

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

Collision

VRG	Model Year															
	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999 & Prior
11	0.763	0.720	0.679	0.641	0.605	0.570	0.538	0.503	0.469	0.438	0.410	0.383	0.358	0.334	0.312	0.292
12	0.788	0.743	0.701	0.661	0.624	0.588	0.555	0.519	0.484	0.452	0.423	0.395	0.369	0.345	0.322	0.302
13	0.813	0.767	0.723	0.683	0.644	0.607	0.573	0.535	0.500	0.467	0.436	0.408	0.381	0.356	0.333	0.311
14	0.841	0.793	0.748	0.706	0.666	0.628	0.592	0.554	0.517	0.483	0.451	0.422	0.394	0.368	0.344	0.322
15	0.868	0.819	0.772	0.729	0.688	0.649	0.612	0.572	0.534	0.499	0.466	0.436	0.407	0.380	0.355	0.333
16	0.896	0.845	0.797	0.752	0.710	0.669	0.631	0.590	0.551	0.515	0.481	0.450	0.420	0.392	0.367	0.343
17	0.925	0.873	0.823	0.777	0.733	0.691	0.652	0.609	0.569	0.532	0.497	0.464	0.434	0.405	0.379	0.354
18	0.957	0.903	0.852	0.804	0.759	0.715	0.675	0.630	0.589	0.550	0.514	0.480	0.449	0.419	0.392	0.367
19	0.991	0.935	0.882	0.832	0.785	0.741	0.698	0.653	0.610	0.569	0.532	0.497	0.465	0.434	0.406	0.380
20	1.024	0.966	0.911	0.860	0.811	0.765	0.722	0.674	0.630	0.588	0.550	0.514	0.480	0.448	0.419	0.392
21	1.060	1.000	0.943	0.890	0.840	0.792	0.747	0.698	0.652	0.609	0.569	0.532	0.497	0.464	0.434	0.406
22	1.096	1.034	0.975	0.920	0.869	0.819	0.772	0.722	0.674	0.630	0.588	0.550	0.514	0.480	0.449	0.420
23	1.133	1.069	1.008	0.951	0.898	0.847	0.799	0.746	0.697	0.651	0.608	0.569	0.531	0.496	0.464	0.434
24	1.172	1.106	1.043	0.984	0.929	0.876	0.826	0.772	0.721	0.674	0.629	0.588	0.550	0.513	0.480	0.449
25	1.212	1.143	1.078	1.017	0.960	0.905	0.854	0.798	0.745	0.696	0.650	0.608	0.568	0.530	0.496	0.464
26	1.252	1.181	1.114	1.051	0.992	0.935	0.882	0.824	0.770	0.719	0.672	0.628	0.587	0.548	0.513	0.479
27	1.295	1.222	1.152	1.088	1.026	0.968	0.913	0.853	0.797	0.744	0.695	0.650	0.607	0.567	0.530	0.496
28	1.340	1.264	1.192	1.125	1.062	1.001	0.944	0.882	0.824	0.770	0.719	0.672	0.628	0.586	0.549	0.513
29	1.383	1.305	1.231	1.161	1.096	1.034	0.975	0.911	0.851	0.795	0.743	0.694	0.649	0.606	0.566	0.530
30	1.428	1.347	1.270	1.199	1.131	1.067	1.006	0.940	0.878	0.820	0.766	0.717	0.669	0.625	0.585	0.547
31	1.479	1.395	1.315	1.242	1.172	1.105	1.042	0.974	0.910	0.850	0.794	0.742	0.693	0.647	0.605	0.566
32	1.525	1.439	1.357	1.281	1.209	1.140	1.075	1.004	0.938	0.876	0.819	0.766	0.715	0.668	0.625	0.584
33	1.576	1.487	1.402	1.323	1.249	1.178	1.111	1.038	0.970	0.906	0.846	0.791	0.739	0.690	0.645	0.604
34	1.628	1.536	1.448	1.367	1.290	1.217	1.147	1.072	1.001	0.935	0.874	0.817	0.763	0.713	0.667	0.624
35	1.681	1.586	1.496	1.412	1.332	1.256	1.185	1.107	1.034	0.966	0.902	0.844	0.788	0.736	0.688	0.644
36	1.739	1.641	1.547	1.460	1.378	1.300	1.226	1.145	1.070	0.999	0.934	0.873	0.816	0.761	0.712	0.666
37	1.800	1.698	1.601	1.511	1.426	1.345	1.268	1.185	1.107	1.034	0.966	0.903	0.844	0.788	0.737	0.689
38	1.861	1.756	1.656	1.563	1.475	1.391	1.312	1.226	1.145	1.069	0.999	0.934	0.873	0.815	0.762	0.713
39	1.925	1.816	1.712	1.616	1.525	1.438	1.357	1.268	1.184	1.106	1.033	0.966	0.903	0.843	0.788	0.737
40	1.992	1.879	1.772	1.672	1.578	1.488	1.404	1.312	1.225	1.144	1.069	1.000	0.934	0.872	0.815	0.763
41	2.056	1.940	1.829	1.727	1.630	1.536	1.449	1.354	1.265	1.181	1.104	1.032	0.964	0.900	0.842	0.788
42	2.124	2.004	1.890	1.784	1.683	1.587	1.497	1.399	1.307	1.220	1.140	1.066	0.996	0.930	0.870	0.814
43	2.197	2.073	1.955	1.845	1.741	1.642	1.549	1.447	1.352	1.262	1.180	1.103	1.030	0.962	0.900	0.842
44	2.273	2.144	2.022	1.908	1.801	1.698	1.602	1.497	1.398	1.306	1.220	1.141	1.066	0.995	0.930	0.870
45	2.352	2.219	2.093	1.975	1.864	1.757	1.658	1.549	1.447	1.351	1.263	1.181	1.103	1.030	0.963	0.901
46	2.435	2.297	2.166	2.044	1.929	1.819	1.716	1.603	1.498	1.399	1.307	1.222	1.142	1.066	0.997	0.933
47	2.516	2.374	2.239	2.113	1.994	1.880	1.773	1.657	1.548	1.446	1.351	1.263	1.180	1.102	1.030	0.964
48	2.603	2.456	2.316	2.186	2.063	1.945	1.835	1.714	1.601	1.496	1.397	1.307	1.221	1.140	1.066	0.997
49	2.688	2.536	2.391	2.257	2.130	2.009	1.894	1.770	1.653	1.544	1.443	1.349	1.260	1.177	1.101	1.030
50	2.776	2.619	2.470	2.331	2.200	2.074	1.956	1.828	1.708	1.595	1.490	1.393	1.302	1.215	1.137	1.063

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															
	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999 & Prior
11	0.641	0.625	0.610	0.595	0.581	0.566	0.550	0.534	0.518	0.503	0.489	0.474	0.461	0.448	0.434	0.422
12	0.671	0.655	0.639	0.624	0.608	0.593	0.576	0.559	0.543	0.527	0.512	0.497	0.483	0.469	0.455	0.442
13	0.702	0.685	0.669	0.652	0.636	0.621	0.603	0.585	0.568	0.551	0.536	0.520	0.505	0.490	0.476	0.462
14	0.737	0.719	0.702	0.684	0.668	0.651	0.633	0.614	0.596	0.579	0.562	0.546	0.530	0.515	0.500	0.485
15	0.772	0.753	0.735	0.717	0.700	0.682	0.663	0.643	0.624	0.606	0.589	0.572	0.555	0.539	0.523	0.508
16	0.810	0.790	0.771	0.752	0.734	0.716	0.695	0.675	0.655	0.636	0.618	0.600	0.582	0.566	0.549	0.533
17	0.849	0.828	0.808	0.788	0.769	0.750	0.729	0.707	0.686	0.667	0.647	0.628	0.610	0.593	0.575	0.559
18	0.890	0.868	0.847	0.826	0.806	0.786	0.764	0.741	0.720	0.699	0.679	0.659	0.640	0.621	0.603	0.586
19	0.934	0.911	0.889	0.867	0.846	0.825	0.802	0.778	0.755	0.733	0.712	0.691	0.671	0.652	0.633	0.615
20	0.978	0.954	0.931	0.908	0.886	0.864	0.840	0.815	0.791	0.768	0.746	0.724	0.703	0.683	0.663	0.644
21	1.025	1.000	0.976	0.952	0.929	0.906	0.880	0.854	0.829	0.805	0.782	0.759	0.737	0.716	0.695	0.675
22	1.074	1.048	1.023	0.998	0.974	0.949	0.922	0.895	0.869	0.844	0.820	0.795	0.772	0.750	0.728	0.707
23	1.126	1.099	1.073	1.046	1.021	0.996	0.967	0.939	0.911	0.885	0.859	0.834	0.810	0.787	0.764	0.742
24	1.181	1.152	1.124	1.097	1.070	1.044	1.014	0.984	0.955	0.927	0.901	0.874	0.849	0.825	0.801	0.778
25	1.238	1.208	1.179	1.150	1.122	1.094	1.063	1.032	1.001	0.972	0.945	0.917	0.890	0.865	0.840	0.815
26	1.298	1.266	1.236	1.205	1.176	1.147	1.114	1.081	1.050	1.019	0.990	0.961	0.933	0.906	0.880	0.855
27	1.360	1.327	1.295	1.263	1.233	1.202	1.168	1.133	1.100	1.068	1.038	1.007	0.978	0.950	0.922	0.896
28	1.427	1.392	1.359	1.325	1.293	1.261	1.225	1.189	1.154	1.121	1.089	1.057	1.026	0.997	0.967	0.940
29	1.495	1.459	1.424	1.389	1.355	1.322	1.284	1.246	1.210	1.174	1.141	1.107	1.075	1.045	1.014	0.985
30	1.568	1.530	1.493	1.457	1.421	1.386	1.346	1.307	1.268	1.232	1.196	1.161	1.128	1.095	1.063	1.033
31	1.644	1.604	1.566	1.527	1.490	1.453	1.412	1.370	1.330	1.291	1.254	1.217	1.182	1.148	1.115	1.083
32	1.723	1.681	1.641	1.600	1.562	1.523	1.479	1.436	1.394	1.353	1.315	1.276	1.239	1.204	1.168	1.135
33	1.806	1.762	1.720	1.677	1.637	1.596	1.551	1.505	1.461	1.418	1.378	1.337	1.299	1.262	1.225	1.189
34	1.894	1.848	1.804	1.759	1.717	1.674	1.626	1.578	1.532	1.488	1.445	1.403	1.362	1.323	1.284	1.247
35	1.985	1.937	1.891	1.844	1.799	1.755	1.705	1.654	1.606	1.559	1.515	1.470	1.428	1.387	1.346	1.307
36	2.081	2.030	1.981	1.933	1.886	1.839	1.786	1.734	1.683	1.634	1.587	1.541	1.496	1.453	1.411	1.370
37	2.182	2.129	2.078	2.027	1.978	1.929	1.874	1.818	1.765	1.714	1.665	1.616	1.569	1.524	1.480	1.437
38	2.287	2.231	2.177	2.124	2.073	2.021	1.963	1.905	1.849	1.796	1.745	1.693	1.644	1.597	1.551	1.506
39	2.397	2.339	2.283	2.227	2.173	2.119	2.058	1.998	1.939	1.883	1.829	1.775	1.724	1.675	1.626	1.579
40	2.513	2.452	2.393	2.334	2.278	2.222	2.158	2.094	2.033	1.974	1.917	1.861	1.807	1.756	1.704	1.655
41	2.635	2.571	2.509	2.448	2.388	2.329	2.262	2.196	2.131	2.070	2.011	1.951	1.895	1.841	1.787	1.735
42	2.762	2.695	2.630	2.566	2.504	2.442	2.372	2.302	2.234	2.169	2.107	2.046	1.986	1.930	1.873	1.819
43	2.896	2.825	2.757	2.689	2.624	2.559	2.486	2.413	2.342	2.274	2.209	2.144	2.082	2.023	1.963	1.907
44	3.036	2.962	2.891	2.820	2.752	2.684	2.607	2.530	2.455	2.384	2.316	2.248	2.183	2.121	2.059	1.999
45	3.183	3.105	3.030	2.956	2.885	2.813	2.732	2.652	2.574	2.500	2.428	2.357	2.288	2.223	2.158	2.096
46	3.336	3.255	3.177	3.099	3.024	2.949	2.864	2.780	2.698	2.620	2.545	2.471	2.399	2.331	2.262	2.197
47	3.497	3.412	3.330	3.248	3.170	3.091	3.003	2.914	2.829	2.747	2.668	2.590	2.515	2.443	2.371	2.303
48	3.666	3.577	3.491	3.405	3.323	3.241	3.148	3.055	2.965	2.879	2.797	2.715	2.636	2.561	2.486	2.414
49	3.844	3.750	3.660	3.570	3.484	3.398	3.300	3.203	3.109	3.019	2.933	2.846	2.764	2.685	2.606	2.531
50	4.030	3.932	3.838	3.743	3.653	3.562	3.460	3.358	3.260	3.165	3.075	2.984	2.898	2.815	2.733	2.654

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