

Nebraska Safety Belt Use **2014 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. 10,239 observations were recorded: 7,750 of drivers, 2,489 of passengers.

Table 1. 2013 Safety Belt Use Survey Summary

Sample Division	N	2013 Belted Estimate (S.E in Parentheses)	95% CI Lower	95% CI Upper
Total Sample	10,239	0.790 (0.014)	0.762	0.819
Drivers	7,750	0.788 (0.014)	0.759	0.818
Passengers	2,489	0.797 (0.014)	0.765	0.829

For easy comparison, the weighted 2014 results are presented next to the 2013 results in Table 2.

Table 2. Safety Belt Use 2013 and 2014

Sample Division	2014 Belted Estimate (S.E in Parentheses)	2013 Belted Estimate (S.E in Parentheses)
Total Sample	0.790 (0.014)	0.791 (0.019)
Drivers	0.788 (0.014)	0.777 (0.021)
Passengers	0.797 (0.014)	0.833 (0.014)

For further comparison, Table 3 presents the weighted county data for 2014 and 2013.

Table 3. Weighted Belt Use By County—Percent Belted

County	N (2014)	2014 Belted Estimate	2013 Belted Estimate
Buffalo	1,039	0.823	0.824
Custer	369	0.755	0.715
Dodge	1,348	0.727	0.764
Douglas	1,841	0.829	0.861
Hamilton	1,162	0.858	0.762
Lancaster	1,047	0.801	0.792
Lincoln	1,182	0.644	0.749
Platte	676	0.807	0.823
Sarpy	915	0.807	0.746
Washington	660	0.825	0.781

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. One hundred ninety-five motorcyclists were observed: 100% were wearing helmets, 168 of these helmets were judged legal (86.2%). Helmet use by county 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	25	5	0	30	83.3%
Platte	4	0	0	4	100.0%
Hamilton	19	2	0	21	90.5%
Buffalo	51	7	0	58	87.9%
Custer	5	0	0	5	100.0%
Lincoln	33	3	0	36	91.7%
Washington	20	4	0	24	83.3%
Dodge	7	1	0	8	87.5%
Sarpy	28	6	0	34	82.4%
Lancaster	24	6	0	30	80.0%
Total	168	27	0	195	86.2%

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	161.1638	185	79	2	264	192	72
3645	Original	26.95663	132	42	1	174	151	23
3778	Alternative	339.022	34	7	0	41	30	11
4095	Original	158.5832	83	41	0	124	96	28
4143	Original	240.081	209	96	0	305	281	24
4363	Original	1318.223	88	43	0	131	107	24
18124	Alternative	871.0844	48	19	2	67	30	37
18282	Original	892.3971	39	21	0	60	50	10
18465	Alternative	1747.895	36	8	0	44	35	9
18664	Original	416.3378	73	37	10	110	93	17
18872	Original	1989.638	20	6	0	26	22	4
19037	Original	357.4154	38	24	0	62	52	10
28858	Original	235.8673	316	114	1	430	373	57
28902	Original	175.1505	23	5	0	28	20	8
29197	Original	79.05197	109	36	0	145	133	12
29333	Original	722.2973	142	64	2	206	185	21
29470	Original	241.4204	85	19	2	104	91	13
29054	Original	3005.312	334	101	1	435	301	134
35844	Original	2256.161	264	40	0	304	236	68
43304	Alternative	159.7925	513	100	7	613	541	72
45139	Original	2392.074	175	33	1	208	175	33
48920	Original	230.5948	173	34	0	207	178	29
54400	Alternative	4699.222	127	38	0	165	149	16
63659	Original	1515.589	300	44	0	344	262	82
71717	Original	2128.72	58	18	1	76	62	14
71720	Original	100.414	197	48	4	245	228	17
71926	Original	1001.101	46	9	0	55	46	9
71938	Original	49.96113	236	102	0	338	311	27
72111	Original	159.6174	232	83	1	315	289	26
72123	Original	244.7865	127	8	1	135	110	25

Site ID	Site Type	Weight	Total Drivers	Total Passengers	Status Unknown	Total Front Passengers	Total Belted	Total Unbelted
83162	Original	13051.04	86	40	0	126	103	23
83838	Original	388.3347	230	114	0	344	304	40
89314	Alternative	704.3613	85	40	1	125	103	22
92521	Alternative	3029.326	100	40	0	140	112	28
97621	Original	238.2398	122	45	0	167	133	34
101209	Alternative	9493.175	118	27	0	145	112	33
102255	Original	87.06906	219	102	0	321	295	26
102405	Original	212.2198	35	7	0	42	34	8
102491	Original	28.62868	100	40	0	140	113	27
102684	Original	251.6281	67	25	0	92	75	17
102848	Original	108.5068	163	94	0	257	231	26
103026	Original	1992.11	237	93	0	330	202	128
109478	Original	255.7729	32	9	0	41	35	6
109595	Original	369.1615	77	14	0	91	78	13
109733	Original	350.1721	73	22	1	95	73	22
109855	Original	356.5625	100	29	0	129	111	18
109972	Original	593.5519	99	25	1	124	93	31
110089	Original	153.7827	143	53	0	196	163	33
112763	Original	322.0928	257	94	0	351	313	38
115072	Original	2924.534	173	49	0	222	199	23
118698	Alternative	5162.558	56	8	0	64	50	14
118888	Original	272.1844	34	14	0	48	39	9
122265	Alternative	8394.083	63	18	0	81	57	24
125952	Original	1790.92	114	35	1	149	126	23
150863	Alternative	433.6201	31	11	0	42	28	14
152253	Original	161.5573	77	20	0	97	80	17
152430	Original	1264.914	29	9	0	38	31	7
154617	Original	390.7516	115	25	0	140	123	17
154864	Alternative	975.1923	146	28	2	174	143	31
154969	Alternative	334.0726	128	41	0	169	142	27

Standard Error of Statewide Belt Use Rate: 1.4%

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.