

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

Collision

VRG	Model Year														
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007 & 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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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															2006 & Prior
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
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.