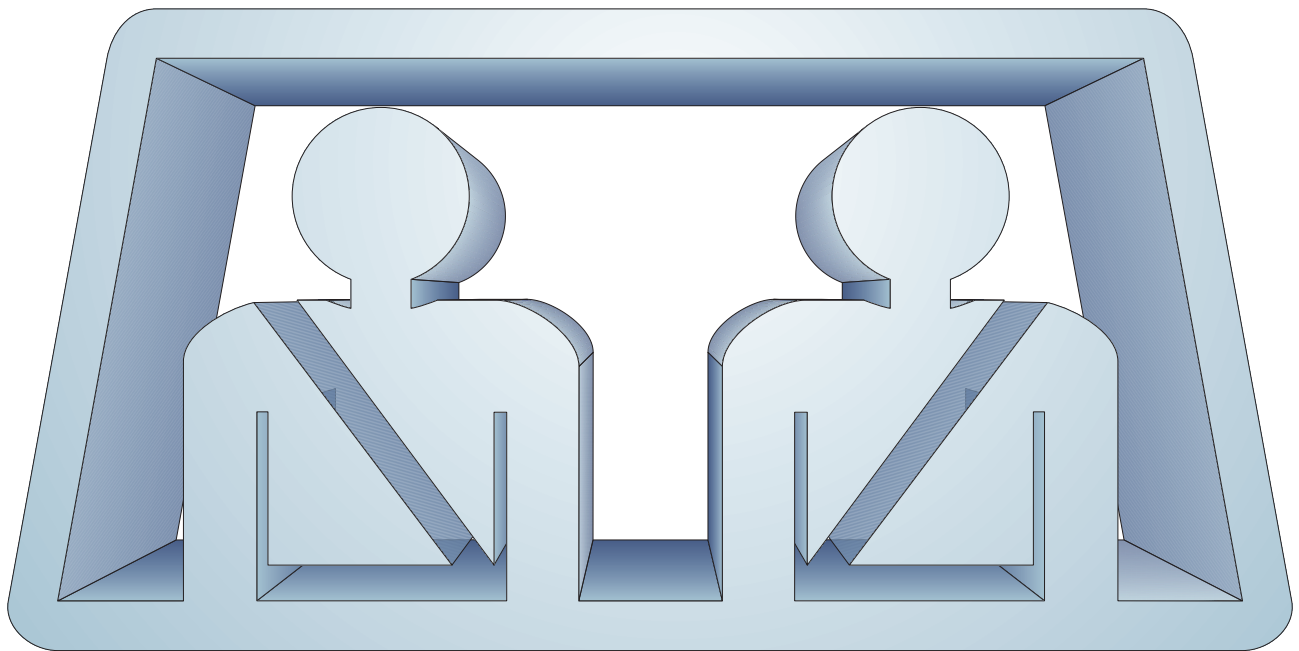


1999 Seat Belt Usage Survey



**Site surveys conducted by troopers of the
Iowa State Patrol, Department of Public Safety**

**Statistics compiled and survey written by the
Office of Driver Services, Iowa Department of Transportation**

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1999 SEAT BELT USAGE SURVEY

During October 1999, 78.02 percent of motorists surveyed on Iowa roadways were wearing seat belts, an increase of 1.15 percent from last year (see Chart 1-Seat Belt Usage).

Safety belt usage on municipal road systems (city streets) led the way with a 1.79 percent increase, erasing last year's decrease of 1.12 percent. This is encouraging since more than 45 percent of all motor vehicle crashes occur on city streets.

In communities where usage is good, enforcement and public education must be maintained in order to improve usage further; in communities where usage is still low, enforcement and public education must both be increased.

Chart 1 - Seat Belt Usage

Road Type	1998			1999			Percent Change
	Observed	Used	Percentage Used	Observed	Used	Percentage Used	
Statewide Total*	20,856	16,140	76.87%	19,789	15,501	78.02%	1.15%
Municipal	5,499	3,853	70.07%	5,451	3,917	71.86%	1.79%
Interstate	7,584	6,352	83.76%	6,821	5,715	83.79%	0.03%
Primary	6,764	5,133	75.89%	5,842	4,535	77.63%	1.74%
Secondary	1,009	802	79.48%	1,675	1,334	79.64%	0.16%

Estimated statewide total usage weighted by vehicle miles traveled (see Chart 21) and 95% confidence intervals for the estimated variance are +/- 0.29%

Usage on the primary system (U.S. or state highways) rose 1.74 percent from the previous year. This is also welcome news because almost half of all fatalities (49 percent) occur on the primary road system. Interstate belt use increased slightly (0.03 percent). Interstate usage has traditionally been the highest of all roadway categories presumably because the longer trips, higher travel speeds and large number of vehicles cause drivers to assume there is greater risk.

Safety belt usage on the secondary system (county roads) showed a 0.16 percent increase over last year. When taking into account that approximately one-third (33.59 percent) of all motor vehicle crash fatalities occur on the secondary road system¹, continued efforts toward increased enforcement and public education for the motoring public concerning the importance of safety belt and child safety seat usage on the secondary road system (county roads), even for short-distance trips, must be maintained.

Belt usage for 19,789 front seat occupants of cars, vans and pickups was observed at 100 locations. Of these front seat occupants, 79.71 percent of drivers (11698 out of 14676) and 74.38 percent of passengers (3803 out of 5113) were observed using seat belts. For 703 front seat occupants, belt usage or non-usage could not be determined.

Methodology

The methodology of this survey follows prior surveys by using a sample of 100 sites that were selected on the basis of population, geographical location, and statewide vehicle miles traveled by road system. (See Chart 17—Site Selection Listing, and Chart 18—Site Selection by County.) The surveys have primarily been conducted at the same sites since 1988. The development of the survey follows specifications of the National Highway Traffic Safety Administration². The survey was conducted by troopers of the Iowa State Patrol, Department of Public Safety, between 6 a.m. and 6 p.m., Monday through Sunday. Observations were made for approximately one hour at each site.

Belt Law Background

The Iowa law mandating seat belt usage went into effect July 1, 1986. A \$10 fine, plus court costs, was effective January 1, 1987. The law requires front seat occupants, age 6 and older, to properly wear a seat belt in 1966 or newer model motor vehicles. The law allows primary enforcement (i.e., officers can stop a vehicle when non-use of belts is observed). Medical exemptions and other exemptions are allowed. Children under the age of 6 are covered by the child restraint law, which went into effect January 1, 1985. The child restraint usage law

¹ Iowa Department of Transportation, *1995 Iowa Crash Facts*, Roadway & Environment Conditions, p. 71.

² "Guidelines for State Observational Surveys of Safety Belt & Motorcycles Helmet Use, Federal Register," Vol 57 No. 125, June 29, 1992, p. 28903.

requires children under age 3 to be in an approved safety seat, and children ages 3 to 6 must be in a safety seat or seat belt in any position in the vehicle. Copies of the annual child restraint survey results are also available through the Iowa Department of Transportation.

Enforcement

The seat belt law has been actively enforced in the state. There were 76,494 seat belt citations and 4,054 child restraint citations issued in 1998 through law enforcement efforts, a decrease from 79,627 and 4,639, respectively, in 1997 (See Charts 14 through 16 for seat belt/child restraint citations issued). Iowa's seat belt usage rates followed trends similar to those in other states, showing a large increase after fines were first imposed (increasing from 27 percent in June 1986 to 63 percent in April 1987). In September 1987, usage dropped to 56 percent, but enforcement and public education has steadily increased usage to the current 78 percent.

Summary

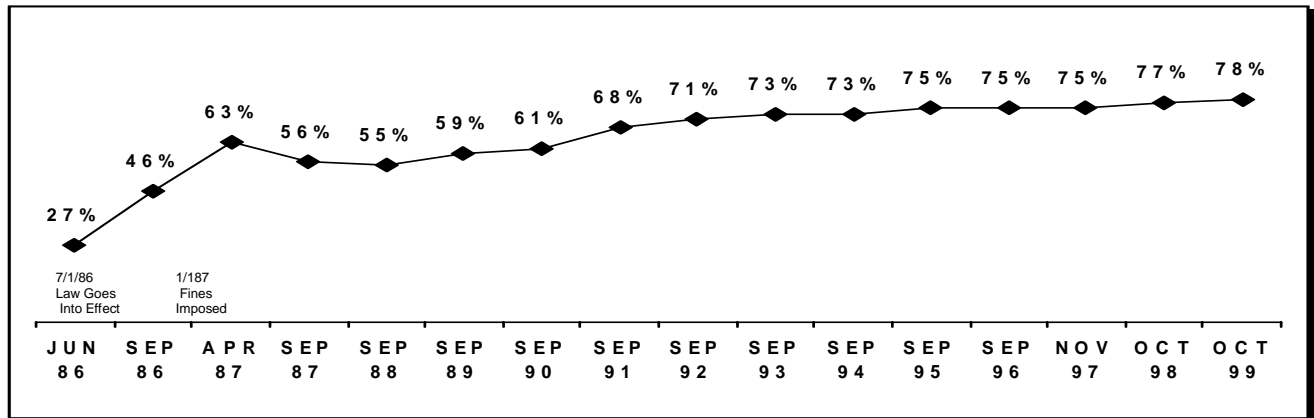
The 78 percent seat belt usage rate in 1999 (up 7 percent since 1992) reflects active enforcement and education efforts that have occurred in Iowa during the last few years. Through continuing education of the public, an active "Life Toll" campaign, seat belt enforcement, and other cooperative efforts between state and local law enforcement, Iowa will strive to increase the use of seat belts and save lives on Iowa roadways.

Chart 2
Percentage of Restraint Usage by Year & Road

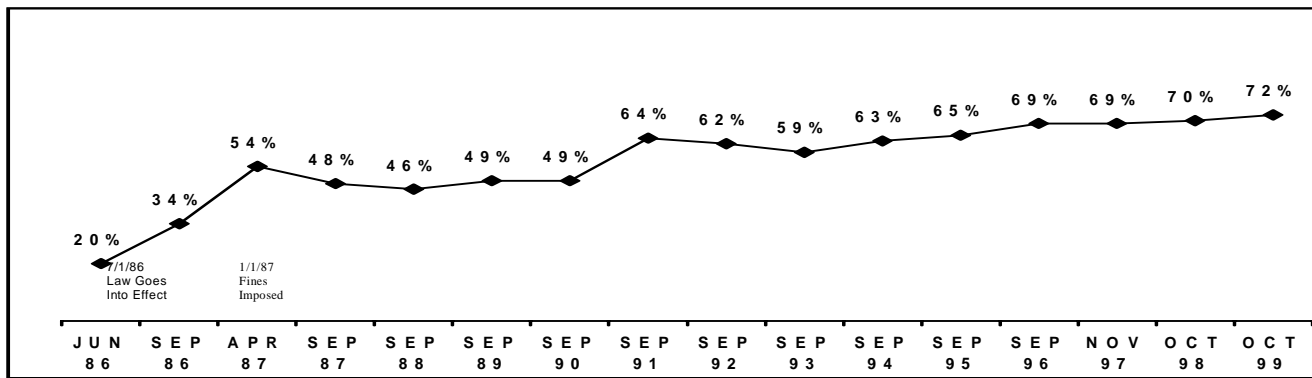
Survey	All	Municipal	Interstate	Primary	Secondary
JUN 86	27%	20%	43%	27%	24%
SEP 86	46%	34%	62%	48%	42%
APR 87	63%	54%	69%	65%	64%
SEP 87	56%	48%	67%	56%	55%
SEP 88	55%	46%	69%	55%	52%
SEP 89	59%	49%	72%	56%	61%
SEP 90	61%	49%	76%	60%	61%
SEP 91	68%	64%	79%	64%	64%
SEP 92	71%	62%	83%	69%	71%
SEP 93	73%	59%	80%	73%	71%
SEP 94	73%	63%	82%	72%	72%
SEP 95	75%	65%	85%	75%	76%
SEP 96	75%	69%	85%	74%	71%
NOV 97	75%	69%	85%	74%	71%
OCT 98	77%	70%	84%	76%	79%
OCT 99	78%	72%	84%	78%	80%

NOTE: For easier comparison, percentages have been rounded to the nearest full digit.

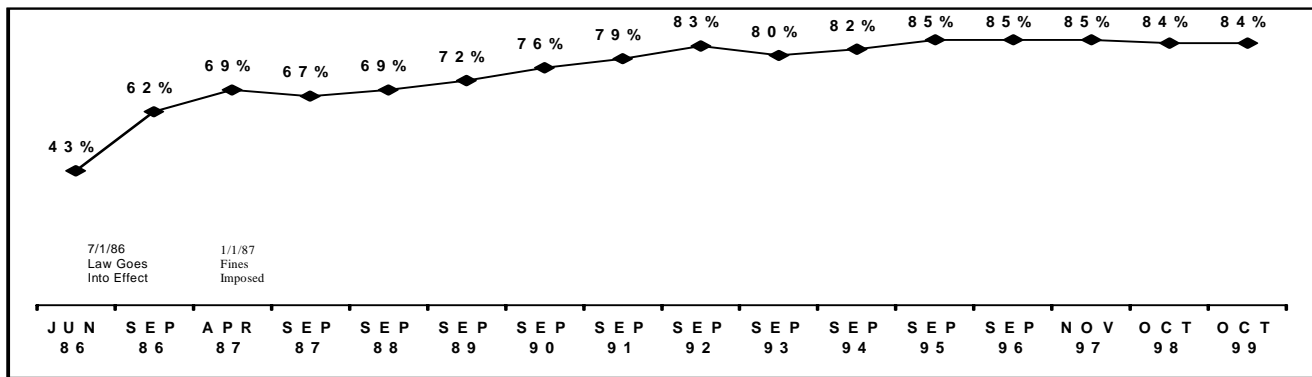
Chart 3
Usage Percent by Year — All Road Types



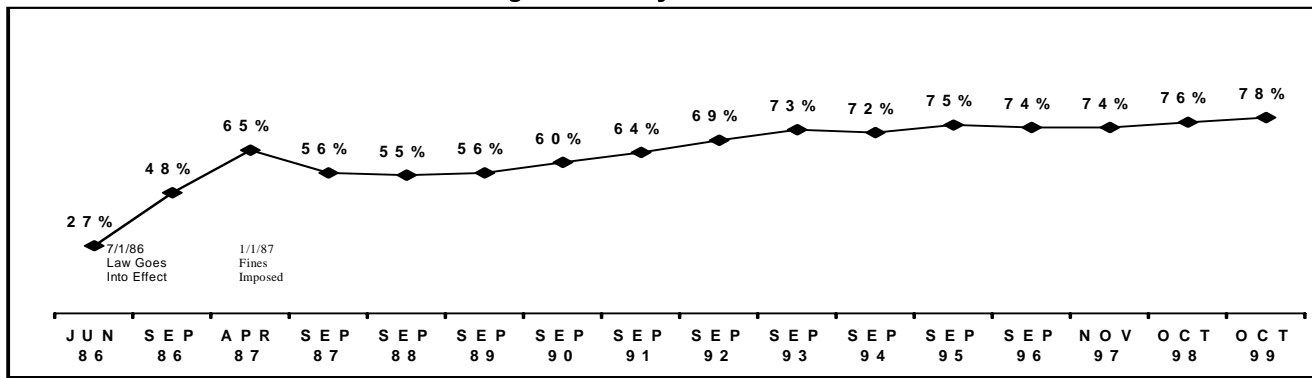
**Chart 4
Usage Percent by Year - CITY**



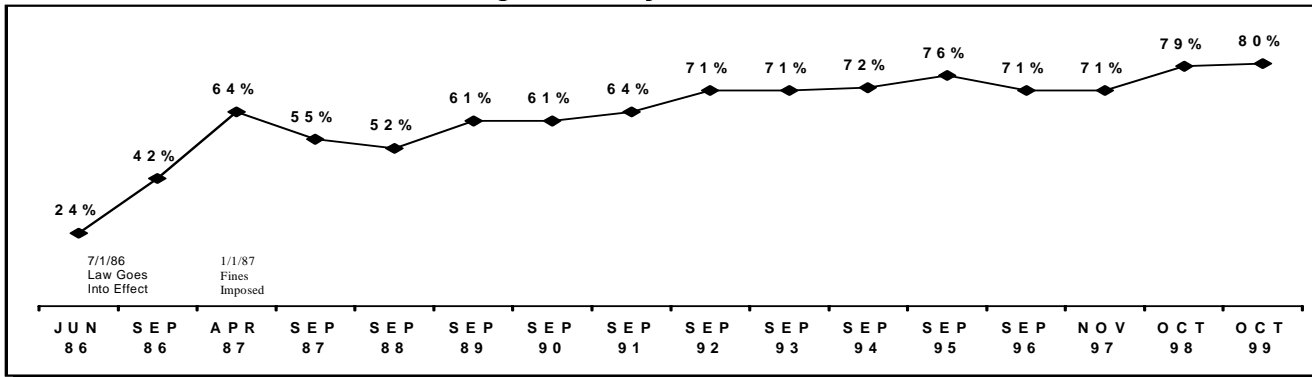
**Chart 5
Usage Percent by Year - INTERSTATE**



**Chart 6
Usage Percent by Year - PRIMARY**



**Chart 7
Usage Percent by Year - SECONDARY**



**Chart 8
Survey Results by County & Road System**

County & Road System	Drivers			Passengers			Total		
	Number	Belted	Percent	Number	Belted	Percent	Number	Belted	Percent
	Observed	Number	Percent	Observed	Number	Percent	Observed	Number	Percent
BUENA VISTA	482	446	92.53%	186	154	82.80%	668	600	89.82%
Municipal	142	130	91.55%	58	45	77.59%	200	175	87.50%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	277	258	93.14%	111	92	82.88%	388	350	90.21%
Secondary	63	58	92.06%	17	17	100.00%	80	75	93.75%
BUTLER	366	286	78.14%	135	113	83.70%	501	399	79.64%
Municipal	169	111	65.68%	21	12	57.14%	190	123	64.74%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	189	167	88.36%	113	100	88.50%	302	267	88.41%
Secondary	8	8	100.00%	1	1	100.00%	9	9	100.00%
CLARKE	372	222	59.68%	93	54	58.06%	465	276	59.35%
Municipal	137	87	63.50%	31	17	54.84%	168	104	61.90%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	235	135	57.45%	62	37	59.68%	297	172	57.91%
Secondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CLAY	651	503	77.27%	121	63	52.07%	772	566	73.32%
Municipal	400	300	75.00%	60	19	31.67%	460	319	69.35%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	207	172	83.09%	53	40	75.47%	260	212	81.54%
Secondary	44	31	70.45%	8	4	50.00%	52	35	67.31%
DALLAS	327	290	88.69%	98	63	64.29%	425	353	83.06%
Municipal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interstate	197	182	92.39%	52	35	67.31%	249	217	87.15%
Primary	130	108	83.08%	46	28	60.87%	176	136	77.27%
Secondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DECATUR	681	565	82.97%	280	229	81.79%	961	794	82.62%
Municipal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interstate	503	434	86.28%	220	189	85.91%	723	623	86.17%
Primary	104	80	76.92%	42	28	66.67%	146	108	73.97%
Secondary	74	51	68.92%	18	12	66.67%	92	63	68.48%
FRANKLIN	886	830	93.68%	403	377	93.55%	1,289	1,207	93.64%
Municipal	78	58	74.36%	9	5	55.56%	87	63	72.41%
Interstate	631	611	96.83%	354	339	95.76%	985	950	96.45%
Primary	160	146	91.25%	36	29	80.56%	196	175	89.29%
Secondary	17	15	88.24%	4	4	100.00%	21	19	90.48%
KEOKUK	87	71	81.61%	31	21	67.74%	118	92	77.97%
Municipal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	87	71	81.61%	31	21	67.74%	118	92	77.97%
Secondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LINN	1,090	988	90.46%	470	344	73.19%	1,560	1,330	85.26%
Municipal	247	219	88.66%	89	68	76.40%	336	287	85.42%
Interstate	456	422	92.54%	213	145	68.08%	669	567	84.75%
Primary	276	245	88.77%	108	85	78.70%	384	330	85.94%
Secondary	111	100	90.09%	60	46	76.67%	171	146	85.38%
LOUISA	169	117	69.23%	45	25	55.56%	214	142	66.36%
Municipal	53	30	56.60%	14	10	71.43%	67	40	59.70%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	100	76	76.00%	20	15	75.00%	120	91	75.83%
Secondary	16	11	68.75%	11	0	0.00%	27	11	40.74%
POLK	2,471	1,975	79.93%	590	397	67.29%	3,061	2,372	77.49%
Municipal	1,233	901	73.07%	313	199	63.58%	1,546	1,100	71.15%
Interstate	1,029	915	88.92%	223	156	69.96%	1,252	1,071	85.54%
Primary	209	159	76.08%	54	42	77.78%	263	201	76.43%
Secondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
POTTAWATTAMIE	1,880	1,384	73.62%	620	388	62.58%	2,500	1,772	70.88%
Municipal	382	264	69.11%	136	80	58.82%	518	344	66.41%
Interstate	963	724	75.18%	317	208	65.62%	1,280	932	72.81%
Primary	389	293	75.32%	121	71	58.68%	510	364	71.37%
Secondary	146	103	70.55%	46	29	63.04%	192	132	68.75%
SCOTT	1,649	1,321	80.11%	957	838	87.57%	2,606	2,159	82.85%
Municipal	494	384	77.73%	121	85	70.25%	615	469	76.26%
Interstate	429	356	82.98%	232	195	84.05%	661	551	83.36%
Primary	589	474	80.48%	118	92	77.97%	707	566	80.06%
Secondary	137	107	78.10%	486	466	95.88%	623	573	91.97%
STORY	1,916	1,497	78.13%	584	428	73.29%	2,500	1,925	77.00%
Municipal	455	347	76.26%	152	106	69.74%	607	453	74.63%
Interstate	782	627	80.18%	220	177	80.45%	1,002	804	80.24%
Primary	579	455	78.58%	178	120	67.42%	757	575	75.96%
Secondary	100	68	68.00%	34	25	73.53%	134	93	69.40%
WAPELLO	1,093	782	71.55%	387	240	62.02%	1,480	1,022	69.05%
Municipal	449	322	71.71%	153	96	62.75%	602	418	69.44%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	511	370	72.41%	183	117	63.93%	694	487	70.17%
Secondary	133	90	67.67%	51	27	52.94%	184	117	63.59%
WARREN	286	239	83.57%	56	37	66.07%	342	276	80.70%
Municipal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	231	195	84.42%	49	35	71.43%	280	230	82.14%
Secondary	55	44	80.00%	7	2	28.57%	62	46	74.19%
WASHINGTON	270	184	68.15%	57	32	56.14%	327	216	66.06%
Municipal	47	19	40.43%	8	3	37.50%	55	22	40.00%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	203	154	75.86%	41	25	60.98%	244	179	73.36%
Secondary	20	11	55.00%	8	4	50.00%	28	15	53.57%

**Chart 9
Survey Results by Population Category & Road System**

Population & Road System	Total Observed	Restraint Used		Restraint Not Used		Restraint Unknown	
A Over 200,000	3,828	3,001	78.40%	749	19.57%	78	2.04%
Municipal	1,546	1,100	71.15%	423	27.36%	23	1.49%
Interstate	1,501	1,288	85.81%	167	11.13%	46	3.06%
Primary	719	567	78.86%	144	20.03%	8	1.11%
Secondary	62	46	74.19%	15	24.19%	1	1.61%
B 150,000 to 199,999	4,166	3,489	83.75%	488	11.71%	189	4.54%
Municipal	951	756	79.50%	155	16.30%	40	4.21%
Interstate	1,330	1,118	84.06%	130	9.77%	82	6.17%
Primary	1,091	896	82.13%	150	13.75%	45	4.12%
Secondary	794	719	90.55%	53	6.68%	22	2.77%
C 75,000 to 149,999	2,500	1,772	70.88%	648	25.92%	80	3.20%
Municipal	518	344	66.41%	159	30.69%	15	2.90%
Interstate	1,280	932	72.81%	290	22.66%	58	4.53%
Primary	510	364	71.37%	139	27.25%	7	1.37%
Secondary	192	132	68.75%	60	31.25%	0	0.00%
D 25,000 to 74,999	3,980	2,947	74.05%	936	23.52%	97	2.44%
Municipal	1,209	871	72.04%	306	25.31%	32	2.65%
Interstate	1,002	804	80.24%	171	17.07%	27	2.69%
Primary	1,451	1,062	73.19%	356	24.53%	33	2.27%
Secondary	318	210	66.04%	103	32.39%	5	1.57%
E Under 25,000	5,315	4,292	80.75%	764	14.37%	259	4.87%
Municipal	1,227	846	68.95%	262	21.35%	119	9.70%
Interstate	1,708	1,573	92.10%	106	6.21%	29	1.70%
Primary	2,071	1,646	79.48%	325	15.69%	100	4.83%
Secondary	309	227	73.46%	71	22.98%	11	3.56%

NOTE: Includes both passengers and drivers.

**Chart 10
Survey Results by Road System & Population**

Road System & Population	Total Observed	Restraint Used		Restraint Not Used		Restraint Unknown	
Municipal	5,451	3,917	71.86%	1,305	23.94%	229	4.20%
Over 200,000	1,546	1,100	71.15%	423	27.36%	23	1.49%
150,000 to 199,999	951	756	79.50%	155	16.30%	40	4.21%
75,000 to 149,999	518	344	66.41%	159	30.69%	15	2.90%
25,000 to 74,999	1,209	871	72.04%	306	25.31%	32	2.65%
Under 25,000	1,227	846	68.95%	262	21.35%	119	9.70%
Interstate	6,821	5,715	83.79%	864	12.67%	242	3.55%
Over 200,000	1,501	1,288	85.81%	167	11.13%	46	3.06%
150,000 to 199,999	1,330	1,118	84.06%	130	9.77%	82	6.17%
75,000 to 149,999	1,280	932	72.81%	290	22.66%	58	4.53%
25,000 to 74,999	1,002	804	80.24%	171	17.07%	27	2.69%
Under 25,000	1,708	1,573	92.10%	106	6.21%	29	1.70%
Primary	5,842	4,535	77.63%	1,114	19.07%	193	3.30%
Over 200,000	719	567	78.86%	144	20.03%	8	1.11%
150,000 to 199,999	1,091	896	82.13%	150	13.75%	45	4.12%
75,000 to 149,999	510	364	71.37%	139	27.25%	7	1.37%
25,000 to 74,999	1,451	1,062	73.19%	356	24.53%	33	2.27%
Under 25,000	2,071	1,646	79.48%	325	15.69%	100	4.83%
Secondary	1,675	1,334	79.64%	302	18.03%	39	2.33%
Over 200,000	62	46	74.19%	15	24.19%	1	1.61%
150,000 to 199,999	794	719	90.55%	53	6.68%	22	2.77%
75,000 to 149,999	192	132	68.75%	60	31.25%	0	0.00%
25,000 to 74,999	318	210	66.04%	103	32.39%	5	1.57%
Under 25,000	309	227	73.46%	71	22.98%	11	3.56%

NOTE: Includes both passengers and drivers.

**Chart 11
Survey Results by Time of Day & Road System**

Time & Road System	Total Observed	Restraint Used			Restraint Not Used		Restraint Unknown	
		Count	Count	Percentage	Count	Percentage	Count	Percentage
7:00-7:59 a.m.	1,748	1,327	75.92%	363	20.77%	58	3.32%	
Municipal	756	552	73.02%	167	22.09%	37	4.89%	
Interstate	457	361	78.99%	85	18.60%	11	2.41%	
Primary	440	342	77.73%	89	20.23%	9	2.05%	
Secondary	95	72	75.79%	22	23.16%	1	1.05%	
8:00-8:59 a.m.	1,561	1,189	76.17%	328	21.01%	44	2.82%	
Municipal	586	407	69.45%	163	27.82%	16	2.73%	
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Primary	874	713	81.58%	135	15.45%	26	2.97%	
Secondary	101	69	68.32%	30	29.70%	2	1.98%	
9:00-9:59 a.m.	2,011	1,588	78.97%	355	17.65%	68	3.38%	
Municipal	1,058	772	72.97%	260	24.57%	26	2.46%	
Interstate	797	710	89.08%	55	6.90%	32	4.02%	
Primary	122	83	68.03%	35	28.69%	4	3.28%	
Secondary	34	23	67.65%	5	14.71%	6	17.65%	
10:00-10:59 a.m.	1,949	1,562	80.14%	321	16.47%	66	3.39%	
Municipal	541	423	78.19%	94	17.38%	24	4.44%	
Interstate	886	738	83.30%	127	14.33%	21	2.37%	
Primary	477	378	79.25%	82	17.19%	17	3.56%	
Secondary	45	23	51.11%	18	40.00%	4	8.89%	
11:00-11:59 a.m.	1,347	1,121	83.22%	169	12.55%	57	4.23%	
Municipal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Interstate	996	832	83.53%	121	12.15%	43	4.32%	
Primary	276	229	82.97%	40	14.49%	7	2.54%	
Secondary	75	60	80.00%	8	10.67%	7	9.33%	
12:00-12:59 a.m.	1,312	915	69.74%	364	27.74%	33	2.52%	
Municipal	190	123	64.74%	61	32.11%	6	3.16%	
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Primary	1,049	750	71.50%	272	25.93%	27	2.57%	
Secondary	73	42	57.53%	31	42.47%	0	N/A	
1:00-1:59 p.m.	1,568	1,322	84.31%	184	11.73%	62	3.95%	
Municipal	55	22	40.00%	28	50.91%	5	9.09%	
Interstate	437	365	83.52%	63	14.42%	9	2.06%	
Primary	453	362	79.91%	52	11.48%	39	8.61%	
Secondary	623	573	91.97%	41	6.58%	9	1.44%	
2:00-2:59 p.m.	1,761	1,475	83.76%	245	13.91%	41	2.33%	
Municipal	260	181	69.62%	71	27.31%	8	3.08%	
Interstate	565	542	95.93%	14	2.48%	9	1.59%	
Primary	663	527	79.49%	118	17.80%	18	2.71%	
Secondary	273	225	82.42%	42	15.38%	6	2.20%	
3:00-3:59 p.m.	1,444	1,052	72.85%	298	20.64%	94	6.51%	
Municipal	341	233	68.33%	50	14.66%	58	17.01%	
Interstate	545	443	81.28%	86	15.78%	16	2.94%	
Primary	402	276	68.66%	106	26.37%	20	4.98%	
Secondary	156	100	64.10%	56	35.90%	-	N/A	
4:00-4:59 p.m.	1,605	1,269	79.07%	274	17.07%	62	3.86%	
Municipal	509	367	72.10%	124	24.36%	18	3.54%	
Interstate	784	635	80.99%	115	14.67%	34	4.34%	
Primary	232	192	82.76%	31	13.36%	9	3.88%	
Secondary	80	75	93.75%	4	5.00%	1	1.25%	
5:00-5:59 p.m.	1,365	1,090	79.85%	236	17.29%	39	2.86%	
Municipal	179	118	65.92%	56	31.28%	5	2.79%	
Interstate	580	486	83.79%	69	11.90%	25	4.31%	
Primary	606	486	80.20%	111	18.32%	9	1.49%	
Secondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
6:00-6:59 p.m.	2,118	1,591	75.12%	448	21.15%	79	3.73%	
Municipal	976	719	73.67%	231	23.67%	26	2.66%	
Interstate	774	603	77.91%	129	16.67%	42	5.43%	
Primary	248	197	79.44%	43	17.34%	8	3.23%	
Secondary	120	72	60.00%	45	37.50%	3	2.50%	

NOTE: Includes both passengers and drivers.

Chart 12
Survey Results by Area & Road System

Area of State & Road System	Total Observed	Restraint Used		Restraint Not Used		Restraint Unknown	
Northeast	3,350	2,936	87.64%	266	7.94%	148	4.42%
Municipal	613	473	77.16%	104	16.97%	36	5.87%
Interstate	1,654	1,517	91.72%	79	4.78%	58	3.51%
Primary	882	772	87.53%	69	7.82%	41	4.65%
Secondary	201	174	86.57%	14	6.97%	13	6.47%
Northwest	3,940	3,091	76.09%	661	14.72%	188	9.19%
Municipal	1,267	947	71.07%	216	18.00%	104	10.93%
Interstate	1,002	804	N/A	171	N/A	27	N/A
Primary	1,405	1,137	82.47%	222	10.68%	46	6.84%
Secondary	266	203	89.92%	52	5.04%	11	5.04%
Southeast	4,745	3,631	78.33%	931	20.21%	183	1.46%
Municipal	1,339	949	70.25%	342	27.77%	48	1.98%
Interstate	661	551	86.60%	74	13.40%	36	0.00%
Primary	1,883	1,415	79.15%	383	19.04%	85	1.81%
Secondary	862	716	76.58%	132	22.04%	14	1.38%
Southwest	7,754	5,843	74.40%	1,727	23.94%	184	1.66%
Municipal	2,232	1,548	66.20%	643	32.77%	41	1.03%
Interstate	3,504	2,843	81.01%	540	16.53%	121	2.46%
Primary	1,672	1,211	67.85%	440	31.67%	21	0.49%
Secondary	346	241	67.69%	104	32.31%	1	0.00%

NOTE: Includes both passengers and drivers.

Chart 13
Survey Results by Day of Week & Road System

Day of Week & Road System	Total Observed	Restraint Used		Restraint Not Used		Restraint Unknown	
Sunday	1,754	1,575	89.79%	128	7.30%	51	2.91%
Municipal	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interstate	1,196	1,139	95.23%	27	2.26%	30	2.51%
Primary	504	395	78.37%	95	18.85%	14	2.78%
Secondary	54	41	75.93%	6	11.11%	7	12.96%
Monday	2,601	1,980	76.12%	527	20.26%	94	3.61%
Municipal	363	256	70.52%	84	23.14%	23	6.34%
Interstate	1,740	1,398	80.34%	288	16.55%	54	3.10%
Primary	330	202	61.21%	119	36.06%	9	2.73%
Secondary	168	124	73.81%	36	21.43%	8	4.76%
Tuesday	988	759	76.82%	157	15.89%	72	7.29%
Municipal	348	268	77.01%	59	16.95%	21	6.03%
Interstate	202	158	78.22%	30	14.85%	14	6.93%
Primary	417	314	75.30%	66	15.83%	37	8.87%
Secondary	21	19	90.48%	2	9.52%	0	N/A
Wednesday	2,616	2,002	76.53%	547	20.91%	67	2.56%
Municipal	968	696	71.90%	248	25.62%	24	2.48%
Interstate	545	443	81.28%	86	15.78%	16	2.94%
Primary	876	682	77.85%	173	19.75%	21	2.40%
Secondary	227	181	79.74%	40	17.62%	6	2.64%
Thursday	5,136	3,938	76.67%	1,072	20.87%	126	2.45%
Municipal	1,948	1,384	71.05%	526	27.00%	38	1.95%
Interstate	1,723	1,429	82.94%	242	14.05%	52	3.02%
Primary	1,312	1,005	76.60%	276	21.04%	31	2.36%
Secondary	153	120	78.43%	28	18.30%	5	3.27%
Friday	3,482	2,575	73.95%	748	21.48%	159	4.57%
Municipal	1,110	758	68.29%	266	23.96%	86	7.75%
Interstate	498	377	75.70%	95	19.08%	26	5.22%
Primary	1,620	1,262	77.90%	312	19.26%	46	2.84%
Secondary	254	178	70.08%	75	29.53%	1	0.39%
Saturday	3,528	2,672	75.74%	406	11.51%	450	12.76%
Municipal	714	555	77.73%	122	17.09%	37	5.18%
Interstate	917	771	84.08%	96	10.47%	50	5.45%
Primary	783	675	86.21%	73	9.32%	351	44.83%
Secondary	798	671	84.09%	115	14.41%	12	1.50%

NOTE: Includes both passengers and drivers.

Chart 14
Seat Belt/Child Restraint Citations Issued by Month & Year

Month	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
January	4,058	4,381	3,529	5,163	4,470	4,790	6,334	5,038	4,673	5,244
February	3,445	4,605	6,014	6,465	5,236	6,558	7,452	6,778	6,391	5,820
March	4,598	5,235	6,950	6,765	6,292	8,071	7,806	10,403	9,785	8,188
April	5,110	4,723	7,277	6,920	6,793	8,379	7,263	8,634	8,387	7,260
May	5,115	5,666	8,272	7,517	8,457	9,090	8,826	11,266	9,131	10,205
June	4,380	4,625	9,029	7,043	7,015	8,070	8,727	9,416	8,367	7,138
July	4,452	5,169	6,108	6,556	7,016	8,023	8,504	8,646	9,039	7,489
August	4,206	4,241	5,865	5,798	6,017	6,801	7,284	8,887	7,931	6,553
September	4,410	4,127	6,215	5,740	6,889	6,381	7,773	6,458	6,489	6,827
October	3,504	3,476	4,146	4,095	6,235	5,360	5,399	5,036	5,737	4,774
November	3,560	3,186	3,253	3,804	5,499	5,522	6,430	5,387	4,991	6,192
December	2,750	1,850	3,491	3,705	5,442	5,191	5,433	4,116	4,345	4,901
Total	49,588	51,284	70,149	69,571	75,361	82,236	87,231	90,065	85,266	80,591

Chart 15
Seat Belt/Child Restraint Citations Issued by Year

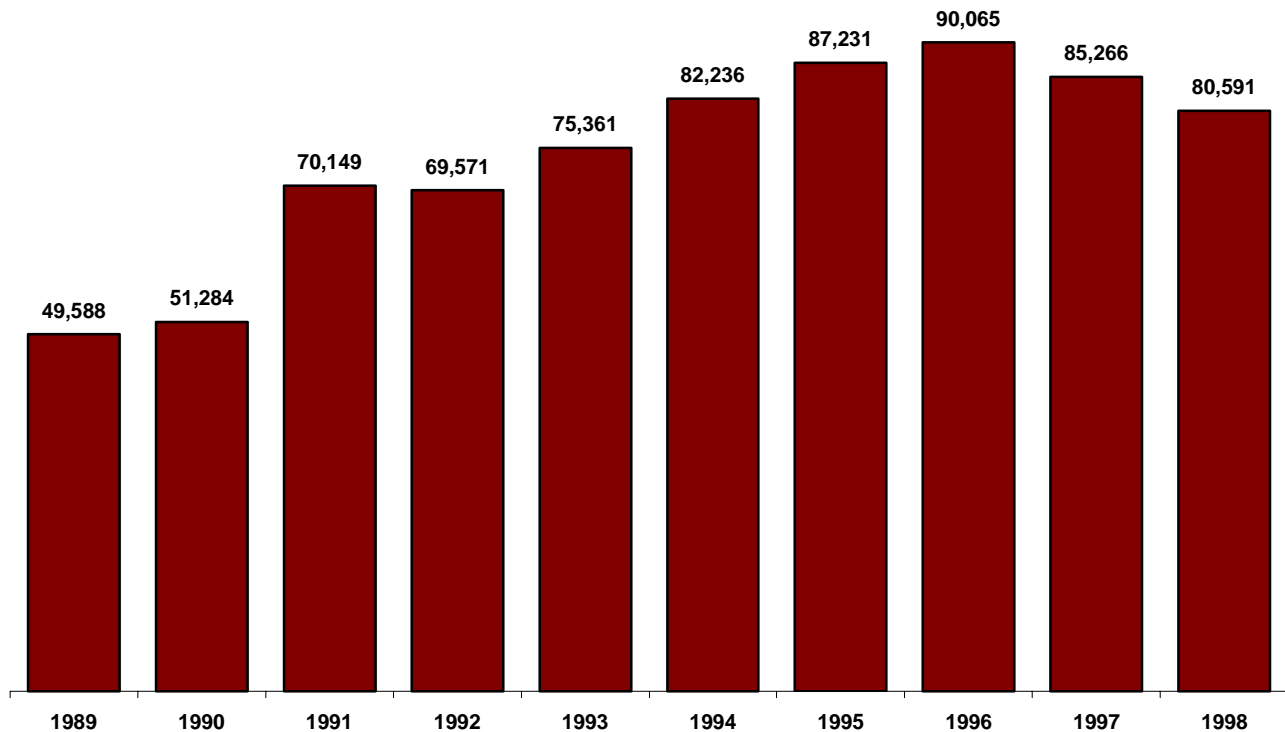


Chart 17 Site Selection Listing

Site	Total Observed	Total Belted	Usage Rate	County	Area	Population Category	Day	Time	Road System	Location	City
1	80	75	93.75%	Buena Vista	NW	E	Thurs	4 PM	Secondary	C 49 @ Hwy 71	
2	181	158	87.29%	Buena Vista	NW	E	Sat	2 PM	Primary	Hwy 7 @ Hwy 71	
3	104	101	97.12%	Buena Vista	NW	E	Sat	4 PM	Primary	Hwy 110 @ Hwy 7	
4	200	175	87.50%	Buena Vista	NW	E	Sat	6 PM	City	Third @ Lake	Storm Lake
5	103	91	88.35%	Buena Vista	NW	E	Thurs	2 PM	Primary	Hwy 7 @ Hwy 71	
6	9	9	100.00%	Butler	NE	E	Wed	8 AM	Secondary	C 55 @ Hwy 14	
7	190	123	64.74%	Butler	NE	E	Wed	12 PM	City	Third St. @ Main	Allison
8	147	130	88.44%	Butler	NE	E	Sun	12 PM	Primary	Hwy 14 @ Hwy 20	
9	68	59	86.76%	Butler	NE	E	Sat	11 AM	Primary	Hwy 188 @ Hwy 3	
10	87	78	89.66%	Butler	NE	E	Sat	1 PM	Primary	Hwy 14 @ Hwy 3	
11	297	172	57.91%	Clarke	SW	E	Mon	12 PM	Primary	Hwy 34 @ Hwy 69	
12	168	104	61.90%	Clarke	SW	E	Wed	9 AM	City	E Washington @ Main St	Osceola
13	202	163	80.69%	Clay	NW	E	Fri	1 PM	Primary	Hwy 18 @ Hwy 71	
14	33	30	90.91%	Clay	NW	E	Mon	5 PM	Primary	Hwy 240 @ Hwy 71	
15	119	86	72.27%	Clay	NW	E	Mon	7 AM	City	4th @ Grand	Spencer
16	25	19	76.00%	Clay	NW	E	Fri	11 AM	Primary	Hwy 10 @ Hwy 71	
17	341	233	68.33%	Clay	NW	E	Fri	3 PM	City	Grand @ 18th	Spencer
18	18	12	66.67%	Clay	NW	E	Thurs	10 AM	Secondary	N 14 @ Hwy 18	
19	34	23	67.65%	Clay	NW	E	Mon	9 AM	Secondary	B 53 @ Hwy 71	
20	176	136	77.27%	Dallas	SW	A	Fri	12 PM	Primary	Hwy 141 @ Hwy 210	
21	249	217	87.15%	Dallas	SW	A	Thurs	9 AM	Interstate	I-80 Exit #110	
22	47	38	80.85%	Decatur	SW	E	Thurs	5 PM	Primary	Hwy 266 @ Hwy 69	Weldon
23	55	33	60.00%	Decatur	SW	E	Thurs	3 PM	Secondary	J 66 @ Hwy 69	Davis City
24	437	365	83.52%	Decatur	SW	E	Thurs	1 PM	Interstate	I-35 Exit #12	
25	99	70	70.71%	Decatur	SW	E	Wed	7 AM	Primary	West Jct. Hwy 69 @ Hwy 2	Leon
26	286	258	90.21%	Decatur	SW	E	Mon	4 PM	Interstate	I-35 Exit #22	
27	37	30	81.08%	Decatur	SW	E	Mon	2 PM	Secondary	J 20 @ Hwy 204	Garden Grove
28	565	542	95.93%	Franklin	NE	E	Sun	2 PM	Interstate	I-35 Exit #165	
29	87	63	72.41%	Franklin	NE	E	Tues	7 AM	City	1st @ 1st Ave	Hampton
30	14	11	78.57%	Franklin	NE	E	Tues	9 AM	Primary	Hwy 107 @ Hwy 3	
31	21	19	90.48%	Franklin	NE	E	Tues	11 AM	Secondary	C 25 @ Hwy 65	
32	182	164	90.11%	Franklin	NE	E	Wed	10 AM	Primary	Hwy 3 @ Hwy 65	
33	420	408	97.14%	Franklin	NE	E	Sun	10 AM	Interstate	I-35 Exit #170	
34	118	92	77.97%	Keokuk	SE	E	Tues	5 PM	Primary	Hwy 149 @ Hwy 23	
35	187	159	85.03%	Linn	NE	B	Sat	10 AM	City	First Ave @ 29th	Cedar Rapids
36	458	378	82.53%	Linn	NE	B	Sat	6 PM	Interstate	I-380 @ Mile Marker 5	
37	149	128	85.91%	Linn	NE	B	Wed	4 PM	City	8th Ave @ 2nd	Cedar Rapids
38	117	105	89.74%	Linn	NE	B	Wed	2 PM	Secondary	E 34 @ Hwy 13	
39	95	78	82.11%	Linn	NE	B	Wed	12 PM	Primary	Hwy 1 @ Hwy 30	
40	54	41	75.93%	Linn	NE	B	Sun	11 AM	Secondary	E 70 @ Hwy 151	
41	211	189	89.57%	Linn	NE	B	Sun	9 AM	Interstate	I-380 @ Mile Marker 13	
42	74	64	86.49%	Linn	NE	B	Sun	7 AM	Primary	Hwy 30 @ Hwy 1	
43	215	188	87.44%	Linn	NE	B	Sat	8 AM	Primary	Hwy 13 @ Hwy 151	
44	67	40	59.70%	Louisa	SE	E	Sat	6 PM	City	South 4th	Wapello
45	120	91	75.83%	Louisa	SE	E	Fri	3 PM	Primary	Hwy 92 @ Hwy 61	
46	27	11	40.74%	Louisa	SE	E	Sat	10 AM	Secondary	X 43 @ Hwy 92	
47	390	298	76.41%	Polk	SW	A	Thurs	9 AM	City	7th @ Grand	Des Moines
48	179	118	65.92%	Polk	SW	A	Wed	5 PM	City	Aurora @ Beaver	Des Moines
49	709	504	71.09%	Polk	SW	A	Thurs	6 PM	City	Meredith @ Merle Hay	Des Moines
50	268	180	67.16%	Polk	SW	A	Thurs	7 AM	City	Indianola Ave @ SE 8th	Des Moines
51	204	156	76.47%	Polk	SW	A	Fri	2 PM	Primary	Hwy 160 Exit #92	Ankeny
52	335	281	83.88%	Polk	SW	A	Mon	11 AM	Interstate	I-80 Exit #143	
53	580	486	83.79%	Polk	SW	A	Thurs	5 PM	Interstate	I-35 Exit #92	
54	337	304	90.21%	Polk	SW	A	Mon	9 AM	Interstate	I-35 Rest Area	
55	59	45	76.27%	Polk	SW	A	Wed	7 AM	Primary	Hwy 46 @ Hwy 5	
56	244	170	69.67%	Pottawattamie	SW	C	Mon	8 AM	City	9th Ave. @ S 16th	Council Bluffs
57	52	41	78.85%	Pottawattamie	SW	C	Fri	6 PM	Primary	Hwy 59 @ Hwy 83	
58	316	225	71.20%	Pottawattamie	SW	C	Mon	6 PM	Interstate	I-29 Exit #47	
59	466	330	70.82%	Pottawattamie	SW	C	Mon	10 AM	Interstate	I-80 Rest Area	
60	73	42	57.53%	Pottawattamie	SW	C	Fri	12 PM	Secondary	M 16 @ Hwy 92	
61	119	90	75.63%	Pottawattamie	SW	C	Fri	2 PM	Secondary	L 55 @ Hwy 6	
62	274	174	63.50%	Pottawattamie	SW	C	Fri	4 PM	City	Ave A @ 25th	Council Bluffs
63	128	96	75.00%	Pottawattamie	SW	C	Sun	5 PM	Primary	Hwy 6 @ Hwy 191	
64	47	33	70.21%	Pottawattamie	SW	C	Sun	7 AM	Primary	Hwy 83 @ Hwy 191	
65	108	72	66.67%	Pottawattamie	SW	C	Sun	9 AM	Primary	Hwy 59 @ Hwy 92	
66	175	122	69.71%	Pottawattamie	SW	C	Fri	2 PM	Primary	Hwy 6 @ Hwy 59	
67	498	377	75.70%	Pottawattamie	SW	C	Fri	4 PM	Interstate	I-80 Exit #40	
68	623	573	91.97%	Scott	SE	B	Sat	1 PM	Secondary	Y 48 @ Hwy 61	
69	41	32	78.05%	Scott	SE	B	Tues	1 PM	Primary	Hwy 61 @ Long Grove Exit	
70	196	156	79.59%	Scott	SE	B	Fri	6 PM	Primary	Hwy 61 @ Hwy 22	
71	470	378	80.43%	Scott	SE	B	Fri	8 AM	Primary	Hwy 61 @ F 55 Exit	
72	261	205	78.54%	Scott	SE	B	Tues	9 AM	City	Kimberly @ Harrison	Davenport
73	354	264	74.58%	Scott	SE	B	Fri	10 AM	City	Locust @ Brady	Davenport
74	459	393	85.62%	Scott	SE	B	Sat	11 AM	Interstate	I-80 @ Exit #284 (Y40)	
75	202	158	78.22%	Scott	SE	B	Tues	11 AM	Interstate	I-280 @ Hwy 61 Exit	
76	86	65	75.58%	Story	NW	D	Fri	4 PM	City	6th @ J Ave.	Nevada
77	183	151	82.51%	Story	NW	D	Thurs	11 AM	Primary	Hwy 30 @ Duff Exit	Ames
78	239	165	69.04%	Story	NW	D	Thurs	9 AM	City	6th @ Grand	Ames
79	161	130	80.75%	Story	NW	D	Thurs	7 AM	Primary	Hwy 210 @ Hwy 65	
80	282	223	79.08%	Story	NW	D	Wed	7 AM	City	Main @ Clark	Ames
81	545	443	81.28%	Story	NW	D	Wed	3 PM	Interstate	I-35 Rest Area	
82	33	26	78.79%	Story	NW	D	Mon	7 AM	Secondary	E 23 @ Hwy 69	
83	457	361	78.99%	Story	NW	D	Thurs	7 AM	Interstate	I-35 Exit #123	
84	161	95	59.01%	Story	NW	D	Wed	3 PM	Primary	Hwy 133 @ Hwy 30	
85	189	147	77.78%	Story	NW	D	Thurs	8 AM	Primary	Hwy 210 @ Hwy 69	
86	63	52	82.54%	Story	NW	D	Thurs	10 AM	Primary	Hwy 65 @ Hwy 30	
87	101	67	66.34%	Story	NW	D	Wed	3 PM	Secondary	E 63 @ Hwy 65	
88	120	72	60.00%	Wapello	SE	D	Sat	6 PM	Secondary	V 37 (College St) @ Hwy 34	Agency
89	260	181	69.62%	Wapello	SE	D	Sat	2 PM	City	Church @ Richmond	Ottumwa
90	232	162	69.83%	Wapello	SE	D	Thurs	10 AM	Primary	Hwy 137 @ Hwy 63	
91	334	234	70.06%	Wapello	SE	D	Thurs	12 PM	Primary	East Jct. Hwy 34 @ Hwy 63	
92	64	45	70.31%	Wapello	SE	D	Mon	8 AM	Secondary	T 61 @ Hwy 34	Blakesburg
93	342	237	69.30%	Wapello	SE	D	Thurs	8 AM	City	Wapello St @ Albia Rd	Ottumwa
94	128	91	71.09%	Wapello	SE	D	Sat	4 PM	Primary	Hwy 16 @ Hwy 34	
95	280	230	82.14%	Warren	SW	A	Wed	5 PM	Primary	Hwy 28 @ Hwy 92	Martensdale
96	62	46	74.19%	Warren	SW	A	Fri	7 AM	Secondary	R 57 @ Hwy 92	
97	123	89	72.36%	Washington	SE	E	Tues	1 PM	Primary	Hwy 218 @ Hwy 92	
98	121	90	74.38%	Washington	SE	E	Tues	3 PM	Primary	Hwy 1 @ Hwy 92	
99	28	15	53.57%	Washington	SE	E	Sat	8 AM	Secondary	G6W @ Hwy 92	
100	55	22	40.00%	Washington	SE	E	Fri	1 PM	City	East 7th @ North 4th	Washington

**Chart 18
Site Selection by County**

COUNTY	POPULATION	POPULATION CATEGORY	AREA	NUMBER OF SITES SELECTED
Adair	8,409	E	SW	
Adams	4,866	E	SW	
Allamakee	13,855	E	NE	
Appanoose	13,743	E	SE	
Audubon	7,334	E	SW	
Benton	22,429	E	NE	
Black Hawk	123,798	B	NE	
Boone	25,186	D	NW	
Bremer	22,813	B	NE	
Buchanan	20,844	E	NE	
Buena Vista	19,965	E	NW	5
Butler	15,731	E	NE	5
Calhoun	11,508	E	NW	
Carroll	21,423	E	NE	
Cass	15,128	E	SW	
Cedar	17,381	E	SE	
Cerro Gordo	46,733	D	NE	
Cherokee	14,098	E	NW	
Chickasaw	13,295	E	NE	
Clarke	8,287	E	SW	2
Clay	17,585	E	NW	7
Clayton	19,054	E	NE	
Clinton	51,040	D	SE	
Crawford	16,775	E	NW	
Dallas	29,755	A	SW	2
Davis	8,312	E	SE	
Decatur	8,338	E	SW	6
Delaware	18,035	E	NE	
Des Moines	42,614	D	SE	
Dickinson	14,909	E	NW	
Dubuque	86,403	C	NE	
Emmet	11,569	E	NW	
Fayette	21,843	D	NE	
Floyd	17,058	E	NE	
Franklin	11,364	E	NE	6
Fremont	8,226	E	SW	
Greene	10,045	E	NW	
Grundy	12,029	E	NE	
Guthrie	10,935	E	NW	
Hamilton	16,071	E	NW	
Hancock	12,638	E	NW	
Hardin	19,094	E	NE	
Harrison	14,730	E	SW	
Henry	19,226	E	SE	
Howard	9,809	E	NE	
Humboldt	10,756	E	NW	
Ida	8,365	E	NW	
Iowa	14,630	E	SE	
Jackson	19,950	E	NE	
Jasper	34,795	D	SE	

COUNTY	POPULATION	POPULATION CATEGORY	AREA	NUMBER OF SITES SELECTED
Jefferson	16,310	E	SE	
Johnson	96,119	C	SE	
Jones	19,444	E	SE	
Keokuk	11,624	E	SE	1
Kossuth	18,591	E	NW	
Lee	38,687	D	SE	
Linn	168,767	B	NE	9
Louisa	11,592	E	SE	3
Lucas	9,070	E	SE	
Lyon	11,952	E	NW	
Madison	12,483	E	SW	
Mahaska	21,522	E	SE	
Marion	30,001	D	SE	
Marshall	38,276	D	NE	
Mills	13,202	E	SW	
Mitchell	10,928	E	NE	
Monona	10,034	E	NW	
Monroe	8,114	E	SE	
Montgomery	12,076	E	SW	
Muscatine	39,907	E	SE	
O'Brien	15,444	E	NW	
Osceola	7,267	E	NW	
Page	16,870	E	SW	
Palo Alto	10,669	E	NW	
Plymouth	23,388	E	NW	
Pocahontas	9,525	E	NW	
Polk	327,140	A	SW	9
Pottawattamie	82,628	C	SW	12
Poweshiek	19,033	E	SE	
Ringgold	5,420	E	SW	
Sac	12,324	E	NW	
Scott	150,979	B	SE	8
Shelby	13,230	E	SW	
Sioux	29,903	D	NW	
Story	74,252	D	NW	12
Tama	17,419	E	NE	
Taylor	7,114	E	SW	
Union	12,750	E	SW	
Van Buren	7,676	E	SE	
Wapello	35,687	D	SE	7
Warren	36,033	A	SW	2
Washington	19,612	E	SE	4
Wayne	7,067	E	SE	
Webster	40,342	D	NW	
Winnebago	12,122	E	NW	
Winneshiek	20,847	E	NE	
Woodbury	98,276	C	NW	
Worth	7,991	E	NE	
Wright	14,269	E	NW	
Totals	2,776,755	N/A	N/A	100

NOTE: Population strata determined using 1980 Census data in the original 1986 Seat Belt Usage Survey.

Chart 19
Site Selection by Area of State

Area of State	Northeast	Southeast	Northwest	Southwest	Totals
Number of Selected Sites	20	23	24	33	100
Number of Possible Counties	25	25	29	20	99
Number of Selected Counties	3	5	3	6	17
Percentage of Counties Selected	12.00%	16.00%	10.34%	30.00%	17.17%
Total Population in Area	799,788	744,185	588,763	644,019	2,776,755
Percentage of Total State Population	28.80%	26.80%	21.20%	23.19%	100.00%

Chart 20
Site Selection by Population Categories

Population Category	A - Over 200,000	B - 150,000 to 200,000	C - 75,000 to 150,000	D - 25,000 to 75,000	E - Under 25,000	Totals
Number of Selected Sites	13	17	12	19	39	100
Number of Possible Counties	3	4	4	13	75	99
Number of Selected Counties	3	2	1	2	9	17
Percentage of Counties Selected	100.00%	100.00%	20.00%	26.67%	10.53%	17.17%
Total Population in Category	327,140	319,746	487,224	593,211	1,049,434	2,776,755
Percentage of Total State Population	11.78%	11.52%	17.55%	21.36%	37.79%	100.00%

NOTE: Population numbers provided by the 1990 Census, U.S. Department of Commerce.

Chart 21
Statewide Vehicle Miles Traveled

October 1998	Municipal	Interstate	Primary	Secondary	Totals
Miles	587	561	965	413	2,526
Percentage	23.24%	22.21%	38.20%	16.35%	100.00%

October 1999	Municipal	Interstate	Primary	Secondary	Totals
Miles	573	562	981	435	2,551
Percentage	22.46%	22.03%	38.46%	17.05%	100.00%

NOTE: Vehicle miles traveled numbers provided by the Office of Transportation Data, Iowa Department of Transportation.