

Table A1. Coefficient estimates for rural model

Variable	Driver IS			Passenger IS		
	Coeff.	t-stat.	E^a	Coeff.	t-stat.	E^a
Year 95 indicator	0.063	2.53	0.20			
Summer indicator	0.118	3.54	0.39			
Spring or fall indicator	0.105	3.30	0.35	0.078	1.92	0.25
Principal arterial state highway indicator	0.166	4.24	0.54	0.172	2.80	0.55
Minor collector state highway indicator	0.234	5.19	0.90	0.207	2.95	0.76
Collector state highway indicator	0.247	4.74	0.98	0.256	3.16	1.02
Intersection indicator	-0.133	-2.37	-0.34			
Intersection-related indicator	-0.518	-2.93	-0.82			
Curve and level roadway indicator	0.082	2.71	0.27			
Curve and grade roadway indicator	0.103	3.61	0.34			
Curve and hill crest indicator				-0.619	-2.74	-0.90
Underpass indicator	-0.596	-2.01	-0.87			
Wet roadway surface indicator	-0.07	-2.31	-0.20			
Icy roadway surface indicator	-0.215	-5.23	-0.64	-0.199	-4.27	-0.59
Snow indicator	-0.21	-4.09	-0.52	-0.25	-3.44	-0.60
Dark indicator	0.051	2.03	0.16			
Off roadway indicator	0.386	5.14	0.77	0.809	6.33	1.35
Posted speed	1.166	5.91	1.89	1.279	4.00	2.08
Post indicator	-0.383	-6.59	-0.77	-0.477	-4.62	-0.88
Ditch indicator	-0.3	-7.26	-0.70	-0.204	-3.35	-0.50
Guardrail end indicator	0.28	3.15	1.25			
Guardrail face indicator	-0.188	-5.38	-0.49	-0.166	-3.14	-0.43
Concrete barrier face indicator	-0.233	-3.91	-0.54	-0.139	-1.80	-0.36
Construction machinery indicator				0.744	3.29	6.42
Tree indicator	0.202	4.87	0.79	0.225	3.48	0.90
Fence indicator	-0.206	-3.84	-0.48	-0.352	-3.91	-0.71
Mail box indicator				-0.353	-2.60	-0.68

^a The sample means of elasticity and pseudo-elasticity of fatality.

Table A1 (Continued). Coefficient estimates for rural model

Variable	Driver IS			Passenger IS		
	Coeff.	t-stat.	E^a	Coeff.	t-stat.	E^a
Lap belt indicator	-0.786	-14.73	-1.50	-0.604	-7.03	-1.07
Shoulder belt indicator	-0.667	-5.69	-0.92			
Lap and shoulder belt indicator	-0.940	-28.80	-9.89	-0.667	-13.69	-4.60
Air bag and belt indicator	-0.345	-3.55	-0.67			
Truck indicator	-0.242	-3.60	-0.55	-0.562	-2.43	-0.91
Motorcycle indicator	-0.498	-2.65	-0.81			
Worn tire indicator	0.309	4.96	1.43	0.358	3.54	1.74
Lost wheel indicator	-0.655	-2.85	-0.91			
Male driver indicator	-0.274	-11.14	-1.03			
Driver's age	0.455	6.39	0.49	0.498	4.58	0.50
Over speed limit indicator	0.234	3.27	0.97			
Exceed safety speed indicator	0.114	2.63	0.35			
Inattention indicator	0.169	3.42	0.62			
Defective equipment indicator	-0.217	-2.57	-0.50	-0.379	-3.72	-0.75
Improper turning indicator	-0.462	-2.15	-0.79			
Over centerline indicator	0.827	3.21	8.47			
Asleep indicator	0.403	8.03	2.04	0.275	4.52	1.16
Driver sobriety indicator	0.519	10.81	3.13	0.369	6.71	1.77
Number of passengers				0.155	9.03	0.70
Constant	-0.765	-4.88	-	-1.538	-6.13	-
m_1	0.417	39.2	-	0.58	23.7	-
m_2	1.534	67.0	-	1.549	39.2	-
m_3	2.377	61.8	-	2.501	30.7	-

^a The sample means of elasticity and pseudo-elasticity of fatality.

TABLE A2. Sample means of elasticities and pseudo-elasticities of driver IS in urban area

Variable	Not injured	Possible injury	Evident injury	Disabling injury	Fatality
Intersection indicator	0.09	-0.09	-0.18	-0.30	-0.39
Intersection-related indicator	0.27	-0.30	-0.50	-0.68	-0.80
Off roadway indicator	-0.33	0.39	0.62	0.86	1.04
Icy roadway surface indicator	0.12	-0.12	-0.25	-0.40	-0.52
Rain indicator	0.08	-0.09	-0.18	-0.30	-0.40
Post indicator	0.27	-0.30	-0.51	-0.73	-0.88
Ditch indicator	0.17	-0.18	-0.33	-0.50	-0.63
Guardrail end indicator	-0.13	0.12	0.31	0.61	0.93
Guardrail face indicator	0.10	-0.11	-0.21	-0.35	-0.46
Concrete barrier face indicator	0.08	-0.08	-0.18	-0.30	-0.41
Bridge face indicator	0.09	-0.10	-0.19	-0.30	-0.39
Tree indicator	-0.11	0.10	0.25	0.47	0.70
Fence indicator	0.18	-0.20	-0.36	-0.53	-0.65
Lap belt indicator	0.44	-0.50	-0.76	-1.06	-1.42
Shoulder belt indicator	0.32	-0.36	-0.57	-0.75	-0.86
Lap and shoulder belt indicator	0.67	-0.35	-1.60	-5.30	-13.38
Air bag and belt indicator	0.22	-0.25	-0.43	-0.61	-0.73
Vehicle age	0.04	-0.04	-0.08	-0.14	-0.19
Large truck indicator	0.36	-0.42	-0.63	-0.81	-0.91
Truck indicator	0.11	-0.12	-0.23	-0.36	-0.46
Motorcycle indicator	0.22	-0.25	-0.42	-0.60	-0.71
Defective brake indicator	0.15	-0.16	-0.30	-0.45	-0.56
Tire blow indicator	0.15	-0.16	-0.29	-0.45	-0.56
Male driver indicator	0.17	-0.16	-0.37	-0.70	-1.04
Driver's age	-0.04	0.04	0.08	0.14	0.19
Over speed limit indicator	-0.09	0.08	0.20	0.38	0.55
Exceed safety speed indicator	-0.06	0.06	0.12	0.21	0.29
Improper turning indicator	0.26	-0.30	-0.49	-0.68	-0.80
Asleep indicator	-0.18	0.16	0.42	0.87	1.37
Driver sobriety indicator	-0.29	0.24	0.69	1.52	2.60
Number of passengers	0.01	-0.01	-0.02	-0.04	-0.05

TABLE A3. Sample means of elasticities and pseudo-elasticities of passenger IS in urban area

Variable	Not injured	Possible injury	Evident injury	Disabling injury	Fatality
Summer indicator	-0.09	0.07	0.17	0.31	0.44
Intersection indicator	0.19	-0.17	-0.34	-0.54	-0.68
Straight and grade roadway indicator	0.07	-0.06	-0.14	-0.24	-0.31
Straight and sag indicator	-0.32	0.18	0.71	1.69	3.03
Bridge indicator	-0.33	0.20	0.75	1.79	3.23
Post indicator	0.34	-0.33	-0.58	-0.81	-0.97
Bridge face indicator	0.28	-0.26	-0.48	-0.69	-0.85
Construction machinery indicator	0.37	-0.37	-0.60	-0.79	-0.91
Tree indicator	-0.29	0.18	0.64	1.46	2.53
Fence indicator	0.31	-0.30	-0.52	-0.73	-0.86
Lap belt indicator	0.37	-0.36	-0.61	-0.86	-1.06
Lap and shoulder belt indicator	0.47	-0.26	-1.04	-2.71	-5.38
Truck indicator	0.46	-0.48	-0.72	-0.90	-1.01
Tire blow indicator	0.31	-0.30	-0.52	-0.73	-0.86
Lost wheel indicator	0.49	-0.51	-0.74	-0.91	-1.02
Defect indicator	0.34	-0.34	-0.57	-0.77	-0.90
Male driver indicator	-0.06	0.05	0.13	0.22	0.30
Elderly driver indicator	-0.17	0.12	0.35	0.71	1.10
Asleep indicator	-0.29	0.18	0.64	1.48	2.57
Driver sobriety indicator	-0.24	0.17	0.52	1.09	1.77
Number of passengers	-0.19	0.12	0.33	0.59	0.81

TABLE A4. Sample means of elasticities and pseudo-elasticities of driver IS in rural area

Variable	Not injured	Possible injury	Evident injury	Disabling injury	Fatality
Year 95 indicator	-0.04	0.03	0.07	0.14	0.20
Summer indicator	-0.08	0.06	0.14	0.27	0.39
Spring or fall indicator	-0.07	0.05	0.12	0.24	0.34
Principal arterial state highway indicator	-0.11	0.08	0.19	0.37	0.54
Minor collector state highway indicator	-0.15	0.11	0.28	0.58	0.90
Collector state highway indicator	-0.16	0.12	0.30	0.63	0.98
Intersection indicator	0.09	-0.07	-0.15	-0.26	-0.34
Intersection-related indicator	0.33	-0.30	-0.50	-0.71	-0.82
Curve and level roadway indicator	-0.05	0.04	0.10	0.19	0.27
Curve and grade roadway indicator	-0.07	0.05	0.12	0.23	0.34
Underpass indicator	0.37	-0.34	-0.56	-0.76	-0.87
Wet roadway surface indicator	0.05	-0.04	-0.08	-0.14	-0.20
Icy roadway surface indicator	0.14	-0.12	-0.25	-0.46	-0.64
Snow indicator	0.14	-0.12	-0.23	-0.40	-0.52
Dark indicator	-0.03	0.03	0.06	0.11	0.16
Off roadway indicator	-0.25	0.22	0.40	0.62	0.77
Posted speed	-0.41	0.32	0.74	1.35	1.89
Post indicator	0.25	-0.21	-0.40	-0.61	-0.77
Ditch indicator	0.19	-0.16	-0.32	-0.53	-0.70
Guardrail end indicator	-0.18	0.12	0.35	0.77	1.25
Guardrail face indicator	0.12	-0.10	-0.21	-0.36	-0.49
Concrete barrier face indicator	0.15	-0.13	-0.25	-0.42	-0.54
Tree indicator	-0.13	0.09	0.25	0.51	0.79
Fence indicator	0.13	-0.11	-0.22	-0.37	-0.48

TABLE A4 (continued). Sample means of elasticities and pseudo-elasticities of driver IS in rural area

Variable	Not injured	Possible injury	Evident injury	Disabling injury	Fatality
Lap belt indicator	0.49	-0.43	-0.71	-1.07	-1.50
Shoulder belt indicator	0.41	-0.38	-0.60	-0.80	-0.92
Lap and shoulder belt indicator	0.66	-0.28	-1.24	-4.08	-9.89
Air bag and belt indicator	0.22	-0.19	-0.35	-0.54	-0.67
Truck indicator	0.16	-0.13	-0.26	-0.43	-0.55
Motorcycle indicator	0.32	-0.28	-0.48	-0.69	-0.81
Worn tire indicator	-0.20	0.13	0.39	0.87	1.43
Lost wheel indicator	0.41	-0.38	-0.60	-0.80	-0.91
Male driver indicator	0.18	-0.13	-0.33	-0.67	-1.03
Driver's age	-0.11	0.08	0.19	0.35	0.49
Over speed limit indicator	-0.15	0.11	0.29	0.61	0.97
Exceed safety speed indicator	-0.07	0.06	0.13	0.24	0.35
Inattention indicator	-0.11	0.08	0.20	0.41	0.62
Defective equipment indicator	0.14	-0.12	-0.24	-0.39	-0.50
Improper turning indicator	0.29	-0.26	-0.46	-0.66	-0.78
Over centerline indicator	-0.50	0.20	1.08	3.63	8.47
Asleep indicator	-0.26	0.18	0.51	1.19	2.04
Driver sobriety indicator	-0.35	0.21	0.68	1.71	3.13

TABLE A5. Sample means of elasticities and pseudo-elasticities of passenger IS in rural area

Variable	Not injured	Possible injury	Evident injury	Disabling injury	Fatality
Spring or fall indicator	-0.06	0.03	0.09	0.17	0.25
Principal arterial state highway indicator	-0.12	0.07	0.20	0.36	0.55
Minor collector state highway indicator	-0.15	0.08	0.24	0.48	0.76
Collector state highway indicator	-0.18	0.10	0.30	0.62	1.02
Curve and hill crest indicator	0.43	-0.34	-0.57	-0.77	-0.89
Icy roadway surface indicator	0.15	-0.09	-0.23	-0.40	-0.59
Snow indicator	0.18	-0.12	-0.27	-0.44	-0.60
Off roadway indicator	-0.55	0.46	0.73	1.01	1.34
Posted speed	-0.50	0.31	0.80	1.43	2.08
Post indicator	0.34	-0.25	-0.48	-0.70	-0.88
Ditch indicator	0.15	-0.10	-0.22	-0.37	-0.50
Guardrail face indicator	0.12	-0.08	-0.18	-0.31	-0.43
Concrete barrier face indicator	0.10	-0.07	-0.15	-0.26	-0.36
Construction machinery indicator	-0.50	0.12	0.89	2.68	6.42
Tree indicator	-0.16	0.09	0.27	0.55	0.90
Fence indicator	0.25	-0.18	-0.36	-0.55	-0.71
Mail box indicator	0.25	-0.18	-0.36	-0.54	-0.68
Lap belt indicator	0.42	-0.32	-0.57	-0.82	-1.06
Lap and shoulder belt indicator	0.50	-0.19	-0.83	-2.14	-4.60
Truck indicator	0.39	-0.31	-0.54	-0.75	-0.91
Worn tire indicator	-0.25	0.12	0.43	0.97	1.74
Driver's age	-0.12	0.07	0.19	0.34	0.50
Defective equipment indicator	0.27	-0.20	-0.39	-0.59	-0.75
Asleep indicator	-0.20	0.10	0.33	0.69	1.16
Driver sobriety indicator	-0.27	0.13	0.45	0.99	1.77
Number of passengers	-0.19	0.09	0.26	0.47	0.70