of 10.7% in credit premium, and the residual market continued to decrease, particularly in those 11 territories previously noted by the Division of Insurance. In fact, for rate class 10, the total residual market share decreased from 1.77% overall to 1.39%. Mr. Kelly predicted that these improvements will continue. Mr. Jonathan Blake and Ms. Lynellen Ramirez agreed.

Ms. Ramirez stated that the Committee previously discussed and concluded that the proposal complies with the statute. She opined that there is no evidence that a reduction to credit premium will cause an increase in the residual market. In fact, the analysis shows no consistent pattern in the size of the residual market as it relates to past credit offers. Mr. Hiltpold agreed, noting that the current formula is self-correcting. If there was an upward swing in the residual market size, there would be an indication for more credits returning to the system.

Mr. Blake informed the Committee that he had considered tempering the Actuarial Committee's recommended credit premium decrease to approximately -10% by offering partial credit factors valued at .5 in the three rate class 10 territories losing their credit factors. The Committee briefly discussed this idea.

Mr. Geoffrey Arnold noted that he believes the Actuarial Committee's proposal is not in compliance with the statute, as it does not appropriately identify those cells that are disproportionately represented in the residual market, and it eliminates credits in territories where they should remain or increase. He predicted that such decreases will result in consumers in those territories having more difficulty getting voluntary insurance at competitive market rates.

Mr. Arnold referenced the residual market share statistics discussed earlier, noting that historically, almost every cell had a residual market share increase where a credit was removed the prior year. Where a credit was offered, the residual market share was reduced. Mr. Arnold believes that the

historical data shows that the overwhelming impact of the use of credits is the reduction of disproportionate representation in the residual market.

After considerable discussion, Mr. John Tierney summarized the Committee's discussions to date and made a motion, which was seconded by Mr. Kelly, that the Actuarial Committee respond to the Governing Committee as follows:

- 1) The Actuarial Committee believes that its proposal complies with the statutory requirement regarding disproportionate representation in the involuntary market;
- 2) Over the course of several meetings to review market credits, the Committee was provided with copies of correspondence from the DOI to CAR pertaining to the DOI's interpretation of how the statutory requirement should be met;
- 3) The proposal from the Actuarial Committee compiled by CAR Staff was developed by emulating the approach taken by the DOI in a prior Decision on involuntary market credits recognizing that the involuntary market is much smaller today and that the standard for disproportionate representation thus needed to be recalibrated;
- 4) The Actuarial Committee notes that five years ago, there were 12 territories in which the residual market share was more than double that of the total market whereas today there are only seven such territories thus reducing the need for credit incentives in the market;
- 5) The Actuarial Committee believes that its proposal, in combination of the continuation of a healthy, open, competitive environment will lead to a continued depopulation of the residual market.

The motion passed with eight members in favor and one, Plymouth Rock, opposed.

The Committee directed staff to present the approved motion, along with the draft amendments to Rule 29 to the Governing Committee for consideration at its January 2016 meeting.

TIMOTHY F. GALLIGAN Financial Services Coordinator

Boston, Massachusetts January 7, 2016

ATTACHMENT LISTING

Docket #AC15.02, Exhibit #4

Attendance Listing

ACTUARIAL COMMITTEE MEETING

SIGN-IN SHEET

December 10, 2015

Individual's Name	Company / Agency
JONATHAN BLAKE	HANOVEN.
Lynellen M Ramirez	Arbella
Alex Butensky	Norfolk & Dedhom
Chris Dupice	EM Freedman Inswance
John Kelly	MAPFRE USA
Mike Petrerca	AMICA
JOHN TIERNEY	QUINCY MUTUAL
Geoffsey Arnold	Plymouth Rak
Glenn History	Safety Insuanie.
Ellie Myers	Morrison Mahoney LLP
Matt Henony	Morrison Michael UP
Dotalie Hubber	CAR
Toe Cofield	Metlife
To Galligan	CAR
Shannon Chiu	CAR
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ACTUARIAL COMMITTEE MEETING

SIGN-IN SHEET

December 10, 2015

Individual's Name	Company / Agency
Allen Chaves	Arbella
Parah Clemens	Mapfre
H. Thoman	A60
Biteinberg	A60
Ken Willis	Plymoth Rock
Parla Gold	Plymoth Rock
Bill Cahill	Havorta Ins
Katy Robbins	CAR
Wendy Brune	<i>PAR</i>
Sean Thompson	Hanavee
Marian Adjate Savid Hassey	mill city susurance
HAU CROWIAN	Austary
- FITTLE CI-ONIXIC	MOSTALE

TRANSCRIPT OF

617-338-4000

SPECIAL GOVERNING COMMITTEE MEETING

A meeting of the Governing Committee was held at the offices of Commonwealth Automobile Reinsurers, 225 Franklin Street, Boston, Massachusetts, on

WEDNESDAY, JANUARY 13, 2016 AT 10:30 A.M.

Committee Members present –

Mr. M. John Olivieri, Jr. - Chair J.K. Olivieri Insurance Agency, Inc.

Liberty Mutual Group Mr. Paolo V. Abelli Mr. William J. Cahill, Jr. The Hanover Insurance Company Meridian Insurance Agency, LLC Mr. Thomas C. DePaulo EM Freedman Insurance Agency, Inc. Mr. Christopher D. Dupill Mr. Sumner D. Gilman Economy Insurance Agency, Inc. Ms. Paula W. Gold Plymouth Rock Assurance Corporation Mr. James S. Hyatt Arbella Insurance Group Mr. Christopher Jarrard **GEICO** Mr. John V. Kelly MAPFRE U.S.A. Corporation Mr. Joseph P. Leahy, Jr. Leahy & Brown Insurance and Realty

Ms. Marie-Armel Theodat R. Theodat Insurance Agency, Inc. Mr. John P. Tierney

Quincy Mutual Group

Substituted for:

N/A

Not in Attendance:

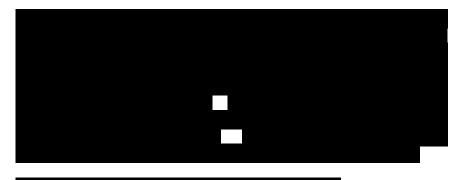
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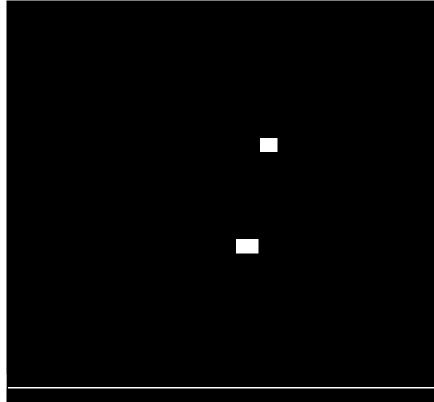
(Meeting began at 10:30 a.m.)

















GC 16.06 Actuarial Committee

Mr. Olivieri: Actuarial Committee.

Ms. Hubley:

As you will recall, in November, the Governing Committee met to consider the Actuarial Committee's recommendation with respect to MAIP quota share credits. The recommendation would result in an estimated decrease of 22.6 percent to credit-eligible exposures and approximately 21.4 percent to available credit premium. After discussion, the Governing Committee remanded the proposal to the Actuarial Committee to consider whether, and to what extent, the proposal complies with the statutory requirement to enhance the prospects that no classification or territory is disproportionately represented in the plan. The remand was requested to give the Governing Committee a better understanding of the discussion at the Actuarial Committee level as to the consistency with the statute and establishing a record of its deliberations.

At their meeting in December, the Actuarial Committee observed that the majority of the decrease to the potential credits, from its recommendation, comes from the elimination of Rate Class 10 credits in Lowell, Lynn and Brockton. The residual market shares in these cells range from 2.5 percent to 2.8 percent as compared to the statewide Class 10 result of 1.4 percent. Also with respect to the 11 territories noted by the Division of Insurance in previous credit decisions, the Committee noted that the proposed credits offer an increase in some areas and slight decreases in others. Further, in Lowell, Lynn and Brockton, the recommendation continues to provide substantive credits for non-Rate Class 10 business. The Committee also noted that last year's credit offer called for a reduction of 10.7 percent in credit premium and the residual market continued to decrease particularly in those 11 territories.

After discussion, Mr. Arnold noted, however, that Plymouth Rock continues to believe that the Actuarial Committee proposal does not comply with the statute as it does not appropriately identify those cells that are disproportionately represented and it eliminates credits in territories where they should remain. He predicted that such decreases will result in consumers in those territories having more difficulty getting voluntary insurance at competitive market rates.

After considerable discussion, the Committee, though, voted with eight members in favor and one opposed to respond to the Governing Committee's request as follows: The Actuarial Committee believes that its proposal complies with the statutory requirement regarding disproportionate representation in the involuntary market. Over the course of several meetings to review market credits, the Committee was provided with copies of correspondence from the Division of Insurance to CAR pertaining to the Division's interpretation of how the statutory requirement should be met. The proposal from the Actuarial Committee, compiled by CAR staff, was developed by emulating the approach taken by the Division in a prior decision on involuntary market credits recognizing that the involuntary market is much smaller today and that the standard for disproportionate representation thus needed to be recalibrated. The Actuarial Committee notes that five years ago there were 12 territories in which the residual market share was more than double that of the total market, whereas today there are only seven such territories thus reducing the need for credit incentives in the market.

Finally, the Actuarial Committee believes that its proposal, in combination with a continuation of a healthy, open, competitive environment, will lead to continued depopulation of the residual market. In light of that discussion, before you today for your consideration is the Actuarial Committee's initial recommendation with respect to credits for policies effective April 1, 2016 and later which, again, will result in an estimated decrease of 22.6 percent to credit-eligible exposures and 21.4 percent to available credit premium. Attached to the Additional Information that was distributed to the Governing Committee are the corresponding proposed Rule amendments that I can walk through with you if you like. But also included is a summary of the Committee's recommendation as well as the two letters, one from the Attorney General's Office and one from Plymouth Rock that was distributed at your last Governing Committee for your information. That would conclude my report. I'd open it up for questions.

This is an action item. So unless anybody has a question initially, I don't know if someone wants to make a – would like to make motion in favor of the Actuarial Committee's recommendation and go from there.

Mr. Chairman, I would like to make a disclosure before we get into a motion particularly for the benefit for the agency representatives around the table. I'm not sure everybody is aware, but under CAR Rules companies can buy and sell credits. That information is available on the CAR website but only to Member Companies. So, in the interest of full disclosure, I wanted the members around the table to know that my company, Quincy Mutual, has been for some time buying credits from other companies. We have not entered into any discussions with the companies that we buy credits from as to whether the approval of this proposal will restrict them from continuing to sell us credits. There is, perhaps, a risk of that. And if they are unable to continue to sell us credits we are okay with absorbing a greater share of the involuntary market or we will find an alternative company to buy credits from. This proposal may have an impact on our company. It may have an adverse

Mr. Olivieri:

Mr. Tierney:

impact on our company if we're not able to buy credits from someone else and have to take on more involuntary business. But we still believe that this is in the best interest of the motoring public which is why we will support this motion. But I wanted to have a full disclosure on the table.

Mr. Olivieri:

Thank you very much. Paolo.

Mr. Abelli:

Along the lines of disclosure, I also wanted to disclose that Liberty engages in the buying and selling of credits like a lot of carriers around this table. I wanted to note that in the notes Mr. Henning addressed as conflict at the Actuarial Committee meeting and clarified that companies are not precluded from this discussion because of that. It's a shared interest. Frankly, every carrier shares, eventually, in the involuntary market in some way, shape or form as do agents, I would argue, in the sense that they end up working with companies and potentially handling assignments. I think it's a very shared interest, but I wanted to disclose that we also engage in the practice of buying and selling credits.

Mr. Olivieri:

Thank you, Paolo. Bill.

Mr. Cahill:

Mr. Chairman, picking up on the same theme here to just disclose that the Hanover Insurance Company has participated similarly and has been, to my knowledge, a buyer of credits over the course of time. I just share that information with everyone as well.

Mr. Olivieri:

Thank you very much. Joe.

Mr. Leahy:

I'd like to make a motion to adopt the Actuarial Committee's proposal.

Mr. Gilman:

Second.

Mr. Olivieri:

We have a motion. We have a second. Any discussion? Paula.

Ms. Gold:

I cannot support that motion. I'd like to address the assertions in the Actuarial Committee's motion that is attached to explain my reasoning for not being able to support that. I'm going to take them one by one. The first one is "The Actuarial Committee believes that its proposal complies with the statutory requirement regarding disproportionate representation in the involuntary market." We believe just the opposite. We believe that the proposal does not comply with the statutory requirement. The statute requires that CAR establish credits every year to "enhance the prospect that no classification or territory is disproportionately represented in the plan." The Attorney General's Office has provided guidance in its recent letter to us regarding what that means when the MAIP is small. In that letter it states, "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 Attorney General noted in its correspondence that at least 11 territories are currently overrepresented in the MAIP and "there is a serious risk that these territories will remain substantially

overrepresented in the MAIP or become even more overrepresented in the MAIP." The proposal before us does nothing to address the Attorney General's concerns about these 11 territories. In fact, it reduces credits by more than 87 percent in three of those territories: Lowell, Lynn and Brockton.

The second point that was made in the motion that passed the Actuarial Committee was that "Over the course of several meetings to review market credits, the Committee was provided with copies of correspondence from the DOI to CAR pertaining to the DOI's interpretation of how the statutory requirement should be met." The correspondence from the DOI related to the credit offers for the 2010 and 2012 MAIP years. The MAIP is much smaller now. Those letters do not address what CAR should do when the MAIP is small but those letters are important to the extent that they identify 11 territories that need attention because they are overrepresented in the MAIP. The Attorney General provided guidance in its November 13th letter to CAR in how to comply with the statute when the MAIP is small. Again, stating that regardless of the size of the MAIP, CAR still has a duty to "develop a system that has a reasonable chance of eliminating territorial overrepresentation in the residual market." The Attorney General noted that the 11 territories of concern to Commissioner Murphy in letters dated December 18, 2009 and December 19, 2011 are still overrepresented. The interesting thing to me is the Attorney General's letter was never discussed at the MAIP Committee meeting.

Three, "The proposal from the Actuarial Committee compiled by CAR Staff was developed by emulating the approach taken by the DOI in a prior Decision on involuntary market credits recognizing that the involuntary market is much smaller today and that the standard for disproportionate representation thus needed to be recalibrated." The response to that is the DOI's prior approach was developed when the MAIP was much larger than it is today. While the Committee modified that approach, it did not fully recalibrate it for current conditions. The result is that the Committee's proposal actually will increase the overrepresentation of several territories and fail to reduce the overrepresentation of others. Therefore, it fails to comply with the statute.

Number four, "The Actuarial Committee notes that five years ago, there were 12 territories in which the residual market share was more than double that of the total market whereas today there are only seven such territories thus reducing the need for credit incentives in the market." In response to that, I would say various parties have made assessments of the number of territories that are overrepresented in the MAIP. These assessments range from seven territories to 11. The Attorney General stated in its letter that there are 11 territories overrepresented with the East Boston/Charlestown territories at 166 percent of the statewide average, Roxbury at 453 percent of the statewide average and nine other territories in between. The exact number is not important because the statute says no territory should be overrepresented in MAIP. Therefore, whether it is seven or a higher number, the proposed Rule does not

comply with the statute because it does not enhance the prospects that no classification or territory is disproportionately represented in the plan.

The fifth point made in that motion is "The Actuarial Committee believes that its proposal, in combination of the continuation of a healthy, open, competitive environment will lead to a continued depopulation of the residual market." The issue is not the depopulation of the residual market in this case. The MAIP has been reduced to less than 2 percent of the market. The issue is that this proposal does nothing to address disproportionate representation in the MAIP. Not only does it fail to reduce existing disproportionate representation, but it will actually increase the disproportionate representation of several territories in direct violation of the statute. Moreover, credits are consistent with a healthy, open, competitive market and all companies are on a level playing field when it comes to credits.

Every company is free to have a strategy to write or not write credit business. The fact that some companies do not choose to do so does not change the fact that credits are beneficial to consumers and, in fact, the consumers who may most need it in this state and, in fact, are required by the statute. So, for the reasons that I stated, I can't accept the assertions that are made in the MAIP Committee's motion and I will vote against the motion.

Mr. Olivieri:

Any other comments?

Mr. Kelly:

I support the motion. I think the Actuarial Committee has done a good job. I would like to just respond to some of those comments a little bit in that the Attorney General correspondence was provided to the Actuarial Committee. We discussed that document and the information contained within it. I think part of the recommendation that's coming from the Actuarial Committee even kind of addresses the issue. We went through and talked about the markets in these towns. I specifically brought up three specific towns that we talked about was a big drop in the credits. I think the Actuarial Committee did a fine job. We did review all the information that was provided to us in the second meeting and including the correspondence from Plymouth Rock and the Attorney General. So, I think that's important for the Committee to understand. I do support the Actuarial Committee's recommendation.

Mr. Olivieri:

Bill.

Mr. Cahill:

Mr. Chairman, I'd just like to say that as folks will recall I was a proponent of returning the proposal back to the Actuarial Committee at our last Governing Committee meeting for further consideration. I did attend the Actuarial Committee meeting as an observer. Based upon that experience and the report that's been brought today, I'm comfortable with the proposal that's come back to us and the effort that was put forth by the Committee at their last meeting. I intend to vote in favor of the motion that's in front of us today. I do want to just thank the staff and the members of the Committee including the Governing Committee members that serve on the Actuarial Committee for their additional

efforts because I do feel much more comfortable now in supporting the

proposal today.

Mr. Olivieri: Paolo.

Mr. Abelli: I also wanted to commend the Actuarial Committee for their work

debating this complicated issue. I, like Bill, was a proponent for sending it back for that double check. I'm confident that the Actuarial Committee thoroughly vetted the issue. That said, I will be voting against this proposal. While I can see value in the current proposal, I think we've been on Record before saying that the current mechanism has been extraordinarily successful in shrinking the overall involuntary market but we would like to see a proposal that unwinds credits more slowly than this one. That is why I will be voting against it specifically

for that reason.

Mr. Olivieri: OK. All those in favor?

Most Committee Members: Aye.

Mr. Olivieri: Opposed? Three opposed, the remaining in favor. Motion carries.

(The Committee voted with nine in favor and Ms. Gold, Mr. Abelli and Ms. Theodat opposed)

Mr. Olivier: Any other business to come before CAR today? Mr. Sumner Gilman, I

will entertain a motion to adjourn.

Mr. Gilman: I would recommend we adjourn, Mr. Chairman.

Mr. Olivieri: Do we have a second?

Mr. Tierney: Second.

Mr. Olivier: All those in favor?

All Committee Members: Aye.

Mr. Olivieri: Opposed? Motion carries. Thank you very much for attending today.

(Meeting ended at 11:02 a.m.)

NATALIE HUBLEY

President

Note: This Transcript has not been approved. It will be considered for approval at the next meeting of the

Governing Committee.

Boston, Massachusetts January 29, 2016

The above proceedings have been transcribed in accordance with CAR's guidelines for producing quality transcripts, which provide for the elimination of insignificant material that does not alter the substance of the Committee's discussions, such as sidebar comments, the use of verbal fillers (i.e., uhm's and ah's), and commentary (i.e., "laughter" and "coughing").

ATTACHMENT LISTING

Docket #GC16.02, Exhibit #1

Attendance Listing

GOVERNING COMMITTEE MEETING SIGN-IN SHEET WEDNESDAY, JANUARY 13, 2016

Individual's Name

Company / Agency

PLEAS	E PRINT
Maz Ella Hyman	DOI
Soul Hold	Roac
Je Je Sugn	Geonomy I. H?
//rom le/gulo	Meridian INS Agency
William Cah Il	HOWACA FIS
Chris JASSAFD	6E100
Chris Dupice	EM Freedman Ins
John KEZLT	MARFRE SA
JOE LEAHY	2 CAMY & BROWN
PAOLO ABELLI	LIBERTY MONAL
JOHN TIERNEY	QUINCY MUTUAL
MARIE ARMEL HODAT	RTIA.
Ellie Myers	Momson Mahoney LLP
Matt Henry	Marrison Mahany UP
Nataliz Hubler	CAR
My hy aliver	AGENT
Ani thatt	Arbella

GOVERNING COMMITTEE MEETING SIGN-IN SHEET WEDNESDAY, JANUARY 13, 2016

Individual's Name

Company / Agency

Individual's Name PLEAS	Company / Agency E PRINT
Roben Tugges	CAR
PETER M'CABE	CAR
Timothy GalligAN	CAR
Steven Bosenstein	Norfolk + Dedham
Steve GANTIECI	CAR
MARK ALVES	CAR
Linnea Memill	Amica Mutual
JOHN METCALFE	CAR
Hichard Varion	CAR
Sew Costan	CAR
Lex Beakin	(AR
Wondy Browne	CAR
Katu Rubbins	CAR
Bruce Cregger	Encompass Ins.
Marian Adejate	CAR
Ken Willis	Plymonta Roch
Geoffrey Arnold	Alymouth Rock
Barry Tagen	Pilgrim
Elizabeth Brodew	Safety
Brian Lam	Safety
sason Califros	MUTH
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