

Commonwealth Automobile Reinsurers

Private Passenger Types
Liability Coverages for Which Rates Vary by Territory

Coverage	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	(9)	
	Fleet Average Loss Pure Prem (Form 100)	Non-Fleet Average Loss Pure Prem (Form 100)		Territory Relativity (100K)	Fleet/ Non-Fleet Differential (100K)		Company Expense Pure Premium (Form 100)	Fleet Variable Expense Factor*	Non-fleet Variable Expense Factor*	20/40 Increased Limits Factor (Form 100)	Final Base Rates***
				Fleet	Non-Fleet					Fleet	Non-Fleet
<u>A-1 & B**</u>	379.01	354.65				83.49	0.8165	0.8165	1.00		
Territory:											
1			2.6402	1.0000	1.0000					1328	1249
2			2.6402	1.0000	1.0000					1328	1249
3			2.6402	1.0000	1.0000					1328	1249
4			2.6402	1.0000	1.0000					1328	1249
5			2.6402	1.0000	1.0000					1328	1249
6			2.6402	1.0000	1.0000					1328	1249
7			2.6402	1.0000	1.0000					1328	1249
8			2.6402	1.0000	1.0000					1328	1249
9			2.6402	1.0000	1.0000					1328	1249
10			2.6402	1.0000	1.0000					1328	1249
11			0.6590	1.0000	1.0000					408	388
12			0.7922	1.0000	1.0000					470	446
13			0.7569	1.0000	1.0000					454	431
14			0.7910	1.0000	1.0000					469	446
15			0.8418	1.0000	1.0000					493	468
16			0.8684	1.0000	1.0000					505	479
17			1.0985	1.0000	1.0000					612	579
18			1.3079	1.0000	1.0000					709	670
19			1.5700	1.0000	1.0000					831	784
20			1.8987	1.0000	1.0000					984	927
<u>A-1**</u>											
Territory:											
1										1155	1087
2										1155	1087
3										1155	1087
4										1155	1087
5										1155	1087
6										1155	1087
7										1155	1087
8										1155	1087
9										1155	1087
10										1155	1087
11										355	338
12										409	388
13										395	375
14										408	388
15										429	407
16										439	417
17										532	504
18										617	583
19										723	682
20										856	806
<u>B. Basic**</u>											
Territory:											
1										173	162
2										173	162
3										173	162
4										173	162
5										173	162
6										173	162
7										173	162
8										173	162
9										173	162
10										173	162
11										53	50
12										61	58
13										59	56
14										61	58
15										64	61
16										66	62
17										80	75
18										92	87
19										108	102
20										128	121

* (6) & (7) = 1 - (Premium Tax Allowance) - (Profit Load) - (Commission Expense Percentage).

** Combined A-1 & B rates are allocated in following manner (calculated from Section 100A of CAR filing):

A-1: 87.0% of Combined rates (Form 110).

B: 13.0% of Combined rates (Form 110).

*** (9A) = $\frac{\{(1) \times (3) \times (4A) + (5) \times (8)\}}{(6)}$.

*** (9B) = $\frac{\{(2) \times (3) \times (4B) + (5) \times (8)\}}{(7)}$.

Commonwealth Automobile Reinsurers

**Private Passenger Types
Liability Coverages for Which Rates Vary by Territory**

Coverage	(1)	(2)	(3) Territory Relativity (100K)	(4) Fleet/ Non-Fleet Differential (100K)		(5)	(6)	(7)	(8)	(9)	
	Fleet Average Loss Pure Prem (Form 100)	Non-Fleet Average Loss Pure Prem (Form 100)		Fleet	Non-Fleet	Company Expense Pure Premium (Form 100)	Fleet Variable Expense Factor* (Form 100)	Non-fleet Variable Expense Factor* (Form 100)	20/40 Increased Limits Factor (Form 100)	Final Base Rates**	
										Fleet	Non-Fleet
<u>A-2</u>	52.80	95.98				19.97	0.8165	0.8165			
Territory:											
1			2.6402	1.0000	1.0000					195	335
2			2.6402	1.0000	1.0000					195	335
3			2.6402	1.0000	1.0000					195	335
4			2.6402	1.0000	1.0000					195	335
5			2.6402	1.0000	1.0000					195	335
6			2.6402	1.0000	1.0000					195	335
7			2.6402	1.0000	1.0000					195	335
8			2.6402	1.0000	1.0000					195	335
9			2.6402	1.0000	1.0000					195	335
10			2.6402	1.0000	1.0000					195	335
11			0.6590	1.0000	1.0000					67	102
12			0.7922	1.0000	1.0000					76	118
13			0.7569	1.0000	1.0000					73	113
14			0.7910	1.0000	1.0000					76	117
15			0.8418	1.0000	1.0000					79	123
16			0.8684	1.0000	1.0000					81	127
17			1.0985	1.0000	1.0000					95	154
18			1.3079	1.0000	1.0000					109	178
19			1.5700	1.0000	1.0000					126	209
20			1.8987	1.0000	1.0000					147	248
<u>PDL, Basic</u>	286.51	277.97				67.71	0.8473	0.8473			
Territory:											
1			2.6402	1.0000	1.0000					973	946
2			2.6402	1.0000	1.0000					973	946
3			2.6402	1.0000	1.0000					973	946
4			2.6402	1.0000	1.0000					973	946
5			2.6402	1.0000	1.0000					973	946
6			2.6402	1.0000	1.0000					973	946
7			2.6402	1.0000	1.0000					973	946
8			2.6402	1.0000	1.0000					973	946
9			2.6402	1.0000	1.0000					973	946
10			2.6402	1.0000	1.0000					973	946
11			0.6590	1.0000	1.0000					303	296
12			0.7922	1.0000	1.0000					348	340
13			0.7569	1.0000	1.0000					336	328
14			0.7910	1.0000	1.0000					347	339
15			0.8418	1.0000	1.0000					365	356
16			0.8684	1.0000	1.0000					374	365
17			1.0985	1.0000	1.0000					451	440
18			1.3079	1.0000	1.0000					522	509
19			1.5700	1.0000	1.0000					611	595
20			1.8987	1.0000	1.0000					722	703

* (6) & (7) = 1 - (Premium Tax Allowance) - (Profit Load) - (Commission Expense Percentage).

** (9A) = {[(1) x (3) x (4A) + (5)] x (8) } / (6).

** (9B) = {[(2) x (3) x (4B) + (5)] x (8) } / (7).

Commonwealth Automobile Reinsurers
Private Passenger Types
Liability Coverages for Which Rates Do Not Vary by Territory

Coverage D

\$5,000	\$25	(From Form 110)
10,000	27	
15,000	29	
20,000	30	
25,000	32	

Coverage U

	Fleet		Non-Fleet	
	U-1	U-2	U-1	U-2
	<u>Uninsured</u>	<u>Underinsured</u>	<u>Uninsured</u>	<u>Underinsured</u>
20/40	5	0	5	0
20/50	6	0	6	0
25/50	7	0	7	0
35/80	8	4	8	4
50/100	9	8	9	8
100/300	10	25	10	25
250/500	11	92	11	92
500/500	15	249	15	249

Commonwealth Automobile Reinsurers

2018 CAR
Schedule 107-2
Page 4

Private Passenger Types
Physical Damage Loss Pure Premium by Territory

Coverage	(1)	(2)	(3)	(4)		(5)	
	Fleet	Non-Fleet	Territory Relativity (100K)	Fleet/ Non-Fleet Differential (100K)		Loss Pure Premium by Territory *	
	Average Loss Pure Prem (Form 100)	Average Loss Pure Prem (Form 100)		Fleet	Non-Fleet	Fleet	Non-Fleet
<u>Collision</u>	710.03	817.26					
Territory:							
1			2.1348	1.0000	1.0000	1516	1745
2			2.1348	1.0000	1.0000	1516	1745
3			2.1348	1.0000	1.0000	1516	1745
4			2.1348	1.0000	1.0000	1516	1745
5			2.1348	1.0000	1.0000	1516	1745
6			2.1348	1.0000	1.0000	1516	1745
7			2.1348	1.0000	1.0000	1516	1745
8			2.1348	1.0000	1.0000	1516	1745
9			2.1348	1.0000	1.0000	1516	1745
10			2.1348	1.0000	1.0000	1516	1745
11			0.6439	1.0000	1.0000	457	526
12			0.8075	1.0000	1.0000	573	660
13			0.7676	1.0000	1.0000	545	627
14			0.8209	1.0000	1.0000	583	671
15			0.8662	1.0000	1.0000	615	708
16			0.9601	1.0000	1.0000	682	785
17			1.1329	1.0000	1.0000	804	926
18			1.3009	1.0000	1.0000	924	1063
19			1.5182	1.0000	1.0000	1078	1241
20			1.6618	1.0000	1.0000	1180	1358
<u>Limited Collision</u>	49.70	57.21					
Territory:							
1			2.1348	1.0000	1.0000	106	122
2			2.1348	1.0000	1.0000	106	122
3			2.1348	1.0000	1.0000	106	122
4			2.1348	1.0000	1.0000	106	122
5			2.1348	1.0000	1.0000	106	122
6			2.1348	1.0000	1.0000	106	122
7			2.1348	1.0000	1.0000	106	122
8			2.1348	1.0000	1.0000	106	122
9			2.1348	1.0000	1.0000	106	122
10			2.1348	1.0000	1.0000	106	122
11			0.6439	1.0000	1.0000	32	37
12			0.8075	1.0000	1.0000	40	46
13			0.7676	1.0000	1.0000	38	44
14			0.8209	1.0000	1.0000	41	47
15			0.8662	1.0000	1.0000	43	50
16			0.9601	1.0000	1.0000	48	55
17			1.1329	1.0000	1.0000	56	65
18			1.3009	1.0000	1.0000	65	74
19			1.5182	1.0000	1.0000	75	87
20			1.6618	1.0000	1.0000	83	95
<u>Comprehensive</u>	194.72	166.18					
Territory:							
1			2.0371	1.0000	1.0000	445	380
2			2.0371	1.0000	1.0000	445	380
3			2.0371	1.0000	1.0000	445	380
4			2.0371	1.0000	1.0000	445	380
5			2.0371	1.0000	1.0000	445	380
6			2.0371	1.0000	1.0000	445	380
7			2.0371	1.0000	1.0000	445	380
8			2.0371	1.0000	1.0000	445	380
9			2.0371	1.0000	1.0000	445	380
10			2.0371	1.0000	1.0000	445	380
11			0.8383	1.0000	1.0000	183	156
12			0.8825	1.0000	1.0000	193	165
13			0.8218	1.0000	1.0000	180	153
14			0.9819	1.0000	1.0000	215	183
15			0.9113	1.0000	1.0000	199	170
16			1.0130	1.0000	1.0000	221	189
17			1.0461	1.0000	1.0000	229	195
18			1.1075	1.0000	1.0000	242	207
19			1.2680	1.0000	1.0000	277	236
20			1.4256	1.0000	1.0000	312	266

Collision/Lim. Collision

* (5A) = (1) x (3) x (4A)

* (5B) = (2) x (3) x (4B)

Comprehensive

* (5A) = [(1) x (3) x (4A)] / (Fleet Anti-Theft Off Balance Factor)

* (5B) = [(1) x (3) x (4B)] / (Non-Fleet Anti-Theft Off Balance Factor)

OTC Anti-Theft Off Balance Factors

Fleet Non-Fleet

0.891 0.891

**Commonwealth Automobile Reinsurers
 Private Passenger Types
 Rate Relativities by Age and Cost New***

Cost New	Symbol Code	COLLISION								
		Age: 1	2	3	4	5	6	7	8	9
0 - 4,500	01	0.792	0.740	0.718	0.718	0.666	0.666	0.651	0.651	0.496
4,501 - 6,000	02	0.888	0.830	0.805	0.805	0.747	0.747	0.730	0.730	0.556
6,001 - 8,000	03	0.888	0.830	0.805	0.805	0.747	0.747	0.730	0.730	0.556
8,001 - 10,000	04	0.899	0.840	0.815	0.815	0.756	0.756	0.739	0.739	0.563
10,001 - 15,000	05	1.070	1.000	0.970	0.970	0.900	0.900	0.880	0.880	0.670
15,001 - 20,000	06	1.166	1.090	1.057	1.057	0.981	0.981	0.959	0.959	0.730
20,001 - 25,000	07	1.102	1.030	0.999	0.999	0.927	0.927	0.906	0.906	0.690
25,001 - 40,000	08	1.134	1.060	1.028	1.028	0.954	0.954	0.933	0.933	0.710
40,001 - 65,000	10	1.209	1.130	1.096	1.096	1.017	1.017	0.994	0.994	0.757
65,001 - 90,000	11	1.659	1.550	1.504	1.504	1.395	1.395	1.364	1.364	1.039
90,001 and Over	12					(see below)				

LIMITED COLLISION										
Cost New	Symbol Code	Age: 1	2	3	4	5	6	7	8	9
0 - 4,500	01	0.792	0.740	0.718	0.718	0.666	0.666	0.651	0.651	0.496
4,501 - 6,000	02	0.888	0.830	0.805	0.805	0.747	0.747	0.730	0.730	0.556
6,001 - 8,000	03	0.888	0.830	0.805	0.805	0.747	0.747	0.730	0.730	0.556
8,001 - 10,000	04	0.899	0.840	0.815	0.815	0.756	0.756	0.739	0.739	0.563
10,001 - 15,000	05	1.070	1.000	0.970	0.970	0.900	0.900	0.880	0.880	0.670
15,001 - 20,000	06	1.166	1.090	1.057	1.057	0.981	0.981	0.959	0.959	0.730
20,001 - 25,000	07	1.102	1.030	0.999	0.999	0.927	0.927	0.906	0.906	0.690
25,001 - 40,000	08	1.134	1.060	1.028	1.028	0.954	0.954	0.933	0.933	0.710
40,001 - 65,000	10	1.209	1.130	1.096	1.096	1.017	1.017	0.994	0.994	0.757
65,001 - 90,000	11	1.659	1.550	1.504	1.504	1.395	1.395	1.364	1.364	1.039
90,001 and Over	12					(see below)				

COMPREHENSIVE										
Cost New	Symbol Code	Age: 1	2	3	4	5	6	7	8	9
0 - 4,500	01	0.820	0.820	0.795	0.787	0.746	0.672	0.672	0.640	0.558
4,501 - 6,000	02	0.820	0.820	0.795	0.787	0.746	0.672	0.672	0.640	0.558
6,001 - 8,000	03	0.830	0.830	0.805	0.797	0.755	0.681	0.681	0.647	0.564
8,001 - 10,000	04	0.940	0.940	0.912	0.902	0.855	0.771	0.771	0.733	0.639
10,001 - 15,000	05	1.000	1.000	0.970	0.960	0.910	0.820	0.820	0.780	0.680
15,001 - 20,000	06	1.090	1.090	1.057	1.046	0.992	0.894	0.894	0.850	0.741
20,001 - 25,000	07	1.100	1.100	1.067	1.056	1.001	0.902	0.902	0.858	0.748
25,001 - 40,000	08	1.170	1.170	1.135	1.123	1.065	0.959	0.959	0.913	0.796
40,001 - 65,000	10	1.450	1.450	1.407	1.392	1.320	1.189	1.189	1.131	0.986
65,001 - 90,000	11	2.590	2.590	2.512	2.486	2.357	2.124	2.124	2.020	1.761
90,001 and Over	12					(see below)				

Factors to determine charges based on the original cost new for vehicles with costs in excess of \$90,000.
 For each \$1000 in excess of \$90,000 add the following factors to the \$65,000-\$90,000 factor.

Factor	Collision	OTC
	0.010	0.020

For example, the collision age/symbol factor for a vehicle with a \$95,000 cost new (age class 1) would be:

$$1.709 = 1.659 + (95,000-90,000)/1,000 \times 0.01$$

* Relative to Age 2, Symbol 5 (Section 105).

Commonwealth Automobile Reinsurers
Private Passenger Types
Miscellaneous Components of Physical Damage Rates

DEDUCTIBLE RELATIVITIES (Section 102)

<u>Deductible</u>	<u>Coverage</u>	
	<u>Collision</u>	<u>Comprehensive</u>
300	1.050	1.030
500	1.000	1.000
1000	0.900	0.940
2000	0.750	0.860
3000	0.630	0.800
4000	0.550	0.760
5000	0.490	0.740

COMPANY EXPENSES

<u>Coverage</u>	<u>Company Expense Pure Premium (Form 100)</u>
Collision	191.62
Limited Collision	13.41
Comprehensive	41.27

VARIABLE EXPENSES

<u>Coverage</u>	<u>Fleet Variable Expense Factor* (Form 100)</u>	<u>Non-Fleet Variable Expense Factor* (Form 100)</u>
Collision	0.8270	0.8270
Limited Collision	0.8270	0.8270
Comprehensive	0.8270	0.8270

* Variable Expense Factor = 1 - (Premium Tax Allowance) - (Profit Load) - (Commission Expense Percentage).

Commonwealth Automobile Reinsurers

**Private Passenger Types
 Collision Waiver of Deductible Charges**

(1A)	Fleet: Average \$500 deductible Collision pure premium, [Form 100, {(5) x (6) x (6A)}]	668.92
(1B)	Non-Fleet: Average \$500 deductible Collision pure premium, [Form 100, {(5) x (6) x (6A)}]	890.22
(2)	Waiver Charges = / Variable Expense Ratio } x { \$X Selected Waiver of Deductible Relativity to \$500 Deductible Losses* } where \$X is \$300, \$500, \$1000, \$2000, \$3000, \$4000, and \$5000.	

* Section 102, Exhibit 2, Page 1, Line 11.

WAIVER CHARGES:

Deductibles:	\$300	\$500	\$1000	\$2000	\$3,000	\$4,000	\$5,000
Fleet	15	22	39	62	78	90	99
Non-Fleet	20	29	52	83	103	119	131

Commonwealth Automobile Reinsurers
Private Passenger Types
Collision - \$300 Deductible Buyback Charge

2018 CAR
Schedule 107-2
Page 8

- (1A) Fleet: Average \$500 deductible Collision pure premium,
[Form 100, {(5) x (6) x (6A)}] 668.92
- (1B) Non-Fleet: Average \$500 deductible Collision pure premium,
[Form 100, {(5) x (6) x (6A)}] 890.22
- (2) \$300 Deductible Buyback Charge = {[(1) x territorial relativity] / variable expense ratio } x
{ \$300 selected deductible relativity to \$500 deductible losses (without waiver) -
\$500 selected deductible relativity to \$500 deductible losses* (without waiver) }

* Section 102, Exhibit 2, Page 1, Line 7A.

\$300 Deductible Buyback Charges		
Territory	Fleet	Non-Fleet
1	105	140
2	105	140
3	105	140
4	105	140
5	105	140
6	105	140
7	105	140
8	105	140
9	105	140
10	105	140
11	32	42
12	40	53
13	38	50
14	41	54
15	43	57
16	47	63
17	56	74
18	64	85
19	75	100
20	82	109

Commonwealth Automobile Reinsurers

2018 CAR
 Schedule 107-2
 Page 9

**Private Passenger Types
 Limited Collision - \$300 Deductible Buyback Charge**

- (1A) Fleet: Average \$500 deductible Limited Collision pure premium,
 [7% of Collision Rate] 46.82

- (1B) Non-Fleet: Average \$500 deductible Limited Collision pure premium,
 [7% of Collision Rate] 62.32

- (2) \$300 Deductible Buyback Charge = {[(1) x territorial relativity] / variable expense ratio } x
 { \$300 selected deductible relativity to \$500 deductible losses (without waiver) -
 \$500 selected deductible relativity to \$500 deductible losses* (without waiver) }

* Section 102, Exhibit 2, Page 1, Line 7A.

\$300 Deductible Buyback Charges		
Territory	Fleet	Non Fleet
1	7	10
2	7	10
3	7	10
4	7	10
5	7	10
6	7	10
7	7	10
8	7	10
9	7	10
10	7	10
11	2	3
12	3	4
13	3	4
14	3	4
15	3	4
16	3	4
17	4	5
18	4	6
19	5	7
20	6	8

Commonwealth Automobile Reinsurers
Private Passenger Types
Comprehensive - \$300 Deductible Buyback Charge

2018 CAR
Schedule 107-2
Page 10

- (1A) Fleet: Average \$500 deductible Comprehensive pure premium,
[Form 100, {(5) x (6) x (6A)}] 201.77
- (1B) Non-Fleet: Average \$500 deductible Comprehensive pure premium,
[Form 100, {(5) x (6) x (6A)}] 188.02
- (2) \$300 Deductible Buyback Charge = {[(1) x territorial relativity] / variable expense ratio } x
{ \$300 selected deductible relativity to \$500 deductible losses (without waiver) -
\$500 selected deductible relativity to \$500 deductible losses* (without waiver) }

* Calculated from Section 102, Exhibit 4, Page 1.

\$300 Deductible Buyback Charges		
Territory	Fleet	Non Fleet
1	20	19
2	20	19
3	20	19
4	20	19
5	20	19
6	20	19
7	20	19
8	20	19
9	20	19
10	20	19
11	8	8
12	9	8
13	8	7
14	10	9
15	9	8
16	10	9
17	10	10
18	11	10
19	12	12
20	14	13