

Nebraska Safety Belt Use **2016 Report**

A Report for the

Nebraska Office of Highway Safety

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Background

This report presents safety belt survey results for the State of Nebraska, gathered according to a protocol Approved by the National Highway Traffic Safety Administration (NHTSA) in accordance with the new Uniform Criteria for State Observational Surveys of Safety Belt Use.

Nebraska is composed of 93 counties; 55 which account for 85% of the passenger vehicle crash related fatalities according to Fatality Analysis Reporting System (FARS) averages for the period 2005 to 2009. These 55 counties were designated eligible counties for sampling. Ten counties were selected with probability proportional to size (PPS) from the 55 eligible counties

The Sample and Observation Process

A sample of 6 road segments was selected randomly with probability proportional to size (PPS) from all eligible segments in the sampled counties. Eligible road segments included primary roads (S1100), secondary roads (S1200) and local neighborhood roads, rural roads and city streets (S1400). This process resulted in the selection of 60 road segments. Additional sites were selected for use as alternatives. Direction of travel was determined randomly for each site.

Based on past experience with the Nebraska's annual safety belt surveys it was expected that a sample size of at least 45 observed vehicles per observation site or at least 2,700 vehicle observations would provide results with a standard error of less than 2.5%.

All observations were completed by a single enumerator who conducted most of the previous safety belt surveys in Nebraska. Observations were completed between 8 AM and 6 PM, staggered to ensure representative number of weekday/weekend, rush-hour/non-rush hour sites. Observations occurred in as many lanes of traffic as comfortable. Drivers and right front seat passengers, including children in booster seats were observed and recorded.

Results

Results are presented in Table 1. 11,018 observations were recorded: 8,327 of drivers, 2,691 of passengers.

Table 1. 2016 Safety Belt Use Survey Summary

Sample Division	N	2016 Belted Estimate (S.E in Parentheses)	95% CI Lower	95% CI Upper
Total Sample	11018	0.833 (0.019)	0.792	0.871
Drivers	8,327	0.832 (0.017)	0.797	0.867
Passengers	2,691	0.831 (0.028)	0.772	0.890

For easy comparison, Table 2 presents the weighted 2016 results next to the 2015 results.

Table 2. Safety Belt Use 2016 and 2015

Sample Division	2016 Belted Estimate (S.E in Parentheses)	2015 Belted Estimate (S.E in Parentheses)
Total Sample	0.833 (0.019)	0.796 (0.018)
Drivers	0.832 (0.017)	0.788 (0.028)
Passengers	0.831 (0.028)	0.826 (0.010)

For further comparison, Table 3 presents the weighted county data for 2016 and 2015.

Table 3. Weighted Belt Use By County—Percent Belted

County	N (2016)	2016 Belted Estimate	2015 Belted Estimate
Buffalo	1167	0.832	0.854
Custer	504	0.826	0.777
Dodge	1268	0.771	0.714
Douglas	1961	0.879	0.834
Hamilton	1124	0.861	0.829
Lancaster	1335	0.803	0.772
Lincoln	1149	0.768	0.755
Platte	625	0.859	0.860
Sarpy	1242	0.865	0.830
Washington	643	0.845	0.848

Motorcycle Helmet Use

As in past years, motorcycle safety helmet use was recorded on all motorcycles that passed, in either direction, the observer of safety belt use. Three hundred and forty motorcyclists were observed: one motorcyclist (.3%) was not wearing a helmet, 305 (89.7%), were wearing helmets judged legal, 34 (10%) were wearing helmets judged not legal. Helmet use is reported in Table 4.

Table 4. Motorcycle Helmet Use by County

County	Helmet Judged Legal	Helmet Judged Not Legal	No Helmet	Total Observations	% Helmets Judged Legal
Douglas	35	2	0	37	94.6%
Platte	27	3	0	30	90.0%
Hamilton	33	4	1	38	86.8%
Buffalo	52	8	0	60	86.7%
Custer	20	0	0	20	100.0%
Lincoln	50	6	0	56	89.3%
Washington	10	3	0	13	76.9%
Dodge	13	2	0	15	86.7%
Sarpy	32	2	0	34	94.1%
Lancaster	33	4	0	37	89.2%
Total	305	34	1	340	89.7%

Part B

Data Collected at Observation Sites

Site ID	Site Type	Weight	Total Drivers	Total Passengers	Status Unknown	Total Front Passengers	Total Belted	Total Unbelted
3427	Original	161.164	222	98	1	320	282	38
3645	Original	26.957	196	78	0	274	266	8
3778	Alternative	339.022	44	21	0	65	53	12
4095	Original	158.583	77	35	0	112	90	22
4143	Original	240.081	218	99	3	317	300	17
4363	Original	1318.223	63	16	2	79	57	22
18124	Alternative	871.084	35	11	0	46	31	15
18282	Original	892.397	48	31	0	79	63	16
18465	Alternative	1747.895	34	17	0	51	38	13
18664	Original	416.338	125	62	0	187	163	24
18872	Original	1989.638	21	8	0	29	28	1
19037	Original	357.415	75	37	0	112	103	9
28858	Original	235.867	268	88	2	356	325	31
28902	Original	175.150	47	9	0	56	41	15
29197	Original	79.052	98	32	1	130	116	14
29333	Original	722.297	157	38	1	195	168	27
29470	Original	241.420	88	16	0	104	90	14
29504	Original	3005.312	346	80	3	426	320	106
35844	Original	2256.161	297	58	0	355	306	49
43304	Alternative	159.792	284	43	1	327	299	28
45139	Original	2392.074	267	58	0	325	290	35
48920	Original	230.595	287	60	0	347	321	26
54400	Original	4699.222	141	39	0	180	163	17
63659	Original	1515.589	354	73	0	427	358	69
71717	Original	2128.720	65	14	0	79	66	13
71720	Original	100.414	149	42	0	191	181	10
71926	Original	1001.101	43	12	1	55	44	11
71938	Original	49.961	235	107	0	342	332	10
72111	Original	159.617	226	94	0	320	310	10

Site ID	Site Type	Weight	Total Drivers	Total Passengers	Status Unknown	Total Front Passengers	Total Belted	Total Unbelted
72123	Original	244.787	115	22	0	137	112	25
83162	Original	13051.037	97	60	0	157	129	28
83838	Original	388.335	408	203	0	611	552	59
89314	Alternative	704.361	109	53	2	162	138	24
95251	Alternative	3029.326	89	39	0	128	114	14
97621	Original	238.240	69	34	0	103	88	15
101209	Original	9493.175	119	55	0	174	129	45
102255	Original	87.069	261	131	0	392	356	36
102405	Original	212.220	39	10	0	49	37	12
102491	Original	28.629	117	57	0	174	156	18
102684	Original	251.628	75	20	0	95	78	17
102848	Original	108.507	149	77	0	226	214	12
103026	Original	1992.110	160	46	24	206	158	48
109478	Original	255.773	41	8	1	49	40	9
109595	Original	369.162	78	27	0	105	96	9
109733	Original	350.172	87	23	0	110	92	18
109855	Original	356.563	95	30	0	125	109	16
109972	Original	593.552	101	28	2	129	108	21
110089	Original	153.783	77	30	0	107	94	13
112763	Original	322.093	371	90	2	461	440	21
115072	Original	2924.534	196	46	0	242	220	22
118698	Alternative	5162.558	66	11	0	77	63	14
118888	Original	272.184	49	21	0	70	63	7
122265	Alternative	8394.083	88	20	0	108	87	21
125952	Original	1790.920	235	49	3	284	261	23
149714	Alternative	433.620	38	7	0	45	38	7
152410	Alternative	161.557	78	22	0	100	87	13
152430	Original	1264.914	35	11	0	46	34	12
154617	Original	390.752	107	25	0	132	115	17
154864	Original	975.192	160	29	0	189	162	27
154969	Alternative	334.073	108	23	2	131	117	14

Standard Error of Statewide Belt Use Rate: 1.9%

Nonresponse Rate, as provided in section 1340.9

Nonresponse rate for the survey variable seat belt use: 0

Note: Most highway maintenance work in Nebraska is carried out in the summer months sometimes making surveys at the original sites impossible hence the use of alternative sites. Site ID for alternative sites refer to originally sampled site.