

Nebraska Safety Belt Use **2013 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. 11,276 observations were recorded: 8,500 of drivers, 2,776 of passengers.

Table 1. Safety Belt Use Survey Summary

Sample Division	N	Belted Estimate (S.E in Parentheses)	95% CI Lower	95% CI Upper
Total Sample	11,276	0.791 (0.019)	0.751	0.830
Drivers	8,500	0.781 (0.021)	0.732	0.823
Passengers	2,776	0.833 (0.014)	0.804	0.863

From a practical perspective it is informative to examine the crude unweighted results. Unweighted belted percentages for each of the ten counties surveyed are reported in Table 2.

Table 2. Unweighted Belt Use By County--Percent Belted

County	N	2013 % Belted Estimate	2012 % Belted Estimate
Buffalo	1,278	85.1%	83.2%
Custer	436	74.1%	73.4%
Dodge	1,279	82.4%	73.8%
Douglas	2,077	85.5%	82.9%
Hamilton	1,298	86.0%	83.2%
Lancaster	1,060	83.0%	80.2%
Lincoln	1,379	85.6%	64.4%
Platte	720	82.9%	85.0%
Sarpy	1,015	82.1%	76.7%
Washington	734	80.4%	82.7%

Unweighted belt use percentages by highway classification are reported in Table 3.

Table 3. Unweighted Belt Use By Road Types—Percent Belted

Sample Division	N	2013 % Belted Estimate	2012 % Belted Estimate
Highway	4,393	89.3%	88.7%
Arterial	3,987	79.4%	73.7%
Local	3,094	81.1%	80.0%

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. Four hundred and six motorcyclists were observed: 97% were wearing helmets, 362 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	49	9	0	58	84.5%
Platte	20	3	0	23	87.0%
Hamilton	31	6	0	37	83.8%
Buffalo	73	9	1	83	88.0%
Custer	14	2	0	16	87.5%
Lincoln	58	11	0	69	84.1%
Washington	20	1	0	21	95.2%
Dodge	24	2	0	26	92.3%
Sarpy	50	8	0	58	86.2%
Lancaster	23	9	0	42	54.8%
Total	362	60	1	433	86.2%

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	196	97	3	296	238	55
3645	Original	26.95663	253	89	7	349	293	49
NA	Alternative	339.022	50	12	4	66	40	22
4095	Original	158.5832	93	37	0	130	109	21
4143	Original	240.081	226	133	6	365	333	26
4363	Original	1318.223	64	27	6	97	71	20
18124	Original	871.0844	52	21	0	73	44	29
18282	Original	892.3971	47	25	0	72	52	20
18465	Alternative	1747.895	51	20	2	73	55	16
18664	Original	416.3378	85	38	4	127	99	24
18872	Original	1989.638	17	4	0	21	11	10
19037	Original	357.4154	56	20	2	78	62	14
28858	Original	235.8673	239	88	1	328	278	49
28902	Original	175.1505	41	9	0	50	41	9
29197	Original	79.05197	85	26	1	112	97	14
29333	Original	722.2973	181	62	1	244	219	24
29470	Original	241.4204	80	16	1	97	85	11
29054	Original	3005.312	359	93	2	454	334	118
35844	Original	2256.161	210	37	4	251	205	42
43304	Alternative	159.7925	652	115	14	781	675	92
45139	Original	2392.074	298	54	6	358	308	44
48920	Original	230.5948	223	41	8	272	227	37
NA	Alternative	4699.222	122	43	2	167	155	10
63659	Original	1515.589	243	39	0	282	205	77
71717	Original	2128.72	50	13	1	64	45	18
71720	Original	100.414	215	80	4	299	268	27
71926	Original	1001.101	86	35	2	123	85	36
71938	Original	49.96113	236	102	5	343	306	32
72111	Original	159.6174	231	92	11	334	292	31

Site ID	Site Type	Weight	Total Drivers	Total Passengers	Status Unknown	Total Front Passengers	Total Belted	Total Unbelted
72123	Original	244.7865	131	26	10	167	118	39
83162	Original	13051.04	93	47	0	140	115	25
83838	Original	388.3347	237	125	3	365	313	49
NA	Alternative	704.3613	68	32	2	102	86	14
NA	Alternative	3029.326	85	33	6	124	99	19
97621	Original	238.2398	88	44	2	134	112	20
101209	Alternative	9493.175	152	55	6	213	155	52
102255	Original	87.06906	238	117	1	356	322	33
102405	Original	212.2198	45	10	2	57	46	9
102491	Original	28.62868	158	58	2	218	192	24
102684	Original	251.6281	74	18	0	92	75	17
102848	Original	108.5068	233	118	5	356	320	31
103026	Original	1992.11	238	72	3	313	225	85
109478	Original	255.7729	44	15	0	59	42	17
109595	Original	369.1615	87	21	1	109	94	14
109733	Original	350.1721	83	31	2	116	89	25
109855	Original	356.5625	128	33	0	161	137	24
109972	Original	593.5519	79	19	2	100	78	20
110089	Original	153.7827	129	51	0	180	157	23
112763	Original	322.0928	264	91	0	355	324	31
115072	Original	2924.534	190	53	2	245	191	52
118698	Alternative	5162.558	70	14	0	84	67	17
118888	Original	272.1844	46	13	0	59	42	17
NA	Alternative	8394.083	78	17	2	97	59	36
125952	Original	1790.92	133	46	2	181	150	29
NA	Alternative	433.6201	39	9	0	48	38	10
152253	Original	161.5573	100	35	0	135	105	30
152430	Original	1264.914	46	4	2	52	36	14
154617	Original	390.7516	141	40	1	182	147	34
154864	Alternative	975.1923	145	23	1	169	126	42
154969	Alternative	334.0726	117	35	3	155	138	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.