

**Massachusetts Private Passenger Automobile
Model Year/VRG Relativities**

Collision

VRG	Model Year															
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005 & Prior
11	0.746	0.710	0.675	0.639	0.604	0.568	0.533	0.497	0.462	0.426	0.391	0.355	0.332	0.310	0.289	0.270
12	0.771	0.734	0.697	0.661	0.624	0.587	0.551	0.514	0.477	0.440	0.404	0.367	0.343	0.320	0.299	0.279
13	0.797	0.759	0.721	0.683	0.645	0.607	0.569	0.531	0.493	0.455	0.417	0.380	0.354	0.331	0.309	0.288
14	0.825	0.786	0.747	0.707	0.668	0.629	0.590	0.550	0.511	0.472	0.432	0.393	0.367	0.343	0.320	0.299
15	0.855	0.814	0.773	0.733	0.692	0.651	0.611	0.570	0.529	0.488	0.448	0.407	0.380	0.355	0.331	0.309
16	0.884	0.842	0.800	0.758	0.716	0.674	0.632	0.589	0.547	0.505	0.463	0.421	0.393	0.367	0.343	0.320
17	0.915	0.871	0.827	0.784	0.740	0.697	0.653	0.610	0.566	0.523	0.479	0.436	0.407	0.380	0.354	0.331
18	0.947	0.902	0.857	0.812	0.767	0.722	0.677	0.631	0.586	0.541	0.496	0.451	0.421	0.393	0.367	0.343
19	0.981	0.934	0.887	0.841	0.794	0.747	0.701	0.654	0.607	0.560	0.514	0.467	0.436	0.407	0.380	0.355
20	1.014	0.966	0.918	0.869	0.821	0.773	0.725	0.676	0.628	0.580	0.531	0.483	0.451	0.421	0.393	0.367
21	1.050	1.000	0.950	0.900	0.850	0.800	0.750	0.700	0.650	0.600	0.550	0.500	0.467	0.436	0.407	0.380
22	1.087	1.035	0.983	0.932	0.880	0.828	0.776	0.725	0.673	0.621	0.569	0.518	0.483	0.451	0.421	0.393
23	1.125	1.071	1.017	0.964	0.910	0.857	0.803	0.750	0.696	0.643	0.589	0.536	0.500	0.467	0.436	0.407
24	1.164	1.109	1.054	0.998	0.943	0.887	0.832	0.776	0.721	0.665	0.610	0.555	0.518	0.484	0.451	0.421
25	1.205	1.148	1.091	1.033	0.976	0.918	0.861	0.804	0.746	0.689	0.631	0.574	0.536	0.501	0.467	0.436
26	1.247	1.188	1.129	1.069	1.010	0.950	0.891	0.832	0.772	0.713	0.653	0.594	0.555	0.518	0.484	0.451
27	1.292	1.230	1.169	1.107	1.046	0.984	0.923	0.861	0.800	0.738	0.677	0.615	0.574	0.536	0.501	0.467
28	1.337	1.273	1.209	1.146	1.082	1.018	0.955	0.891	0.827	0.764	0.700	0.637	0.594	0.555	0.518	0.484
29	1.383	1.317	1.251	1.185	1.119	1.054	0.988	0.922	0.856	0.790	0.724	0.659	0.615	0.574	0.536	0.500
30	1.431	1.363	1.295	1.227	1.159	1.090	1.022	0.954	0.886	0.818	0.750	0.682	0.637	0.594	0.555	0.518
31	1.481	1.410	1.340	1.269	1.199	1.128	1.058	0.987	0.917	0.846	0.776	0.705	0.658	0.615	0.574	0.536
32	1.534	1.461	1.388	1.315	1.242	1.169	1.096	1.023	0.950	0.877	0.804	0.731	0.682	0.637	0.595	0.555
33	1.587	1.511	1.435	1.360	1.284	1.209	1.133	1.058	0.982	0.907	0.831	0.756	0.706	0.659	0.615	0.574
34	1.642	1.564	1.486	1.408	1.329	1.251	1.173	1.095	1.017	0.938	0.860	0.782	0.730	0.682	0.637	0.594
35	1.700	1.619	1.538	1.457	1.376	1.295	1.214	1.133	1.052	0.971	0.890	0.810	0.756	0.706	0.659	0.615
36	1.760	1.676	1.592	1.508	1.425	1.341	1.257	1.173	1.089	1.006	0.922	0.838	0.783	0.731	0.682	0.637
37	1.821	1.734	1.647	1.561	1.474	1.387	1.301	1.214	1.127	1.040	0.954	0.867	0.810	0.756	0.706	0.659
38	1.886	1.796	1.706	1.616	1.527	1.437	1.347	1.257	1.167	1.078	0.988	0.898	0.839	0.783	0.731	0.682
39	1.952	1.859	1.766	1.673	1.580	1.487	1.394	1.301	1.208	1.115	1.022	0.930	0.868	0.811	0.757	0.706
40	2.019	1.923	1.827	1.731	1.635	1.538	1.442	1.346	1.250	1.154	1.058	0.962	0.898	0.838	0.783	0.731
41	2.090	1.990	1.891	1.791	1.692	1.592	1.493	1.393	1.294	1.194	1.095	0.995	0.929	0.868	0.810	0.756
42	2.163	2.060	1.957	1.854	1.751	1.648	1.545	1.442	1.339	1.236	1.133	1.030	0.962	0.898	0.838	0.783
43	2.239	2.132	2.025	1.919	1.812	1.706	1.599	1.492	1.386	1.279	1.173	1.066	0.996	0.930	0.868	0.810
44	2.317	2.207	2.097	1.986	1.876	1.766	1.655	1.545	1.435	1.324	1.214	1.104	1.031	0.962	0.898	0.839
45	2.398	2.284	2.170	2.056	1.941	1.827	1.713	1.599	1.485	1.370	1.256	1.142	1.067	0.996	0.930	0.868
46	2.482	2.364	2.246	2.128	2.009	1.891	1.773	1.655	1.537	1.418	1.300	1.182	1.104	1.031	0.962	0.898
47	2.569	2.447	2.325	2.202	2.080	1.958	1.835	1.713	1.591	1.468	1.346	1.224	1.143	1.067	0.996	0.930
48	2.659	2.532	2.405	2.279	2.152	2.026	1.899	1.772	1.646	1.519	1.393	1.266	1.182	1.104	1.031	0.962
49	2.751	2.620	2.489	2.358	2.227	2.096	1.965	1.834	1.703	1.572	1.441	1.310	1.224	1.142	1.066	0.996
50	2.847	2.711	2.575	2.440	2.304	2.169	2.033	1.898	1.762	1.627	1.491	1.356	1.266	1.182	1.103	1.030

For the Calculation of Rate Relativities for VRG 50, refer to Rule 22 E.

**Massachusetts Private Passenger Automobile
Model Year/VRG Relativities**

Comprehensive

VRG	Model Year															
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005 & Prior
11	0.636	0.620	0.599	0.578	0.559	0.540	0.522	0.505	0.487	0.471	0.454	0.439	0.424	0.410	0.396	0.383
12	0.667	0.651	0.629	0.607	0.587	0.567	0.548	0.530	0.512	0.494	0.477	0.461	0.445	0.430	0.416	0.402
13	0.699	0.682	0.659	0.636	0.614	0.594	0.574	0.555	0.536	0.518	0.500	0.483	0.466	0.451	0.436	0.421
14	0.734	0.716	0.692	0.668	0.645	0.624	0.603	0.583	0.563	0.543	0.525	0.507	0.490	0.473	0.458	0.442
15	0.770	0.751	0.725	0.701	0.677	0.654	0.632	0.611	0.590	0.570	0.550	0.532	0.514	0.496	0.480	0.463
16	0.808	0.788	0.761	0.735	0.710	0.686	0.663	0.641	0.619	0.598	0.578	0.558	0.539	0.521	0.504	0.486
17	0.847	0.826	0.798	0.771	0.744	0.719	0.695	0.672	0.649	0.627	0.605	0.585	0.565	0.546	0.528	0.510
18	0.889	0.867	0.838	0.809	0.781	0.755	0.730	0.706	0.681	0.658	0.636	0.614	0.593	0.573	0.554	0.535
19	0.931	0.908	0.877	0.847	0.818	0.791	0.765	0.739	0.714	0.689	0.666	0.643	0.621	0.600	0.580	0.560
20	0.978	0.954	0.922	0.890	0.860	0.831	0.803	0.777	0.750	0.724	0.699	0.675	0.653	0.631	0.610	0.589
21	1.025	1.000	0.966	0.933	0.901	0.871	0.842	0.814	0.786	0.759	0.733	0.708	0.684	0.661	0.639	0.617
22	1.075	1.049	1.013	0.979	0.945	0.914	0.883	0.854	0.825	0.796	0.769	0.743	0.718	0.693	0.670	0.647
23	1.129	1.101	1.064	1.027	0.992	0.959	0.927	0.896	0.865	0.836	0.807	0.780	0.753	0.728	0.704	0.679
24	1.183	1.154	1.115	1.077	1.040	1.005	0.972	0.939	0.907	0.876	0.846	0.817	0.789	0.763	0.737	0.712
25	1.240	1.210	1.169	1.129	1.090	1.054	1.019	0.985	0.951	0.918	0.887	0.857	0.828	0.800	0.773	0.747
26	1.301	1.269	1.226	1.184	1.143	1.105	1.068	1.033	0.997	0.963	0.930	0.898	0.868	0.839	0.811	0.783
27	1.364	1.331	1.286	1.242	1.199	1.159	1.121	1.083	1.046	1.010	0.976	0.942	0.910	0.880	0.851	0.821
28	1.430	1.395	1.348	1.302	1.257	1.215	1.175	1.136	1.096	1.059	1.023	0.988	0.954	0.922	0.891	0.861
29	1.500	1.463	1.413	1.365	1.318	1.274	1.232	1.191	1.150	1.110	1.072	1.036	1.001	0.967	0.935	0.903
30	1.574	1.536	1.484	1.433	1.384	1.338	1.293	1.250	1.207	1.166	1.126	1.087	1.051	1.015	0.982	0.948
31	1.650	1.610	1.555	1.502	1.451	1.402	1.356	1.311	1.265	1.222	1.180	1.140	1.101	1.064	1.029	0.993
32	1.731	1.689	1.632	1.576	1.522	1.471	1.422	1.375	1.328	1.282	1.238	1.196	1.155	1.116	1.079	1.042
33	1.815	1.771	1.711	1.652	1.596	1.543	1.491	1.442	1.392	1.344	1.298	1.254	1.211	1.171	1.132	1.093
34	1.904	1.858	1.795	1.734	1.674	1.618	1.564	1.512	1.460	1.410	1.362	1.315	1.271	1.228	1.187	1.146
35	1.997	1.948	1.882	1.817	1.755	1.697	1.640	1.586	1.531	1.479	1.428	1.379	1.332	1.288	1.245	1.202
36	2.094	2.043	1.974	1.906	1.841	1.779	1.720	1.663	1.606	1.551	1.498	1.446	1.397	1.350	1.305	1.261
37	2.198	2.144	2.071	2.000	1.932	1.867	1.805	1.745	1.685	1.627	1.572	1.518	1.466	1.417	1.370	1.323
38	2.303	2.247	2.171	2.096	2.025	1.957	1.892	1.829	1.766	1.705	1.647	1.591	1.537	1.485	1.436	1.386
39	2.416	2.357	2.277	2.199	2.124	2.053	1.985	1.919	1.853	1.789	1.728	1.669	1.612	1.558	1.506	1.454
40	2.533	2.471	2.387	2.305	2.226	2.152	2.081	2.011	1.942	1.875	1.811	1.749	1.690	1.633	1.579	1.525
41	2.657	2.592	2.504	2.418	2.335	2.258	2.182	2.110	2.037	1.967	1.900	1.835	1.773	1.713	1.656	1.599
42	2.787	2.719	2.627	2.537	2.450	2.368	2.289	2.213	2.137	2.064	1.993	1.925	1.860	1.797	1.737	1.678
43	2.922	2.851	2.754	2.660	2.569	2.483	2.401	2.321	2.241	2.164	2.090	2.019	1.950	1.885	1.822	1.759
44	3.065	2.990	2.888	2.790	2.694	2.604	2.518	2.434	2.350	2.269	2.192	2.117	2.045	1.976	1.911	1.845
45	3.214	3.136	3.029	2.926	2.826	2.731	2.641	2.553	2.465	2.380	2.299	2.220	2.145	2.073	2.004	1.935
46	3.371	3.289	3.177	3.069	2.963	2.865	2.769	2.677	2.585	2.496	2.411	2.329	2.250	2.174	2.102	2.029
47	3.536	3.450	3.333	3.219	3.108	3.005	2.905	2.808	2.712	2.619	2.529	2.443	2.360	2.280	2.205	2.129
48	3.708	3.618	3.495	3.376	3.260	3.151	3.046	2.945	2.844	2.746	2.652	2.562	2.475	2.391	2.312	2.232
49	3.889	3.794	3.665	3.540	3.418	3.305	3.195	3.088	2.982	2.880	2.781	2.686	2.595	2.508	2.424	2.341
50	4.080	3.980	3.845	3.713	3.586	3.467	3.351	3.240	3.128	3.021	2.917	2.818	2.722	2.631	2.543	2.456

For the Calculation of Rate Relativities for VRG 50, refer to Rule 22 E.