

# Commonwealth Automobile Reinsurers

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# NOTICE OF MEETING

## REINSURANCE COMMITTEE

A meeting of the Reinsurance Committee will be held at the Automobile Insurers Bureau Conference Center at 101 Arch Street, 7<sup>th</sup> Floor, Boston, on

# WEDNESDAY, SEPTEMBER 18, 2019 AT 9:00 A.M.

### MEMBERS OF THE COMMITTEE

Mr. James Hyatt – Chair Arbella Insurance Group

Mr. Douglas Briggs Ms. Kellie Thibodeau Quincy Mutual Group
The Hanover Insurance Company

### **AGENDA**

# RC

# 19.01 Records of Previous Meeting

The Records of the Reinsurance Committee meeting of May 16, 2019 should be read and approved.

## RC

# 19.03 CAR Conflict of Interest Policy

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

## RC

# 19.04 Commercial Residual Market Reinsurance Arrangement

At its May 16, 2019 meeting, the Reinsurance Committee began discussions relative to the feasibility of entering into a reinsurance treaty for CAR. The Committee directed staff to prepare several exhibits for consideration. Attached are the following exhibits related to the commercial residual market to assist in the Committee's discussion:

• An updated summary of large losses by policy year for policies with losses greater than \$1.0 million. (Docket #RC19.04, Exhibit #2)

• CAR's "Large Loss Load" filing, proposed but not approved in the 2019 rate filing. (Docket #RC19.04, Exhibit #3)

A report summarizing underwriting results including on-level premiums and projected and trended losses by statistically reported class type will be distributed as additional information prior to the meeting.

The Committee should be prepared to review these exhibits and to continue discussions at the September 18, 2019 meeting.

# **Other Business**

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

# **Executive Session**

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

SHANNON CHIU Actuarial/Statistical Analyst

Attachments

Boston, Massachusetts September 6, 2019

#### Commonwealth Automobile Reinsurers Large Loss Listing by Policy Year (Large Losses \$1.0 Million and Greater) Data Reported Through June, 2019

				Accident	No of					Total Incurred			Change in Total			QTR 1ST > 1.0	)
#	PY	Liab Lim	Limit ID	Year	Claims	Class Description	ITD Paid Loss	Current Reserves	ITD ALAE	Loss	Prior Reserves	Prior Qtr Loss	Losses	PIP Loss	CITY_TWN	Mill	1st Rept
1	18	1.0 M	CSL	18	7	SEMITRAILERS, FLEET	948,019	230,461	30,003	1,208,483	436,028	1,208,482	1	0	NON MA	4Q 2018	4Q 2018
2	18	1.0 M	CSL	19	2	NON-OWNED: HIRED AUTOS	0	1,000,000	20,001	1,020,001	1,000,000	1,020,000	1	0	NON MA	1Q 2019	1Q 2019
3	18	1.0 M	CSL	19	2	SEMITRAILERS, FLEET	1,072,231	0	0	1,072,231	372,747	1,042,868	29,363	0	NON MA	1Q 2019	1Q 2019
4	18	1.0 M	CSL	19	1	GARAGES: RISKS SUBJECT TO COMPULSORY LAW	0	1,000,000	0	1,000,000			1,000,000	0	MASS	2Q 2019	2Q 2019
5	18	1.0 M	CSL	19	10	MEDIUM TRUCKS, FLEET, ZONE RATED	0	1,000,000	0	1,000,000			1,000,000	0	NON MA	2Q 2019	2Q 2019
6	18	1.0 M	CSL	18	2	EXTRA-HEAVY TRUCKS, FLEET	0	1,008,000	29	1,008,029	1,008,000	1,008,029	0	8,000	MASS	4Q 2018	4Q 2018
7	18	1.0 M	CSL	18	4	EXTRA-HEAVY TRUCK-TRACTORS, FLEET	0	1,000,000	50,205	1,050,205	1,000,000	1,050,205	0	0	MASS	4Q 2018	4Q2018
8	18	5.0 M	CSL	19	57	CHARTER BUS, FLEET, ZONE RATED	295,892	5,289,840	140,125	5,725,857	2,284,200	2,361,200	3,364,657	286,158	NON MA	1Q 2019	1Q 2019
9	18 18	5.0 M 5.0 M	CSL	18 18	1 64	BUS NOT OTHERWISE CLASSIFIED, FLEET, ZONE RATED SIGHTSEEING BUS, FLEET, ZONE RATED	0 403,528	5,003,500 4,998,550	50,125 243,669	5,053,625 5,645,747	5,003,500	5,053,625 5,527,161	0 118,586	3,625 559,337	NON MA NON MA	1Q 2019	4Q 2018
10	18 Total	3.0 IVI	CSL	10	04	SIGHT SEEING BOS, FLEET, ZONE RATED	2,719,670	20,530,351	534,157	23,784,178	5,007,510 16,111,985	18,271,570	5,512,608	857,120	NON IVIA	2Q 2018	2Q 2018
	10 10(a)						2,713,070	20,330,331	334,137	23,704,170	10,111,965	18,271,370	3,312,008	837,120			
1	17	1.0 M	CSL	17	8	EXTRA-HEAVY TRUCK-TRACTORS, FLEET	1,136,433	0	3,762	1,140,195	0	1,140,195	0	4.100	MASS	4Q 2017	3Q 2017
2	17	1.0 M	CSL	18	1	GARAGES: RISKS SUBJECT TO COMPULSORY LAW	7,432	1.000.000	51,745	1,059,177	1,000,000	1,057,600	1.577	7,432	MASS	4Q 2018	3Q 2018
3	17	1.0 M	CSL	18	5	EXTRA-HEAVY TRUCK-TRACTORS, NON FLEET, ZONE RATED	123,834	950,000	47,500	1,121,334	950,000	1,120,034	1,300	0	NON MA	4Q 2018	2Q 2018
4	17	1.0 M	CSL	18	4	MEDIUM TRUCKS, FLEET	2,718	1,000,000	100,482	1,103,200	752,300	825,763	277,437	2,783	MASS	20 2019	1Q 2018
5	17	1.0 M	CSL	17	1	NON-OWNED: NON OWNERSHIP LIABILITY	1,000,000	0	3,456	1,003,456	0	1,003,456	0	0	NON MA	1Q 2018	4Q 2017
6	17	1.0 M	CSL	17	2	URBAN BUS, FLEET	20,493	1,000,000	26	1,020,519	1,000,000	1,020,519	0	0	MASS	3Q 2017	3Q 2017
7	17	1.0 M	CSL	18	1	EXTRA-HEAVY TRUCKS, FLEET	0	1,003,500	50,125	1,053,625	1,003,500	1,011,125	42,500	3,625	MASS	4Q 2018	4Q 2018
8	17	5.0 M	CSL	17	6	CHARTER BUS, NON-FLEET, ZONE RATED	116,888	1,035,000	55,817	1,207,705	1,035,000	1,207,630	75	8,027	NON MA	4Q 2018	3Q 2017
9	17	1.0 M	CSL	18	1	HEAVY TRUCKS, NON FLEET	0	1,000,000	15,000	1,015,000	1,001,588	1,016,618	(1,618)	0	MASS	3Q 2018	2Q 2018
10	17	1.0 M	CSL	17	1	TRAILERS, FLEET	8,175	999,825	150,000	1,158,000	999,825	1,158,000	0	8,000	MASS	4Q 2017	2Q 2017
	17 Total						2,415,973	7,988,325	477,913	10,882,211	7,742,213	10,560,940	321,271	33,967			
1	16	1.0 M	CSL	17	3	GARAGES: RISKS SUBJECT TO COMPULSORY LAW	120,507	1,000,000	30,004	1,150,511	1,000,000	1,150,511	0	0	NON MA	1Q 2018	2Q 2017
2	16	5.0 M	CSL	16 17	1	INTER CITY BUS, FLEET	5,000,000	0	50,517	5,050,517	0	5,250,006	(199,489)	0	NON MA	3Q 2016	3Q 2016
3	16	1.0 M	CSL		2	NON-OWNED: HIRED AUTOS	1,000,000	0	17	1,000,017		1,000,017	0	0	NON MA	3Q 2017	2Q 2017
4	16	5.0 M	CSL	17	4	CHARTER BUS, FLEET	50,031	2,004,785	71,293	2,126,109	2,004,785	2,126,109	0	55,122 0	NON MA	4Q 2018	2Q 2017
5	16 16	1.0 M 5.0 M	CSL	16 17	27	SPECIAL RATING AND ADJUSTMENT CHARTER BUS, ELEFT	26,314 507,816	976,906 5,565,570	56,958 248.811	1,060,178 6,322,197	976,906 5,565,570	1,040,176 6,323,181	20,002	72,935	NON MA	3Q 2018 4Q 2017	4Q2016 4Q2017
7	16	5.0 M	CSL	16	1	BUS NOT OTHERWISE CLASSIFIED, FLEET	0	3,000,000	185,000	3,185,000	3,000,000	3,185,000	0	72,933	MASS	4Q 2017 4Q 2018	4Q2017 4Q 2018
8	16	1.0 M	CSL	16	2	NON-OWNED: HIRED AUTOS	1,000,000	0	45	1,000,045	0	1.000.045	0	0	NOT REPORTED	1Q 2017	3Q 2016
9	16	1.0 M	CSL	16	10	MEDIUM TRUCKS, FLEET	232,056	787,048	68,480	1,087,584	781,048	1,062,418	25,166	0	MASS	2Q 2018	4Q 2016
10	16	1.0 M	CSL	17	4	LIGHT TRUCK, FLEET	128,248	850,000	46,880	1,025,128	850,000	1,021,416	3,712	0	MASS	1Q 2019	1Q 2017
11	16	1.0 M	CSL	16	1	PRIVATE PASSENGER TYPES, FLEET	50,000	1,000,000	112,618	1,162,618	1,000,000	1,152,848	9,770	50,025	NON MA	4Q 2016	3Q 2016
12	16	1.0 M	CSL	16	4	NON-OWNED: NON OWNERSHIP LIABILITY	0	1,000,002	127,584	1,127,586	1,000,002	1,123,393	4,193	0	NOT REPORTED	4Q 2017	3Q 2017
13	16	1.0 M	CSL	16	4	GARAGES: RISKS SUBJECT TO COMPULSORY LAW	830,039	0	76,360	906,399	996,985	1,143,042	(236,643)	0	MASS	1Q 2019	1Q 2017
14	16	5.0 M	CSL	17	39	CHARTER BUS, FLEET, ZONE RATED	352,349	1,160,271	156,495	1,669,115	1,160,271	1,648,450	20,665	181,605	NON MA	3Q 2017	2Q 2017
15	16	5.0 M	CSL	17	12	CHARTER BUS, FLEET, ZONE RATED	135,983	776,494	130,193	1,042,670	901,494	1,183,419	(140,749)	45,901	NON MA	4Q 2018	3Q 2017
16	16	1.0 M	CSL	17	17	GARAGES: RISKS SUBJECT TO COMPULSORY LAW	10,100	1,000,000	211,934	1,222,034	1,000,000	1,221,200	834	0	MASS	2Q 2017	2Q 2017
17	16	1.5 M	CSL	16	4	AIRPORT BUS OR AIRPORT LIMOUSINE, FLEET	1,488,482	19,953	58,201	1,566,636	23,114	1,566,636	0	50,250	NON MA	2Q 2017	2Q 2016
18	16	1.0 M	CSL	17	15	GARAGES: RISKS SUBJECT TO COMPULSORY LAW	0	1,000,000	1,500	1,001,500	1,012,500	1,014,000	(12,500)	0	MASS	2Q 2017	2Q 2017
19	16	1.0 M	CSL	16	2	EXTRA-HEAVY TRUCK-TRACTORS, NON FLEET	2,773	1,000,000	85,000	1,087,773	1,000,000	1,087,773	0	0	NON MA	3Q 2018	3Q 2016
20	16	1.0 M	CSL	17	29	TRAILERS, NON FLEET	59,074	778,693	197,550	1,035,317	771,940	1,013,664	21,653	0	NON MA	1Q 2019	1Q 2017
	16 Total						10,993,772	21,919,722	1,915,440	34,828,934	23,044,615	35,313,304	(484,370)	455,838			
1	15	1.0 m	CSL	16	2	HEAVY TRUCKS, FLEET	1,016,000	0	12,957	1,028,957	0	1,028,957	0	16,000	MASS	40 2016	40 2016
2	15	5.0 M	CSL	16	74	CHARTER BUS, FLEET, ZONE RATED	5,560,090	38,062	923,685	6,521,837	38,062	6,521,837	0	322,530	NON MA	4Q 2016 4Q 2016	4Q 2016 1Q 2016
3	15	1.0 M	CSL	16	3	LIGHT TRUCK, FLEET	14,288	985,711	18,851	1,018,850	985,711	1,019,829	(979)	0	NON MA	1Q 2018	2Q 2017
4	15	5.0 M	CSL	16	29	NON-OWNED: NON OWNERSHIP LIABILITY	4,054,198	945,802	149,997	5,149,997	945,802	5,149,997	0	0	NON MA	2Q 2018	2Q 2016
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5	15	5.0 M	CSL	16	4	SPECIAL RATING AND ADJUSTMENT: COMPOSITE RATED RISKS	1,824,935	0	146,584	1,971,519	0	1,971,519	0	0	MASS	1Q 2016	1Q 2016
6	15	1.0 M	CSL	16	2	LIGHT TRUCK, FLEET	0	1,000,001	50,000	1,050,001	1,000,000	1,050,000	1	0	NON MA	1Q 2019	2Q 2016
7	15	1.0 M	CSL	16	3	EXTRA-HEAVY TRUCK-TRACTORS, FLEET, ZONE RATED	1,000,356	0	172,474	1,172,830	80,000	1,169,816	3,014	0	NON MA	4Q 2018	1Q 2016
8	15	1.0 M	CSL	15	3	SOCIAL SERVICES AUTO, FLEET	1,015,095	0	489	1,015,584	0	1,015,584	0	6,380	MASS	1Q 2016	3Q 2015
9	15	1.5 M	CSL	16	7	BUS NOT OTHERWISE CLASSIFIED, FLEET, ZONE RATED	246,109	700,000	43,327	989,436	1,300,000	1,432,684	(443,248)	84,341	NON MA	3Q 2018	2Q 2016
10	15	5.0 M	CSL	16	15	CHARTER BUS, NON-FLEET, ZONE RATED	1,369,996	2,026,000	265,292	3,661,288	2,191,000	3,826,288	(165,000)	55,845	NON MA	3Q 2016	2Q 2016
	15 Total						16,101,067	5,695,576	1,783,656	23,580,299	6,540,575	24,186,511	(606,212)	485,096			
		401	CCI	45		CARACTE DIGITE CURIETT TO COMPUNICATIVE		4 000 000	424.045	4 424 045	1 000 000	4 425 062	(4.047)				
1	14	1.0 M	CSL	15	9	GARAGES: RISKS SUBJECT TO COMPULSORY LAW	0	1,000,000	434,845	1,434,845	1,000,000	1,435,862	(1,017)	0	NON MA	1Q 2017	3Q 2015
2	14 14	1.0 M 1.0 M	CSL CSL	14 15	4	EXTRA-HEAVY TRUCK-TRACTORS, FLEET NON-OWNED: NON OWNERSHIP LIABILITY	1,027,733	0	56,146 0	1,083,879	0	1,083,879 1,000,000	0	0	NON MA MASS	4Q 2014	3Q 2014
4	14	1.0 M	CSL	15	2 Δ	EXTRA-HEAVY TRUCK-TRACTORS. FLEET	1,000,000 575.000	425.000	79.364	1,000,000 1.079.364	950.000	1,000,000	3	0	MASS	1Q 2015 1Q 2019	1Q 2015 2Q 2014
5	14	1.0 M	BI	15	3	PRIVATE PASSENGER TYPES, NON FLEET	1,065,335	0	3,315	1,068,650	930,000	1,068,650	0	22,362	MASS	4Q 2015	2Q 2014 2Q 2015
6	14	1.5 M	CSL	15	6	BUS NOT OTHERWISE CLASSIFIED, NON-FLEET, ZONE RATED	1,672,346	0	47,662	1,720,008	0	1,719,986	22	167.136	NON MA	40 2015	2Q 2015 2Q 2015
7	14	1.0 M	CSL	14	4	NON-OWNED: HIRED AUTOS	938,211	0	295,018	1,233,229	0	1,233,229	0	0	NON MA	3Q 2016	3Q 2014
	14 Total						6,278,625	1,425,000	916,350	8,619,975	1,950,000	8,620,967	(992)	189,498			

#### Commonwealth Automobile Reinsurers Large Loss Listing by Policy Year (Large Losses \$1.0 Million and Greater) Data Reported Through June, 2019

				Accident	No of					Total Incurred			Change in Total			QTR 1ST > 1.0	)
#	PY	Liab Lim	Limit ID	Year	Claims	Class Description	ITD Paid Loss	Current Reserves	ITD ALAE	Loss	Prior Reserves	Prior Qtr Loss	Losses	PIP Loss	CITY_TWN	Mill	1st Rept
1	13	5.0 M	CSL	13	2	INTER CITY BUS, FLEET	1,764,617	0	66,058	1,830,675	0	1,830,675	0	0	NON MA	4Q 2016	1Q 2014
2	13	1.0 M	CSL	13	2	NON-OWNED: NON OWNERSHIP LIABILITY	1,000,000	0	26,833	1,026,833	0	1,026,833	0	0	NON MA	3Q 2015	4Q 2013
3	13	5.0 M	CSL	14	15	CHARTER BUS, NON-FLEET, ZONE RATED	3,386,839	347	291,839	3,679,025	2,157	3,688,619	(9,594)	217,274	NON MA	3Q 2017	1Q 2014
4	13	5.0 M	CSL	14	3	CHARTER BUS, NON-FLEET, ZONE RATED	1,432,188	0	75,117	1,507,305	0	1,507,305	0	0	NON MA	4Q 2017	1Q 2014
5	13	5.0 M	CSL	14	2	CHARTER BUS, FLEET	1,217,136	0	52,574	1,269,710	0	1,269,710	0	0	NON MA	4Q 2015	1Q 2014
6	13	5.0 M	CSL	14	1	SPECIAL RATING AND ADJUSTMENT: COMPOSITE RATED RISKS	2,508,000	0	23,224	2,531,224	0	2,531,224	0	8,000	MASS	2Q 2017	2Q 2014
7	13	1.0 M	CSL	14	1	NON-OWNED: HIRED AUTOS	1,000,000	0	25,432	1,025,432	0	1,025,432	0	0	NOT REPORTED	3Q 2014	2Q 2014
8	13	1.5 M	CSL	14	17	BUS NOT OTHERWISE CLASSIFIED, NON-FLEET, ZONE RATED	1,521,226	0	10,096	1,531,322	0	1,531,322	0	22,359	NON MA	3Q 2014	2Q 2014
9	13	1.0 M	CSL	14	2	EXTRA-HEAVY TRUCK-TRACTORS, NON FLEET, ZONE RATED	42,344	1,000,000	251,500	1,293,844	1,007,656	1,305,000	(11,156)	43,844	NON MA	4Q 2014	3Q 2014
	13 Total						13,872,350	1,000,347	822,673	15,695,370	1,009,813	15,716,120	(20,750)	291,477			
1	12	5.0 M	CSL	13	3	INTER CITY BUS, FLEET	1,495,842	0	24,558	1,520,400	0	1,520,400	0	0	NON MA	4Q 2016	2Q 2013
2	12	1.0 M	CSL	12	2	EXTRA-HEAVY TRUCK-TRACTORS, FLEET	1,088,400	0	10,895	1,099,295	0	1,099,295	0	0	MASS	3Q 2012	3Q 2012
3	12	5.0 M	CSL	12	1	BUS NOT OTHERWISE CLASSIFIED, FLEET	3,858,000	0	24,490	3,882,490	0	3,882,490	0	8,000	MASS	1Q 2013	4Q 2012
4	12	1.0 M	CSL	12	2	NON-OWNED: NON OWNERSHIP LIABILITY	1,000,000	0	3,810	1,003,810	0	1,003,810	0	0	NOT REPORTED	4Q 2012	3Q 2012
5	12	5.0 M	CSL	12	2	BUS NOT OTHERWISE CLASSIFIED, NON-FLEET, ZONE RATED	1,250,000	0	67,167	1,317,167	0	1,317,167	0	0	NON MA	4Q 2012	4Q 2012
6	12	5.0 M	CSL	13	3	INTER CITY BUS, FLEET	4,849,894	0	41,875	4,891,769	0	4,891,272	497	100,455	NON MA	1Q 2013	1Q 2013
	12 Total						13,542,136	0	172,795	13,714,931	0	13,714,434	497	108,455			
1	11	49	CSL	12	1	ALL OTHER SPECIAL RATING AND ADJUSTMENT	962,503	0	53,247	1,015,750	0	1,015,750	0	0	NON MA	1Q 2017	1Q 2012
2	11	5.0 M	CSL	11	14	SEMITRAILERS, FLEET	5,130,932	0	227,409	5,358,341	0	5,358,341	0	0	MASS	3Q 2011	3Q 2011
3	11	1.0 M	CSL	11	7	LIGHT TRUCK, FLEET	1,008,378	0	22,620	1,030,998	0	1,030,998	0	0	MASS	1Q 2012	3Q 2011
4	11	1.0 M	CSL	11	2	CAR SERVICE, NON-FLEET	1,008,000	0	117,427	1,125,427	0	1,125,427	0	8,069	MASS	2Q 2018	4Q 2011
	11 Total						8,109,813	0	420,703	8,530,516	0	8,530,516	0	8,069			
1	10	1.0 M	CSL	10	4	GARAGES: RISKS SUBJECT TO COMPULSORY LAW	1,047,336	0	7,576	1,054,912	0	1,054,912	0	0	MASS	3Q 2010	3Q 2010
2	10	1.0 m	CSL	10	3	HEAVY TRUCKS, NON FLEET	1,012,086	0	2,313	1,014,399	0	1,014,399	0	0	MASS	3Q 2010	2Q 2010
3	10	1.0 M	CSL	11	2	NON-OWNED: HIRED AUTOS	1,000,000	0	402,416	1,402,416	0	1,402,416	0	0	NOT REPORTED	2Q 2013	1Q 2012
4	10	1.0 M	CSL	10	2	GARAGES: RISKS SUBJECT TO COMPULSORY LAW	1,000,000	0	68,416	1,068,416	0	1,068,416	0	1	MASS	4Q 2013	2Q 2010
5	10	1.0 M	CSL	11	1	HEAVY TRUCKS, NON FLEET	1,002,680	0	5,803	1,008,483	0	1,008,483	0	0	MASS	3Q 2011	3Q 2011
	10 Total						5,062,102	0	486,524	5,548,626	0	5,548,626	0	1			
	Grand						70 005 555	F0 FF0 334	7 500 045	445 405 6	EC 200 26	440 450 050	4 700 055	2 422 524			
	Total						79,095,508	58,559,321	7,530,211	145,185,040	56,399,201	140,462,988	4,722,052	2,429,521			

# Change in Large Losses By Policy Year Data Reported through June, 2019

# **Summary of Losses Over 1.0 Million:**

Policy Year # Claims		Current Reserves	<b>Current Incurred Losses</b>	<b>Prior Incurred Losses</b>	Change in losses
2018	10	20,530,351	23,784,178	18,271,570	5,512,608
2017	10	7,988,325	10,882,211	10,560,940	321,271
2016	19	21,919,722	33,922,535	34,170,262	(247,727)
2015	9	4,995,576	22,590,863	22,753,827	(162,964)
2014	7	1,425,000	8,619,975	8,620,967	(992)
2013	9	1,000,347	15,695,370	15,716,120	(20,750)
2012	6	0	13,714,931	13,714,434	497
2011	4	0	8,530,516	8,530,516	0
2010	5	0	5,548,626	5,548,626	0
Subtotal	79	57,859,321	143,289,205	137,887,262	5,401,943

# Losses that went under 1.0 Million (Remain on Report):

Policy Year # Claims		Current Reserves	Current Incurred Losses	Prior Incurred Losses	Change in losses
2016	1	0	906,399	1,143,042	(236,643)
2015	1	700,000	989,436	1,432,684	(443,248)
Subtotal	2	700,000	1,895,835	2,575,726	(679,891)
Total All	81	58,559,321	145,185,040	140,462,988	4,722,052

# New To Report: Incurred Losses Over 1.0 Million:

Policy Year # Claims		Current Reserves	Current Incurred Losses	Prior Incurred Losses	Change in losses
2018	2	2,000,000	2,000,000	0	2,000,000
2017	1	1,000,000	1,103,200	825,763	277,437
	3	3,000,000	3,103,200	825,763	2,277,437

# **Massachusetts Commercial Automobile**

# **Large Loss Adjustment**

# **Explanatory Memorandum**

With this filing CAR proposes to introduce an adjustment to bodily injury rates to address loss distribution differences in the residual market Bus experience that is not adequately reflected in the pricing of increased limits factors used for Buses.

The table below shows commercial residual market per-occurrence claims in excess of \$900K over accident years 2012-2016 at latest report.

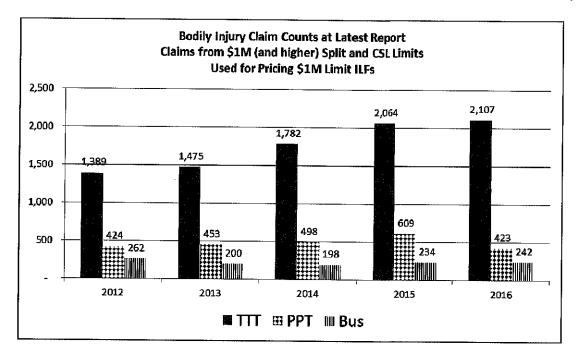
	1			
Accident Year	Class Type	Total Incurred Loss & ALAE		
2010	Bus	\$3,874,490		
2012	Bus	2,060,724		
	Bus	4,545,000		
2012	Non-Owned	1,000,000		
2013	Bus	1,534,676		
	Bus	1,501,776		
	Bus	1,075,000		
	Non-Owned	1,070,902		
2014	TTT	1,066,205		
2014	Non-Owned	1,025,432		
	TTT	943,198		
	TTT	1,175,000		
	Bus	1,100,000		
2015	Bus	1,006,069		
2015	Non-Owned	980,000		
	TTT	1,045,944		
	Bus	5,000,000		
	Bus	5,291,301		
	Bus	1,500,000		
2016	PPT	1,000,000		
	Non-Owned	1,000,000		
	Bus	1,100,000		
	Bus	1,491,564		

The above table shows that the source of most large residual market claims in recent years is the Bus vehicle class. Given the impact such large losses have on commercial residual market deficits it is important to evaluate the adequacy of the excess limit rates and ratemaking methodology for the Bus class type.

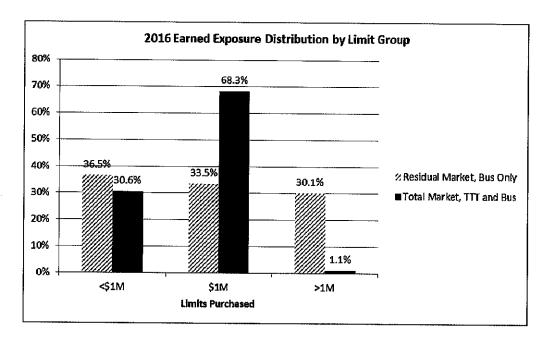
Currently bodily injury increased limits factors (ILFs) for Buses are derived using combined total market data (combined voluntary and residual markets) for Trucks, Tractors & Trailers (TTTs), Private Passenger Types (PPTs), Buses and Van Pools<sup>1</sup>. The chart below shows incurred bodily injury claim counts by vehicle class used to price the \$1M/\$1M limit ILF for buses; it illustrates that the majority of data comprises the TTT vehicle class and therefore this class has significantly more influence on the resulting ILF than the Bus class<sup>2</sup>.

<sup>1</sup> Increased limits factor calculations exclude data for Zone-rated vehicles; however, the resulting ILFs are used for pricing Zone-rated vehicles.

<sup>2</sup> As described more fully in Section 101, losses used to evaluate increased limits factors at any particular policy limit are used from polices written at that limit or higher. (Losses from higher limit polices are censored to the policy limit being evaluated.) The \$1M/\$1M limit is the highest limit for which empirical ILF calculations are performed based on historical experience. ILFs for limits greater than \$1M/\$1M are derived using the \$1M/\$1M limit ILF and an interpolation between the log-transformed limits.



In the chart below, exposure distributions show that (as a group) less than 2% of the combined exposures for TTTs and Buses in the total market are written at combined single limits in excess of \$1M. However, over 30% of Buses in the residual market were written at limits greater than \$1M in 2016.



A deeper look into the exposure distribution for the Buses vehicle class shows bodily injury coverage for policies in the residual market tends to be written at higher policy limits than in the voluntary market. Exhibit 1 displays historical earned Bus exposures written at \$1M and \$5M policy limits in the voluntary and residual markets. In the voluntary market most exposures (approximately 90%) are written at \$1M limits, with only 2%-5% at the higher \$5M limit. In the residual market over 30% of exposures are written at the \$5M limit.

The above shows there is an increased risk potential for more, larger losses in the residual market which may exceed the expected losses anticipated by the current Bus ILFs due to:

- the masking of the contribution of data from high limit Bus policies by the more voluminous TTT data,
- the \$1M censoring of the data from the many \$5M limit Bus policies,
- the differences in exposure distributions of residual market Buses vs. the total market grouped experience used to price ILFs for Buses.

As depicted in the *Exposure Distribution by Limit Group* chart above there are proportionally far fewer TTT policies than Bus policies written at combined single limits over \$1M contributing to the data set used to determine ILFs. As shown below, there are a significant number of Bus exposures written at limits higher than \$1M from

which to draw inferences about size of loss distributions<sup>3</sup>.

# 2016 Earned Liability Exposures

	T	TT	Bus				
<u>Limits</u>	<u>Res</u>	<u>Vol</u>	<u>Res</u>	<u>Vol</u>			
<=\$1M	16,384	188,160	5,693	12,502			
>\$1M	121	571	2,449	1,832			

Exhibit 2 displays size of loss distributions for claims for Bus policies written at \$5M limits. Distributions are compared between the voluntary and residual markets, for accident years 2012-2016<sup>4</sup>, valued at the latest report. Total limits incurred claims (including ALAE) were segmented into size of loss layers and plotted as cumulative distributions. To interpret by example: Exhibit 2a indicates that in accident year 2012 100% of the \$5M limit Bus claims in the voluntary market are \$500K or less. In the residual market similar claims reach up into the \$3M-\$4M layer. Similar results hold for accident years 2013-2016 (shown in Exhibits 2b-2e), indicating that claim severities for policies with the same \$5M policy limits are consistently higher for buses in the residual market than in the voluntary market. Because both voluntary and residual market experience are used to determine ILFs for the residual market, use of the total market experience suppresses the indicated rate level required at the higher limits in the residual market for Buses. Exhibit 2f shows a sample of the largest claims that underlie Exhibit 2a-e.

<sup>3</sup> Most of the higher limit Bus exposures are written at the \$5M limit.

To quantify this level of rate suppression Exhibit 3 provides a comparison of indicated ILFs at the \$1M/\$1M limit<sup>5</sup> for various experience data subsets<sup>6</sup>. Subset (A) represents the data set used in filing analyses typically performed for ILFs applicable to Buses and comprises total market data for TTTs, PPTs, Buses and Van Pools. By observing the ILFs calculated using various other experience data subsets, the following observations can be made:

- The use of Bus-only data results in an indicated increase to the ILF. This can be seen by comparing the results from data subsets (A) vs. (C) and (B) vs. (D).
- The use of residual market data (instead of total market) also results in an indicated increase to the ILF. This can be seen by comparing the results from data subsets (C) vs. (E) and (D) vs. (F).
- The inclusion of Zone-rated data results in an indicated increase to the ILFs. This can be seen by comparing results from data subsets (A) vs.
  (B), (C) vs. (D), and (E) vs. (F). (Zone-rated experience is not currently included in the annual CAR ILF analyses.)

The indicated ILF from subset (E) has been used as the basis from which to estimate the losses for which the current rating methodology does not make an

<sup>4</sup> Claims were compiled on a per claimant basis as data on a per occurrence basis was not readily available.

<sup>5</sup> As noted in footnote 2, \$1M/\$1M is the highest limit for which ILFs are empirically calculated in the filing.

adequate provision in the residual market Bus rates at higher limits. Exhibit 4 uses indicated ILFs, 2016 earned exposures, and the bodily injury basic limits pure premiums for the various Bus groups to estimate the inadequacy. An indicated large loss adjustment<sup>7</sup> has been calculated based on the ILF derived from residual market Bus data (subset (E)), and a selected adjustment<sup>8</sup> has been derived based on ILFs capped at +10% above the ILF based on the typically filed data set (subset (A)).

Large loss adjustment amounts are calculated at \$1M, 1.5M and \$5M limits for the three Bus groups and the total is converted into a pure premium for inclusion in basic limits bodily injury rates in Form 100. The large loss pure premium is further adjusted in Exhibit 4 to reduce it for the expected average BIILF for each vehicle class so the actual loss load collected will be uniform across all vehicle classes<sup>9</sup>.

The following are the adjustments included in the indicated bodily injury rates in Form 100:

<sup>6</sup> Indicated ILFs are calculated as described in ILF Section 101 of this filing.

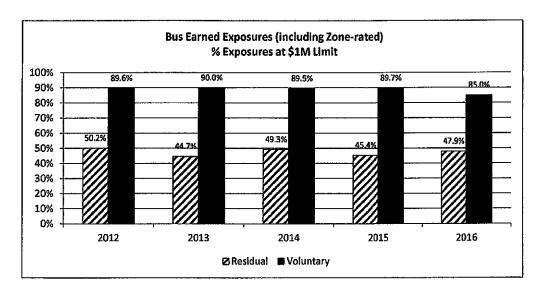
<sup>7</sup> See column labelled (2) in Exhibit 4.

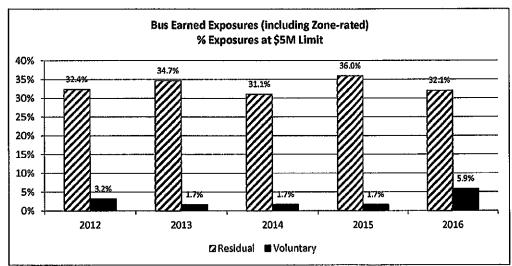
<sup>8</sup> See column labelled (3) in Exhibit 4.

<sup>9</sup> Rather than filing for an increase to the BUS ILFs to address this rate inadequacy CAR has chosen to distribute this large loss adjustment across all vehicle class types, excluding PPT non-fleets.

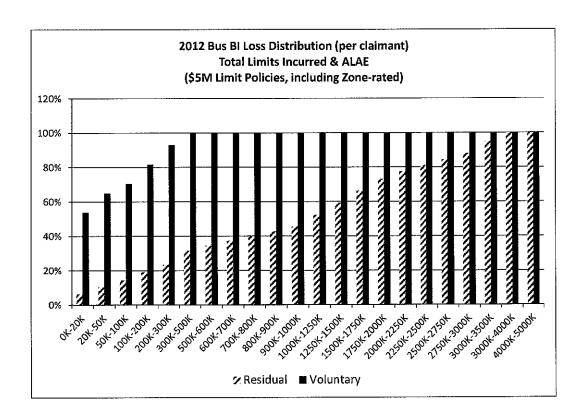
Vehicle Class	Large Loss Adjustment				
TTT	\$18.88				
PPT Fleet	\$19.56				
Garages	\$17.97				
Taxis	\$19.35				
Limos	\$15.65				
Car Service	\$15.65				
Bus (School & Church)	\$15.50				
Bus (Other)	\$15.81				
Bus (Soc. Serv. & NOC)	\$15.81				
Van Pools	\$15.98				

2019 CAR Filing Section 106 Exhibit 1

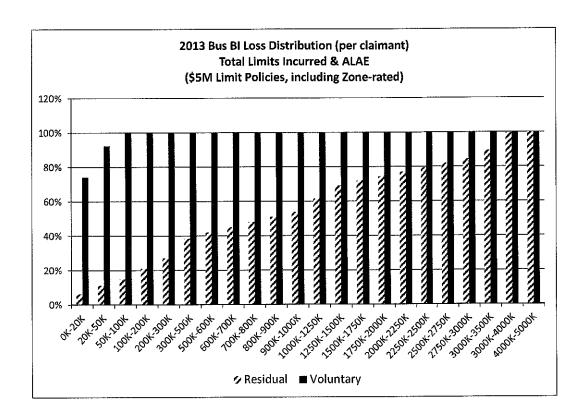




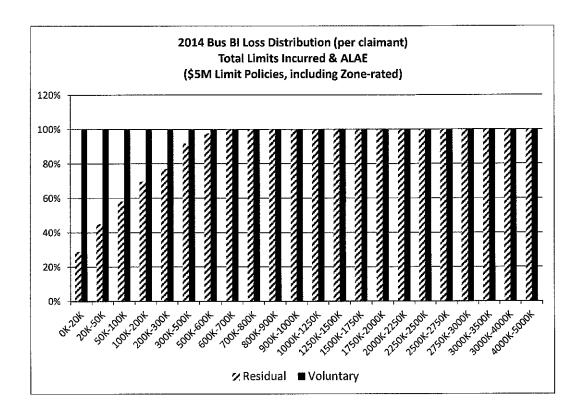
2019 CAR Filing Section 106 Exhibit 2a



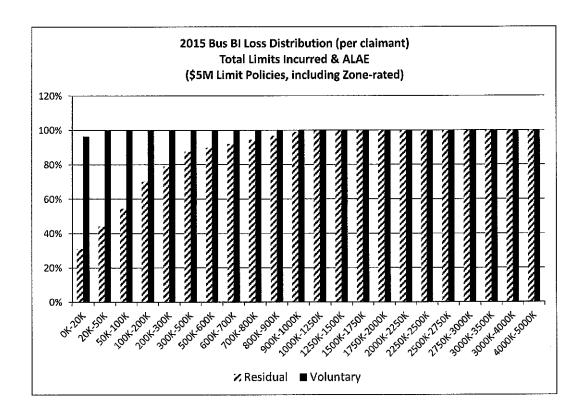
2019 CAR Filing Section 106 Exhibit 2b



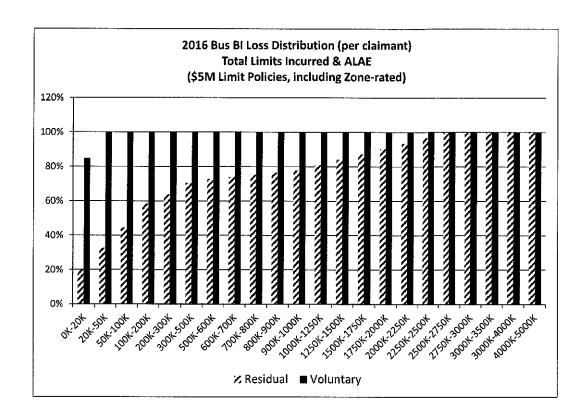
2019 CAR Filing Section 106 Exhibit 2c



2019 CAR Filing Section 106 Exhibit 2d



2019 CAR Filing Section 106 Exhibit 2e



2019 CAR Filing Section 106 Exhibit 2e

## Massachusetts Commercial Automobile Top 10 Largest B! Claims by Market Segment \$5M Policy Limits CSL Policies (per claimant)

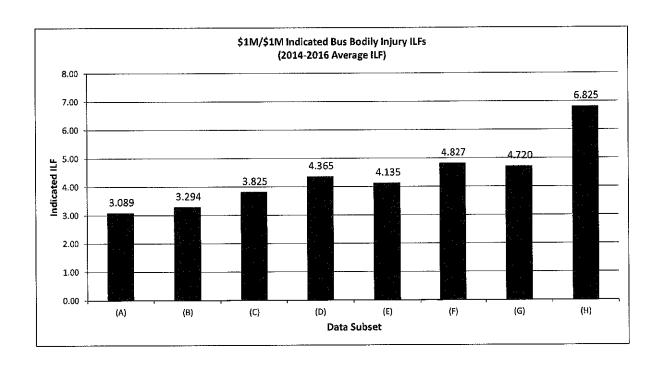
		Bus			
Accident <u>Year</u>	<u>Top 10</u>	Voluntary	<u>Residual</u>	Voluntary	<u>Residual</u>
2012	1	360,696	3,874,490	6,977	85,208
	2	40,000	2,060,724	•	40,500
	3	32,830	507,474		21,204
	4	32,214	136,493		15,000
	5	27,000	107,954		4,000
	6	26,000	96,444		
	7	25,005	44,112		
	8	25,000	43,964		
	9	20,000	40,392		
	10	19,000	32,512		
2013	1	64,003	4,545,000	105,966	40,658
	2	23,500	1,534,676	32,798	18,624
	3	20,000	1,501,776	8,784	16,000
	4	12,944	535,000	1,482	12,716
	5	10,000	510,076		10,855
	6	9,500	440,930		10,655
	7	8,297	110,000		9,893
	8	8,000	55,750		9,587
	9	8,000	55,631		7,524
	10	4,362	53,534		7,201
2014	1	15,000	695,662	7,000	125,253
	2	13,003	571,819	38	65,322
	3	12,000	570,002		42,672
	4	10,500	165,000		34,133
	5	10,000	150,000		30,000
	6	9,500	133,750		15,000
	7	7,750	125,212		9,500
	8	7,730	100,793		6,700
	9	7,500	95,000		6,700
	10	7,000	89,297		6,700
2015	1	22,500	1,045,944	166,792	31,065
	2	17,000	485,000	4,800	15,610
	3	11,973	273,663	340	11,400
	4	8,000	262,500		
	5	8,000	220,001		
	6		220,000		
	7		183,364		
	8		107,533		
	9		82,500		
	10		75,000		
2016	1	48,017	2,750,001	23,573	15,500
	2	20,051	574,790	10,600	13,180
	3	20,000	435,000		9,334
	4	20,000	250,000		4,100
	5	10,250	239,440		2,500
	6	10,000	220,000		2,500
	7	10,000	205,000		201
	8	8,000	195,000		
	9	8,000	145,000		
	10	7,095	139,000		

2019 CAR Filing Section 106 Exhibit 3

# \$1M/\$1M Bodily Injury Indicated Increased Limits Factors Based Various Data Subsets (Average of 2014-2016 Indicated ILFS)

2016			
Incurred	Indicated		
Claims*	<u>ILF</u>	Data S	<u>ubset</u>
2,818	3.089	(A)	Total Market (TTT, PPT, Bus, Van), Excluding Zone-rated (Typical Filed Data Subset for Buses)
3,021	3.294	(B)	Total Market (TTT, PPT, Bus, Van), Including Zone-rated
346	3.825	(C)	Total Market (Bus only), Excluding Zone-rated
454	4.365	(D)	Total Market (Bus only), Including Zone-rated
235	4.135	(E)	Residual Market (Bus only), Excluding Zone-rated
338	4.827	(F)	Residual Market (Bus only), Including Zone-rated
201	4.720	(G)	Zone-rated only, Total Market (Bus & TTT)
108	6.825	(H)	Zone-rated only, Total Market (Bus)

<sup>\*</sup> Claims contributing to the \$1M/\$1M ILF calculations (from policies with limits equal to or higher than the \$1M/\$1M limit)



2019 CAR Filing Section 106 Exhibit 4

299,283

50,254

1,185,485

## Massachusetts Commercial Automobile Calculation and Distribution of Large Loss Adjustment Reflecting Bodily Injury Distributional Differences in High Limit Policies

<u>8us Group</u> S&C Bus Other Bus SS & NOC Bus	2016 Residual Market <u>E. Exposures</u> 2,128.9 1,342.6 3,722.6 7,194.1	Bodily Injury Selected Average Premium (Form 100) 319.35 501.16 986.99	Implied <u>Losses</u> 679,864 672,857 3,674,169 5,026,891								
	(1)	(2)	(3)								
	Indicated	Indicated	Selected								
	Total Market TTT,	Residual Market	Residual Market		(1)	Based on Tota	il Market TTT, F	PPT, Bus and V	an Pool expe	rience (Exh. 4,	Subset A)
<u>Limit</u>	PPT, Bus Van ILF	Bus (LF	Bus ILF		(2)	Based on Resi	dual Market Bu	us-only experie	nce (Exh. 4,	Subset E)	
\$1M	3.201	4.135	3.521		(3)	l'otal Market	TTT, PPT, Bus a	nd Van Pool IL	F capped at	:	10.0%
\$1.5M	3.389	4.378	3.728								
\$5M	3.947	5.098	4.342		Note: \$1.5M and \$5M limit ILFs based on the \$1M limits ILF and						
					;	an interpolation	on between the	e log-transforn	ned limits.		
			Bodily Injury	Indicated (1)							
		2016	Selected Average	Tot, Market		Indicated	(2) Residual M	arket Bus	Selected	(3) Residual M	larket Bus
		Residual Market	Premium	TTT, PPT, Bus	Implied	Indicated	Implied	Indicated	Selected	Implied	Selected
<u>Limit</u>	Bus Group	E. Exposures	(Form 100)	& Van ILF	Losses	ILF	Losses	Adjustment	ILF	Losses	Adjustment
\$1M	S&C Bus	983	319.35	3,201	1,004,861	4.135	1,298,064	293,202	3.521	1,105,347	100,486
•	Other Bus	349	501.16	3.201	559,870	4.135	723,232	163,361	3,521	615,857	55,987
	SS & NOC Bus	1,595	986.99	3.201	5,039,171	4.135	6,509,520	1,470,349	3.521	5,543,088	503,917
		-									
\$1.5M	S&C Bus	140	319.35	3.389	151,519	4.378	195,736	44,217	3.728	166,671	15,152
	Other Bus	219	501.16	3.389	371,956	4.378	480,503	108,547	3.728	409,152	37,196
	SS & NOC Bus	322	986.99	3.389	1,077,061	4.378	1,391,376	314,315	3.728	1,184,767	107,706
\$5M	S&C Bus	123	319.35	3.947	155,038	5.098	200,250	45,211	4.342	170,542	15,504

## Distribution of Large Loss Adjustment To Class Type

Other Bus

SS & NOC Bus

TOTAL

(Bodily Injury Coverage Only)

	(a)	(b)	(a)=Adjustment/(b)
	2016	Average BI	1
	Residual Market	îlf	F Large Loss
Class	E. Exposures	(Form 110)	<u>Adjustment</u>
тт	19,095.6	1.782	18.88
PPT Fleet	1,142.9	1.720	19.56
Garages	3,380.9	1.872	17.97
Taxis	703.1	1.738	19.35
Limos	203.5	2.150	15.65
Car Service	763.4	2.150	15.65
Bus (S&C)	2,128.9	2.170	15.50
Bus (Other)	1,342.6	2.128	15.81
Bus (SS & NOC)	3,722.6	2.128	15.81
Van Pool	147.5	2.105	15.98
Zone-rated (TTT)	1,744.0		The large loss adjustments for Zone-rated classes are incorporated into Zone rates
Zone-rated (Bus)	867.0		as described in footnote (3) of the filing summary exhibit (filing page 2)
TOTAL	35,242.0		

1,513

129

501.16

986.99

3.947

3.947

2,992,833

11,854,849

502,539

5.098

5.098

3,865,584

15,313,350

649,086

872,752

146,547

3,458,501

4.342

4.342

3,292,116

13,040,334

552,793

Selected Large Loss Adjustment

1,185,485 Large Loss Adj. as Pure Premium

\$33.64 = (Adjustment)/(Total Earned Exposures)