

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

Collision

VRG	Model Year															
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008 & Prior
11	0.782	0.745	0.708	0.671	0.641	0.611	0.581	0.540	0.499	0.458	0.421	0.384	0.350	0.317	0.283	0.253
12	0.805	0.767	0.729	0.690	0.660	0.629	0.598	0.556	0.514	0.472	0.433	0.395	0.360	0.326	0.291	0.261
13	0.830	0.790	0.751	0.711	0.679	0.648	0.616	0.573	0.529	0.486	0.446	0.407	0.371	0.336	0.300	0.269
14	0.855	0.814	0.773	0.733	0.700	0.667	0.635	0.590	0.545	0.501	0.460	0.419	0.383	0.346	0.309	0.277
15	0.880	0.838	0.796	0.754	0.721	0.687	0.654	0.608	0.561	0.515	0.473	0.432	0.394	0.356	0.318	0.285
16	0.906	0.863	0.820	0.777	0.742	0.708	0.673	0.626	0.578	0.531	0.488	0.444	0.406	0.367	0.328	0.293
17	0.933	0.889	0.845	0.800	0.765	0.729	0.693	0.645	0.596	0.547	0.502	0.458	0.418	0.378	0.338	0.302
18	0.962	0.916	0.870	0.824	0.788	0.751	0.714	0.664	0.614	0.563	0.518	0.472	0.431	0.389	0.348	0.311
19	0.990	0.943	0.896	0.849	0.811	0.773	0.736	0.684	0.632	0.580	0.533	0.486	0.443	0.401	0.358	0.321
20	1.020	0.971	0.922	0.874	0.835	0.796	0.757	0.704	0.651	0.597	0.549	0.500	0.456	0.413	0.369	0.330
21	1.050	1.000	0.950	0.900	0.860	0.820	0.780	0.725	0.670	0.615	0.565	0.515	0.470	0.425	0.380	0.340
22	1.082	1.030	0.979	0.927	0.886	0.845	0.803	0.747	0.690	0.633	0.582	0.530	0.484	0.438	0.391	0.350
23	1.114	1.061	1.008	0.955	0.912	0.870	0.828	0.769	0.711	0.653	0.599	0.546	0.499	0.451	0.403	0.361
24	1.148	1.093	1.038	0.984	0.940	0.896	0.853	0.792	0.732	0.672	0.618	0.563	0.514	0.465	0.415	0.372
25	1.182	1.126	1.070	1.013	0.968	0.923	0.878	0.816	0.754	0.692	0.636	0.580	0.529	0.479	0.428	0.383
26	1.218	1.160	1.102	1.044	0.998	0.951	0.905	0.841	0.777	0.713	0.655	0.597	0.545	0.493	0.441	0.394
27	1.255	1.195	1.135	1.076	1.028	0.980	0.932	0.866	0.801	0.735	0.675	0.615	0.562	0.508	0.454	0.406
28	1.293	1.231	1.169	1.108	1.059	1.009	0.960	0.892	0.825	0.757	0.696	0.634	0.579	0.523	0.468	0.419
29	1.331	1.268	1.205	1.141	1.090	1.040	0.989	0.919	0.850	0.780	0.716	0.653	0.596	0.539	0.482	0.431
30	1.371	1.306	1.241	1.175	1.123	1.071	1.019	0.947	0.875	0.803	0.738	0.673	0.614	0.555	0.496	0.444
31	1.412	1.345	1.278	1.211	1.157	1.103	1.049	0.975	0.901	0.827	0.760	0.693	0.632	0.572	0.511	0.457
32	1.454	1.385	1.316	1.247	1.191	1.136	1.080	1.004	0.928	0.852	0.783	0.713	0.651	0.589	0.526	0.471
33	1.498	1.427	1.356	1.284	1.227	1.170	1.113	1.035	0.956	0.878	0.806	0.735	0.671	0.606	0.542	0.485
34	1.544	1.470	1.397	1.323	1.264	1.205	1.147	1.066	0.985	0.904	0.831	0.757	0.691	0.625	0.559	0.500
35	1.590	1.514	1.438	1.363	1.302	1.241	1.181	1.098	1.014	0.931	0.855	0.780	0.712	0.643	0.575	0.515
36	1.637	1.559	1.481	1.403	1.341	1.278	1.216	1.130	1.045	0.959	0.881	0.803	0.733	0.663	0.592	0.530
37	1.686	1.606	1.526	1.445	1.381	1.317	1.253	1.164	1.076	0.988	0.907	0.827	0.755	0.683	0.610	0.546
38	1.737	1.654	1.571	1.489	1.422	1.356	1.290	1.199	1.108	1.017	0.935	0.852	0.777	0.703	0.629	0.562
39	1.789	1.704	1.619	1.534	1.465	1.397	1.329	1.235	1.142	1.048	0.963	0.878	0.801	0.724	0.648	0.579
40	1.843	1.755	1.667	1.580	1.509	1.439	1.369	1.272	1.176	1.079	0.992	0.904	0.825	0.746	0.667	0.597
41	1.898	1.808	1.718	1.627	1.555	1.483	1.410	1.311	1.211	1.112	1.022	0.931	0.850	0.768	0.687	0.615
42	1.955	1.862	1.769	1.676	1.601	1.527	1.452	1.350	1.248	1.145	1.052	0.959	0.875	0.791	0.708	0.633
43	2.014	1.918	1.822	1.726	1.649	1.573	1.496	1.391	1.285	1.180	1.084	0.988	0.901	0.815	0.729	0.652
44	2.075	1.976	1.877	1.778	1.699	1.620	1.541	1.433	1.324	1.215	1.116	1.018	0.929	0.840	0.751	0.672
45	2.137	2.035	1.933	1.832	1.750	1.669	1.587	1.475	1.363	1.252	1.150	1.048	0.956	0.865	0.773	0.692
46	2.201	2.096	1.991	1.886	1.803	1.719	1.635	1.520	1.404	1.289	1.184	1.079	0.985	0.891	0.796	0.713
47	2.267	2.159	2.051	1.943	1.857	1.770	1.684	1.565	1.447	1.328	1.220	1.112	1.015	0.918	0.820	0.734
48	2.335	2.224	2.113	2.002	1.913	1.824	1.735	1.612	1.490	1.368	1.257	1.145	1.045	0.945	0.845	0.756
49	2.406	2.291	2.176	2.062	1.970	1.879	1.787	1.661	1.535	1.409	1.294	1.180	1.077	0.974	0.871	0.779
50	2.478	2.360	2.242	2.124	2.030	1.935	1.841	1.711	1.581	1.451	1.333	1.215	1.109	1.003	0.897	0.802

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															
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008 & Prior
11	0.706	0.676	0.648	0.621	0.594	0.569	0.546	0.523	0.500	0.479	0.459	0.439	0.421	0.404	0.387	0.370
12	0.734	0.703	0.673	0.645	0.618	0.592	0.567	0.543	0.520	0.498	0.477	0.457	0.438	0.420	0.402	0.385
13	0.763	0.731	0.700	0.671	0.643	0.616	0.590	0.565	0.541	0.518	0.496	0.475	0.455	0.436	0.418	0.401
14	0.793	0.760	0.728	0.698	0.668	0.640	0.613	0.587	0.562	0.539	0.516	0.494	0.473	0.454	0.435	0.416
15	0.825	0.790	0.757	0.725	0.694	0.665	0.638	0.611	0.585	0.560	0.536	0.514	0.492	0.472	0.452	0.433
16	0.858	0.822	0.787	0.755	0.723	0.692	0.663	0.635	0.608	0.583	0.558	0.534	0.512	0.491	0.470	0.450
17	0.893	0.855	0.819	0.785	0.752	0.720	0.690	0.661	0.633	0.606	0.581	0.556	0.533	0.510	0.489	0.469
18	0.928	0.889	0.852	0.816	0.781	0.749	0.717	0.687	0.658	0.630	0.604	0.578	0.554	0.531	0.509	0.487
19	0.966	0.925	0.886	0.849	0.813	0.779	0.746	0.715	0.685	0.656	0.628	0.601	0.576	0.552	0.529	0.507
20	1.004	0.962	0.922	0.883	0.846	0.810	0.776	0.744	0.712	0.682	0.653	0.625	0.599	0.574	0.550	0.527
21	1.044	1.000	0.958	0.918	0.879	0.842	0.807	0.773	0.740	0.709	0.679	0.650	0.623	0.597	0.572	0.548
22	1.086	1.040	0.996	0.955	0.914	0.876	0.839	0.804	0.770	0.737	0.706	0.676	0.648	0.621	0.595	0.570
23	1.130	1.082	1.037	0.993	0.951	0.911	0.873	0.836	0.801	0.767	0.735	0.703	0.674	0.646	0.619	0.593
24	1.175	1.125	1.078	1.033	0.989	0.947	0.908	0.870	0.833	0.798	0.764	0.731	0.701	0.672	0.644	0.617
25	1.221	1.170	1.121	1.074	1.028	0.985	0.944	0.904	0.866	0.830	0.794	0.761	0.729	0.698	0.669	0.641
26	1.271	1.217	1.166	1.117	1.070	1.025	0.982	0.941	0.901	0.863	0.826	0.791	0.758	0.727	0.696	0.667
27	1.322	1.266	1.213	1.162	1.113	1.066	1.022	0.979	0.937	0.898	0.860	0.823	0.789	0.756	0.724	0.694
28	1.375	1.317	1.262	1.209	1.158	1.109	1.063	1.018	0.975	0.934	0.894	0.856	0.820	0.786	0.753	0.722
29	1.430	1.370	1.312	1.258	1.204	1.154	1.106	1.059	1.014	0.971	0.930	0.891	0.854	0.818	0.784	0.751
30	1.488	1.425	1.365	1.308	1.253	1.200	1.150	1.102	1.055	1.010	0.968	0.926	0.888	0.851	0.815	0.781
31	1.547	1.482	1.420	1.360	1.303	1.248	1.196	1.146	1.097	1.051	1.006	0.963	0.923	0.885	0.848	0.812
32	1.609	1.541	1.476	1.415	1.355	1.298	1.244	1.191	1.140	1.093	1.046	1.002	0.960	0.920	0.881	0.844
33	1.674	1.603	1.536	1.472	1.409	1.350	1.294	1.239	1.186	1.137	1.088	1.042	0.999	0.957	0.917	0.878
34	1.740	1.667	1.597	1.530	1.465	1.404	1.345	1.289	1.234	1.182	1.132	1.084	1.039	0.995	0.954	0.914
35	1.810	1.734	1.661	1.592	1.524	1.460	1.399	1.340	1.283	1.229	1.177	1.127	1.080	1.035	0.992	0.950
36	1.882	1.803	1.727	1.655	1.585	1.518	1.455	1.394	1.334	1.278	1.224	1.172	1.123	1.076	1.031	0.988
37	1.958	1.875	1.796	1.721	1.648	1.579	1.513	1.449	1.388	1.329	1.273	1.219	1.168	1.119	1.073	1.028
38	2.036	1.950	1.868	1.790	1.714	1.642	1.574	1.507	1.443	1.383	1.324	1.268	1.215	1.164	1.115	1.069
39	2.117	2.028	1.943	1.862	1.783	1.708	1.637	1.568	1.501	1.438	1.377	1.318	1.263	1.211	1.160	1.111
40	2.202	2.109	2.020	1.936	1.854	1.776	1.702	1.630	1.561	1.495	1.432	1.371	1.314	1.259	1.206	1.156
41	2.289	2.193	2.101	2.013	1.928	1.847	1.770	1.695	1.623	1.555	1.489	1.425	1.366	1.309	1.254	1.202
42	2.381	2.281	2.185	2.094	2.005	1.921	1.841	1.763	1.688	1.617	1.549	1.483	1.421	1.362	1.305	1.250
43	2.476	2.372	2.272	2.177	2.085	1.997	1.914	1.834	1.755	1.682	1.611	1.542	1.478	1.416	1.357	1.300
44	2.576	2.467	2.363	2.265	2.168	2.077	1.991	1.907	1.826	1.749	1.675	1.604	1.537	1.473	1.411	1.352
45	2.679	2.566	2.458	2.356	2.256	2.161	2.071	1.984	1.899	1.819	1.742	1.668	1.599	1.532	1.468	1.406
46	2.786	2.669	2.557	2.450	2.346	2.247	2.154	2.063	1.975	1.892	1.812	1.735	1.663	1.593	1.527	1.463
47	2.898	2.776	2.659	2.548	2.440	2.337	2.240	2.146	2.054	1.968	1.885	1.804	1.729	1.657	1.588	1.521
48	3.014	2.887	2.766	2.650	2.538	2.431	2.330	2.232	2.136	2.047	1.960	1.877	1.799	1.724	1.651	1.582
49	3.134	3.002	2.876	2.756	2.639	2.528	2.423	2.321	2.221	2.128	2.038	1.951	1.870	1.792	1.717	1.645
50	3.259	3.122	2.991	2.866	2.744	2.629	2.519	2.413	2.310	2.213	2.120	2.029	1.945	1.864	1.786	1.711

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