

2002 Seat Belt Usage Survey



**Site surveys were conducted by Iowa Department of Public Safety's
Iowa State Patrol Troopers**

**Statistics compiled and report written by the
Iowa Department of Transportation's Office of Driver Services**

List of Charts

Survey Results

1. Seat Belt Usage	2
2. Percentage of Restraint Usage by Year and Road Type.....	3
3. Usage Percent by Year – All Road Types (Chart)	3
4. Usage Percent by Year – City (Chart)	4
5. Usage Percent by Year – Interstate (Chart)	4
6. Usage Percent by Year – Primary (Chart)	4
7. Usage Percent by Year – Secondary (Chart)	4
8. Survey Results by County and Road System	5
9. Survey Results by Population Category and Road System	6
10. Survey Results by Road System and Population.....	6
11. Survey Results by Time of Day and Road System	7
12. Survey Results by Area and Road System	8
13. Survey Results by Day of Week and Road System	8

Seat Belt/Child Restraint Citations Issued

14. Seat Belt/Child Restraint Citations Issued by Month and Year	9
15. Seat Belt/Child Restraint Citations Issued by Year (Chart).....	9
16. Seat Belt/Child Restraint Citations Issued by County of Residence (Map).....	10

Observation Site Selection

17. Site Selection Listing	11
18. Site Selection by County Including County Populations and Number of Sites per County.....	12
19. Site Selection by Area of State.....	13
20. Site Selection by Population Categories	13
21. Statewide Vehicle Miles Traveled	13

2002 SEAT BELT USAGE SURVEY

During the autumn of 2002, 82.35 percent of motorists surveyed on all Iowa roadways were wearing safety belts, an increase of nearly 1.5 percent from the previous year (see Chart 1-Seat Belt Usage).

Chart 1 - Seat Belt Usage

Road Type	2001			2002			Percent Change
	Observed	Used	Percentage Used	Observed	Used	Percentage Used	
Statewide Total*	22,597	18,171	80.92%	15,078	12,314	82.35%	1.43%
Municipal	6,753	5,128	75.94%	5,741	4,550	79.25%	3.31%
Interstate	6,217	5,063	81.44%	2,145	1,739	81.07%	-0.37%
Primary	7,831	6,493	82.91%	5,799	4,820	83.12%	0.21%
Secondary	1,796	1,487	82.80%	1,393	1,205	86.50%	3.70%

*Estimated statewide total usage weighted by vehicle miles traveled (see Chart 21) and 95% confidence intervals with an estimated variance of +/-0.29%

For the second consecutive year safety belt usage increased on three of the four road systems studied. Belt usage on secondary road systems (county roads) led the way with a 3.7 percent increase over the previous year. Since more than 30 percent of all motor vehicle fatalities occur on secondary road systems, this usage increase is great news. Continued belt usage enforcement and ongoing public education for the motoring public concerning the importance of safety belt and child safety seat usage on the secondary road system, even for short distance trips, must be maintained.

Safety belt use on municipal road systems (city streets) increased 3.31 percent. This, too, is encouraging since more than 45 percent of all motor vehicle crashes occur on city streets and belt usage on the municipal road system has historically been the lowest of the road systems studied. In communities with good usage, sustained enforcement efforts and public education will further improve safety restraint use; in communities where usage is still low, intensified enforcement efforts and enhanced public education is necessary.

Primary System (U.S. and state highways) safety belt usage rose .21 percent. Since this falls within the +/- 0.29% estimated variance, actual belt usage could range from no increase to an increase of .5 percent. This drops usage on state and U.S. highways from the highest in 2001 to ranking third among the road systems. This is of concern to safety specialists because almost half of the traffic fatalities (47 percent) occur on the Primary Road System.

There was a decline in interstate belt use of -.37 percent. Since these surveys began this is only the second year that Interstate System usage has not been the highest of all the roadway systems. This is the fourth decline since its highest usage rate in 1995, and may be cause for concern for safety officials due to the increasing traffic density and higher travel speeds on the Interstate System. One possible explanation for this decline is the increased number of out-of-state drivers traveling through Iowa on the interstates. These drivers may not be aware of Iowa's safety belt law. Increased enforcement, public education, media-supported awareness and additional signage could restore these roadways to their highest usage status.

Belt usage for 15,078 front seat occupants of cars, vans and pickups was observed at 100 locations. Of these front seat occupants, 83.45 percent of drivers (9,537 out of 11,428) and 76.06 percent of front seat passengers (2,777 out of 3,650) were observed using safety belts. For 583 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 observational 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 the Iowa Department of Public Safety's Iowa State Patrol Troopers, between the hours of 7 a.m. and 7 p.m., Monday through Sunday. Observations were made for approximately one hour at each site.

1 Iowa Department of Transportation, 1999 Iowa Crash Facts, Roadway and Environment Conditions, p. 51.

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

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 fine was increased to \$25, plus court costs effective July 1, 2001. 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 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.

Chart 2

Percentage of Restraint Usage by Year and Road Type

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%
OCT 00	78%	73%	82%	79%	77%
OCT 01	81%	76%	81%	83%	83%
SEP 02	82%	79%	81%	83%	87%

Enforcement

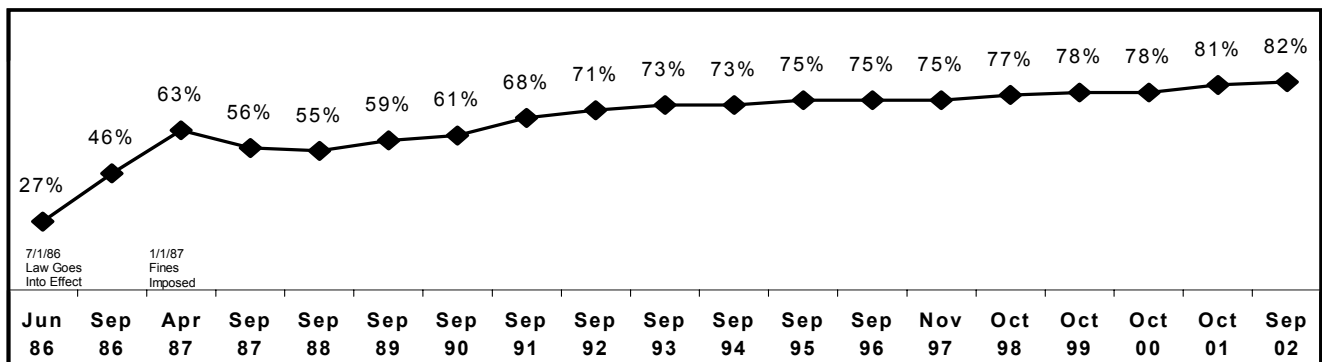
The safety belt law continues to be actively enforced in the state. There were 65,618 safety belt citations and 3,010 child restraint citations issued in 2001, an increase from 62,432 and 2,893 respectively, in 2000 (See Charts 14 through 16 for safety belt/child restraint citations issued). Iowa's safety 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 82 percent.

Summary

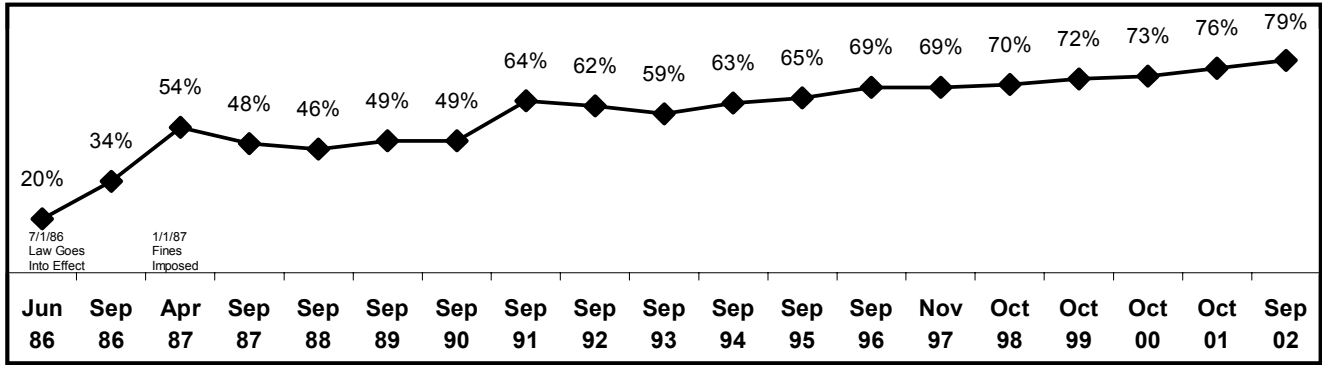
The 82 percent seat belt usage rate in 2002 (up 11 percent since 1992) reflects active enforcement and education efforts that have occurred in Iowa during the last few years. Through continuing education of the public, an active "Life Toll" campaign, seat belt enforcement, and other cooperative efforts between state and local law enforcement, Iowa will strive to increase the use of seat belts and save more lives on Iowa roadways.

Chart 3

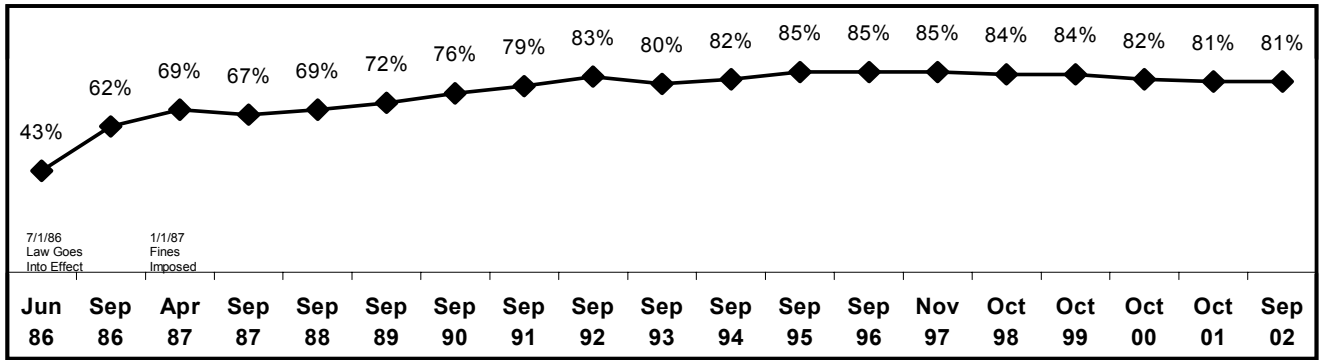
Usage Percent by Year- ALL ROAD TYPES



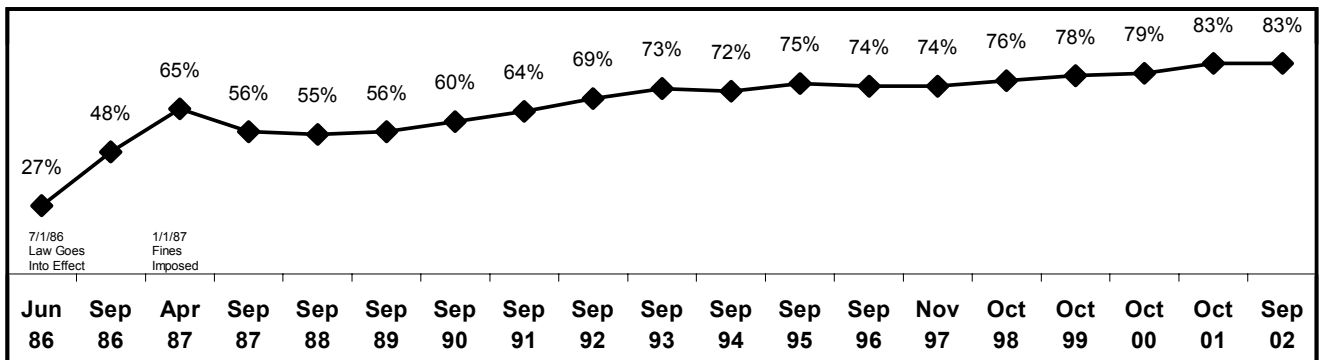
**Chart 4
Usage Percent by Year - MUNICIPAL**



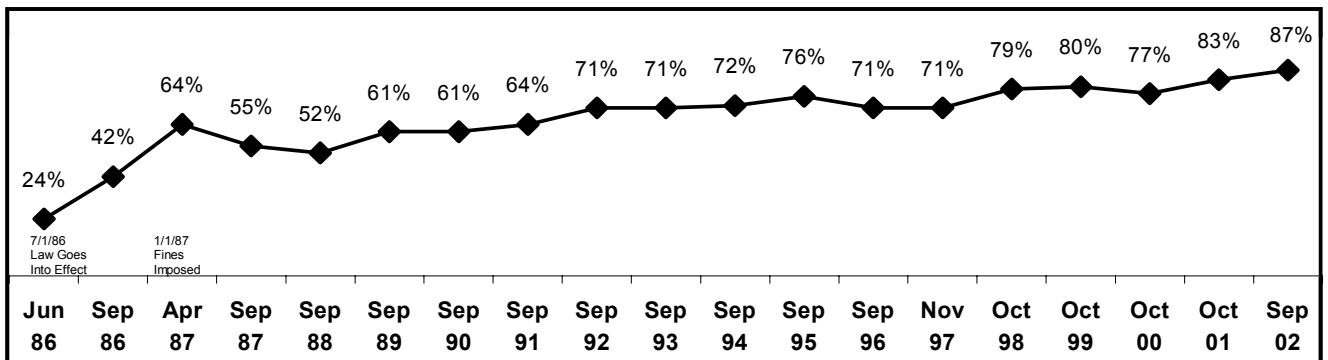
**Chart 5
Usage Percent by Year - INTERSTATE**



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



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



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

County and Road System	Drivers			Passengers			Total		
	Number	Belted		Number	Belted		Number	Belted	
	Observed	Number	Percent	Observed	Number	Percent	Observed	Number	Percent
BUENA VISTA	368	330	89.67%	73	59	80.82%	441	389	88.21%
Municipal	94	83	88.30%	16	11	68.75%	110	94	85.45%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	184	165	89.67%	38	31	81.58%	222	196	88.29%
Secondary	90	82	91.11%	19	17	89.47%	109	99	90.83%
BUTLER	362	316	87.29%	96	81	84.38%	458	397	86.68%
Municipal	162	133	82.10%	35	25	71.43%	197	158	80.20%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	187	171	91.44%	58	53	91.38%	245	224	91.43%
Secondary	13	12	92.31%	3	3	100.00%	16	15	93.75%
CLARKE	591	461	78.00%	188	144	76.60%	779	605	77.66%
Municipal	276	216	78.26%	67	44	65.67%	343	260	75.80%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	315	245	77.78%	121	100	82.64%	436	345	79.13%
Secondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CLAY	692	517	74.71%	236	160	67.80%	928	677	72.95%
Municipal	409	301	73.59%	152	120	78.95%	561	421	75.04%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	239	182	76.15%	74	35	47.30%	313	217	69.33%
Secondary	44	34	77.27%	10	5	50.00%	54	39	72.22%
DALLAS	218	178	81.65%	64	56	87.50%	282	234	82.98%
Municipal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interstate	120	94	78.33%	38	34	89.47%	158	128	81.01%
Primary	98	84	85.71%	26	22	84.62%	124	106	85.48%
Secondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DECATUR	301	262	87.04%	109	92	84.40%	410	354	86.34%
Municipal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interstate	100	84	84.00%	36	28	77.78%	136	112	82.35%
Primary	109	92	84.40%	46	40	86.96%	155	132	85.16%
Secondary	92	86	93.48%	27	24	88.89%	119	110	92.44%
FRANKLIN	554	514	92.78%	155	128	82.58%	709	642	90.55%
Municipal	185	171	92.43%	63	53	84.13%	248	224	90.32%
Interstate	76	70	92.11%	35	27	77.14%	111	97	87.39%
Primary	269	249	92.57%	56	47	83.93%	325	296	91.08%
Secondary	24	24	100.00%	1	1	100.00%	25	25	100.00%
KEOKUK	116	102	87.93%	29	24	82.76%	145	126	86.90%
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	116	102	87.93%	29	24	82.76%	145	126	86.90%
Secondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LINN	892	813	91.14%	371	310	83.56%	1,263	1,123	88.92%
Municipal	279	249	89.25%	122	104	85.25%	401	353	88.03%
Interstate	127	112	88.19%	87	72	82.76%	214	184	85.98%
Primary	296	272	91.89%	64	46	71.88%	360	318	88.33%
Secondary	190	180	94.74%	98	88	89.80%	288	268	93.06%
LOUISA	197	157	79.70%	53	45	84.91%	250	202	80.80%
Municipal	23	14	60.87%	9	4	44.44%	32	18	56.25%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	148	120	81.08%	35	32	91.43%	183	152	83.06%
Secondary	26	23	88.46%	9	9	100.00%	35	32	91.43%
POLK	2,074	1,749	84.33%	615	473	76.91%	2,689	2,222	82.63%
Municipal	1,048	882	84.16%	397	282	71.03%	1,445	1,164	80.55%
Interstate	617	518	83.95%	88	72	81.82%	705	590	83.69%
Primary	409	349	85.33%	130	119	91.54%	539	468	86.83%
Secondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
POTTAWATTAMIE	1,056	777	73.58%	459	296	64.49%	1,515	1,073	70.83%
Municipal	286	195	68.18%	129	75	58.14%	415	270	65.06%
Interstate	252	184	73.02%	124	72	58.06%	376	256	68.09%
Primary	413	317	76.76%	157	110	70.06%	570	427	74.91%
Secondary	105	81	77.14%	49	39	79.59%	154	120	77.92%
SCOTT	984	844	85.77%	236	179	75.85%	1,220	1,023	83.85%
Municipal	576	494	85.76%	129	92	71.32%	705	586	83.12%
Interstate	245	218	88.98%	82	69	84.15%	327	287	87.77%
Primary	102	84	82.35%	21	17	80.95%	123	101	82.11%
Secondary	61	48	78.69%	4	1	25.00%	65	49	75.38%
STORY	1,230	1,028	83.58%	394	290	73.60%	1,624	1,318	81.16%
Municipal	387	323	83.46%	136	92	67.65%	523	415	79.35%
Interstate	81	58	71.60%	37	27	72.97%	118	85	72.03%
Primary	580	485	83.62%	131	96	73.28%	711	581	81.72%
Secondary	182	162	89.01%	90	75	83.33%	272	237	87.13%
WAPELLO	1,292	1,105	85.53%	435	333	76.55%	1,727	1,438	83.27%
Municipal	349	295	84.53%	154	119	77.27%	503	414	82.31%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	793	683	86.13%	225	168	74.67%	1,018	851	83.60%
Secondary	150	127	84.67%	56	46	82.14%	206	173	83.98%
WARREN	108	90	83.33%	11	11	100.00%	119	101	84.87%
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	73	65	89.04%	5	5	100.00%	78	70	89.74%
Secondary	35	25	71.43%	6	6	100.00%	41	31	75.61%
WASHINGTON	393	294	74.81%	126	96	76.19%	519	390	75.14%
Municipal	212	147	69.34%	46	26	56.52%	258	173	67.05%
Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Primary	175	143	81.71%	77	67	87.01%	252	210	83.33%
Secondary	6	4	66.67%	3	3	100.00%	9	7	77.78%

Chart 9
Survey Results by Population Category and Road System

Population and Road System	Total Observed	Restraint Used		Restraint Not Used		Restraint Unknown	
A Over 200,000	3,090	2,557	82.75%	439	14.21%	94	3.04%
Municipal	1,445	1,164	80.55%	253	17.51%	28	1.94%
Interstate	863	718	83.20%	104	12.05%	41	4.75%
Primary	741	644	86.91%	72	9.72%	25	3.37%
Secondary	41	31	75.61%	10	24.39%	-	0.00%
B 150,000 to 199,999	2,483	2,146	86.43%	264	10.63%	73	2.94%
Municipal	1,106	939	84.90%	136	12.30%	31	2.80%
Interstate	541	471	87.06%	54	9.98%	16	2.96%
Primary	483	419	86.75%	46	9.52%	18	3.73%
Secondary	353	317	89.80%	28	7.93%	8	2.27%
C 75,000 to 149,999	1,515	1,073	70.83%	392	25.87%	50	3.30%
Municipal	415	270	65.06%	118	28.43%	27	6.51%
Interstate	376	256	68.09%	99	26.33%	21	5.59%
Primary	570	427	74.91%	141	24.74%	2	0.35%
Secondary	154	120	77.92%	34	22.08%	-	0.00%
D 25,000 to 74,999	3,194	2,632	82.40%	453	14.18%	109	3.41%
Municipal	724	579	79.97%	118	16.30%	27	3.73%
Interstate	118	85	72.03%	15	12.71%	18	15.25%
Primary	1,874	1,558	83.14%	263	14.03%	53	2.83%
Secondary	478	410	85.77%	57	11.92%	11	2.30%
E Under 25,000	4,796	3,906	81.44%	633	13.20%	257	5.36%
Municipal	2,051	1,598	77.91%	327	15.94%	126	6.14%
Interstate	247	209	84.62%	38	15.38%	-	0.00%
Primary	2,131	1,772	83.15%	247	11.59%	112	5.26%
Secondary	367	327	89.10%	21	5.72%	19	5.18%

NOTE: Includes both drivers and front seat passengers.

Chart 10
Survey Results by Road System and Population

Road System and Population	Total Observed	Restraint Used		Restraint Not Used		Restraint Unknown	
Municipal	5,741	4,550	79.25%	952	16.58%	239	4.16%
Over 200,000	1,445	1,164	80.55%	253	17.51%	28	1.94%
150,000 to 199,999	1,106	939	84.90%	136	12.30%	31	2.80%
75,000 to 149,999	415	270	65.06%	118	28.43%	27	6.51%
25,000 to 74,999	724	579	79.97%	118	16.30%	27	3.73%
Under 25,000	2,051	1,598	77.91%	327	15.94%	126	6.14%
Interstate	2,145	1,739	81.07%	310	14.45%	96	4.48%
Over 200,000	863	718	83.20%	104	12.05%	41	4.75%
150,000 to 199,999	541	471	87.06%	54	9.98%	16	2.96%
75,000 to 149,999	376	256	68.09%	99	26.33%	21	5.59%
25,000 to 74,999	118	85	72.03%	15	12.71%	18	15.25%
Under 25,000	247	209	84.62%	38	15.38%	-	0.00%
Primary	5,799	4,820	83.12%	769	13.26%	210	3.62%
Over 200,000	741	644	86.91%	72	9.72%	25	3.37%
150,000 to 199,999	483	419	86.75%	46	9.52%	18	3.73%
75,000 to 149,999	570	427	74.91%	141	24.74%	2	0.35%
25,000 to 74,999	1,874	1,558	83.14%	263	14.03%	53	2.83%
Under 25,000	2,131	1,772	83.15%	247	11.59%	112	5.26%
Secondary	1,393	1,205	86.50%	150	10.77%	38	2.73%
Over 200,000	41	31	75.61%	10	24.39%	-	0.00%
150,000 to 199,999	353	317	89.80%	28	7.93%	8	2.27%
75,000 to 149,999	154	120	77.92%	34	22.08%	-	0.00%
25,000 to 74,999	478	410	85.77%	57	11.92%	11	2.30%
Under 25,000	367	327	89.10%	21	5.72%	19	5.18%

NOTE: Includes both drivers and front seat passengers.

Chart 11
Survey Results by Time of Day and Road System

Time and Road System	Total Observed	Restraint Used		Restraint Not Used		Restraint Unknown	
7:00 a.m. - 7:59 a.m.	1,102	905	82.12%	154	13.97%	43	3.90%
Municipal	-	-	0.00%	-	0.00%	-	0.00%
Interstate	264	218	82.58%	27	10.23%	19	7.20%
Primary	710	580	81.69%	107	15.07%	23	3.24%
Secondary	128	107	83.59%	20	15.63%	1	0.78%
8:00 a.m. - 8:59 a.m.	601	444	73.88%	89	14.81%	68	11.31%
Municipal	320	200	62.50%	71	22.19%	49	15.31%
Interstate	-	-	0.00%	-	0.00%	-	0.00%
Primary	191	160	83.77%	13	6.81%	18	9.42%
Secondary	90	84	93.33%	5	5.56%	1	1.11%
9:00 a.m. - 9:59 a.m.	1,575	1,281	81.33%	270	17.14%	24	1.52%
Municipal	380	307	80.79%	71	18.68%	2	0.53%
Interstate	115	92	80.00%	23	20.00%	-	0.00%
Primary	1,016	834	82.09%	160	15.75%	22	2.17%
Secondary	64	48	75.00%	16	25.00%	-	0.00%
10:00 a.m. - 10:59 a.m.	485	360	74.23%	77	15.88%	48	9.90%
Municipal	-	-	0.00%	-	0.00%	-	0.00%
Interstate	204	136	66.67%	47	23.04%	21	10.29%
Primary	281	224	79.72%	30	10.68%	27	9.61%
Secondary	-	-	0.00%	-	0.00%	-	0.00%
11:00 a.m. - 11:59 a.m.	830	675	81.33%	139	16.75%	16	1.93%
Municipal	206	172	83.50%	29	14.08%	5	2.43%
Interstate	32	29	90.63%	3	9.38%	-	0.00%
Primary	463	373	80.56%	80	17.28%	10	2.16%
Secondary	129	101	78.29%	27	20.93%	1	0.78%
12:00 p.m. - 12:59 p.m.	746	590	79.09%	144	19.30%	12	1.61%
Municipal	645	510	79.07%	128	19.84%	7	1.09%
Interstate	-	-	0.00%	-	0.00%	-	0.00%
Primary	71	55	77.46%	16	22.54%	-	0.00%
Secondary	30	25	83.33%	-	0.00%	5	16.67%
1:00 p.m. - 1:59 p.m.	804	668	83.08%	116	14.43%	20	2.49%
Municipal	358	295	82.40%	53	14.80%	10	2.79%
Interstate	199	163	81.91%	30	15.08%	6	3.02%
Primary	157	138	87.90%	15	9.55%	4	2.55%
Secondary	90	72	80.00%	18	20.00%	-	0.00%
2:00 p.m. - 2:59 p.m.	1,987	1,606	80.83%	283	14.24%	98	4.93%
Municipal	170	118	69.41%	32	18.82%	20	11.76%
Interstate	400	326	81.50%	57	14.25%	17	4.25%
Primary	1,327	1,086	81.84%	183	13.79%	58	4.37%
Secondary	90	76	84.44%	11	12.22%	3	3.33%
3:00 p.m. - 3:59 p.m.	1,923	1,560	81.12%	306	15.91%	57	2.96%
Municipal	1,208	916	75.83%	260	21.52%	32	2.65%
Interstate	-	-	0.00%	-	0.00%	-	0.00%
Primary	245	215	87.76%	18	7.35%	12	4.90%
Secondary	470	429	91.28%	28	5.96%	13	2.77%
4:00 p.m. - 4:59 p.m.	1,746	1,435	82.19%	207	11.86%	104	5.96%
Municipal	820	638	77.80%	100	12.20%	82	10.00%
Interstate	376	322	85.64%	49	13.03%	5	1.33%
Primary	432	372	86.11%	44	10.19%	16	3.70%
Secondary	118	103	87.29%	14	11.86%	1	0.85%
5:00 p.m. - 5:59 p.m.	1,779	1,523	85.61%	202	11.35%	54	3.04%
Municipal	742	628	84.64%	102	13.75%	12	1.62%
Interstate	273	237	86.81%	18	6.59%	18	6.59%
Primary	604	512	84.77%	72	11.92%	20	3.31%
Secondary	160	146	91.25%	10	6.25%	4	2.50%
6:00 p.m. - 6:59 p.m.	1,500	1,267	84.47%	194	12.93%	39	2.60%
Municipal	892	766	85.87%	106	11.88%	20	2.24%
Interstate	282	216	76.60%	56	19.86%	10	3.55%
Primary	302	271	89.74%	31	10.26%	-	0.00%
Secondary	24	14	58.33%	1	4.17%	9	37.50%

NOTE: Includes both drivers and front seat passengers.

Chart 12
Survey Results by Area and Road System

Area of State and Road System	Total Observed	Restraint Used			Restraint Not Used		Restraint Unknown	
Northeast	2,430	2,162	88.97%	215	8.85%	53	2.18%	
Municipal	846	735	86.88%	92	10.87%	19	2.25%	
Interstate	325	281	86.46%	34	10.46%	10	3.08%	
Primary	930	838	90.11%	75	8.06%	17	1.83%	
Secondary	329	308	93.62%	14	4.26%	7	2.13%	
Northwest	2,993	2,384	79.65%	317	10.59%	292	9.76%	
Municipal	1,194	930	77.89%	132	11.06%	132	11.06%	
Interstate	118	85	72.03%	15	12.71%	18	15.25%	
Primary	1,246	994	79.78%	136	10.91%	116	9.31%	
Secondary	435	375	86.21%	34	7.82%	26	5.98%	
Southeast	3,861	3,179	82.34%	594	15.38%	88	2.28%	
Municipal	1,498	1,191	79.51%	279	18.62%	28	1.87%	
Interstate	327	287	87.77%	34	10.40%	6	1.83%	
Primary	1,721	1,440	83.67%	232	13.48%	49	2.85%	
Secondary	315	261	82.86%	49	15.56%	5	1.59%	
Southwest	5,794	4,589	79.20%	1,055	18.21%	150	2.59%	
Municipal	2,203	1,694	76.90%	449	20.38%	60	2.72%	
Interstate	1,375	1,086	78.98%	227	16.51%	62	4.51%	
Primary	1,902	1,548	81.39%	326	17.14%	28	1.47%	
Secondary	314	261	83.12%	53	16.88%	-	0.00%	

NOTE: Includes both drivers and front seat passengers.

Chart 13
Survey Results by Day of Week and Road System

Day of Week/Road System	Total Observed	Restraint Used			Restraint Not Used		Restraint Unknown	
Sunday	1,494	1,185	79.32%	258	17.27%	51	3.41%	
Municipal	775	585	75.48%	172	22.19%	18	2.32%	
Interstate	158	128	81.01%	16	10.13%	14	8.86%	
Primary	473	402	84.99%	53	11.21%	18	3.81%	
Secondary	88	70	79.55%	17	19.32%	1	1.14%	
Monday	1,825	1,575	86.30%	204	11.18%	46	2.52%	
Municipal	801	663	82.77%	103	12.86%	35	4.37%	
Interstate	327	287	87.77%	34	10.40%	6	1.83%	
Primary	647	581	89.80%	62	9.58%	4	0.62%	
Secondary	50	44	88.00%	5	10.00%	1	2.00%	
Tuesday	1,682	1,353	80.44%	177	10.52%	152	9.04%	
Municipal	415	318	76.63%	27	6.51%	70	16.87%	
Interstate	104	83	79.81%	21	20.19%	-	0.00%	
Primary	899	736	81.87%	93	10.34%	70	7.79%	
Secondary	264	216	81.82%	36	13.64%	12	4.55%	
Wednesday	283	215	75.97%	38	13.43%	30	10.60%	
Municipal	-	-	0.00%	-	0.00%	-	0.00%	
Interstate	-	-	0.00%	-	0.00%	-	0.00%	
Primary	188	141	75.00%	23	12.23%	24	12.77%	
Secondary	95	74	77.89%	15	15.79%	6	6.32%	
Thursday	3,244	2,635	81.23%	522	16.09%	87	2.68%	
Municipal	703	555	78.95%	134	19.06%	14	1.99%	
Interstate	264	218	82.58%	27	10.23%	19	7.20%	
Primary	2,051	1,672	81.52%	328	15.99%	51	2.49%	
Secondary	226	190	84.07%	33	14.60%	3	1.33%	
Friday	2,630	2,168	82.43%	374	14.22%	88	3.35%	
Municipal	1,328	1,058	79.67%	229	17.24%	41	3.09%	
Interstate	670	554	82.69%	90	13.43%	26	3.88%	
Primary	510	439	86.08%	50	9.80%	21	4.12%	
Secondary	122	117	95.90%	5	4.10%	-	0.00%	
Saturday	3,920	3,183	81.20%	608	15.51%	129	3.29%	
Municipal	1,719	1,371	79.76%	287	16.70%	61	3.55%	
Interstate	622	469	75.40%	122	19.61%	31	4.98%	
Primary	1,031	849	82.35%	160	15.52%	22	2.13%	
Secondary	548	494	90.15%	39	7.12%	15	2.74%	

NOTE: Includes both drivers and front seat passengers.

Chart 14

Seat Belt/Child Restraint Citations Issued by Month and Year

Month	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Jan	4,381	3,529	5,163	4,470	4,790	6,334	5,038	4,673	5,244	4,623	4,503	4,271
Feb	4,605	6,014	6,465	5,236	6,558	7,452	6,778	6,391	5,820	6,578	5,272	6,133
Mar	5,235	6,950	6,765	6,292	8,071	7,806	10,403	9,785	8,188	6,822	6,657	6,242
Apr	4,723	7,277	6,920	6,793	8,379	7,263	8,634	8,387	7,260	6,249	7,185	6,284
May	5,666	8,272	7,517	8,457	9,090	8,826	11,266	9,131	10,205	10,075	8,268	8,374
Jun	4,625	9,029	7,043	7,015	8,070	8,727	9,416	8,367	7,138	6,148	5,292	5,816
Jul	5,169	6,108	6,556	7,016	8,023	8,504	8,646	9,039	7,489	6,962	5,795	6,574
Aug	4,241	5,865	5,798	6,017	6,801	7,284	8,887	7,931	6,553	7,143	5,847	7,269
Sep	4,127	6,215	5,740	6,889	6,381	7,773	6,458	6,489	6,827	5,540	5,382	5,564
Oct	3,476	4,146	4,095	6,235	5,360	5,399	5,036	5,737	4,774	3,920	3,613	3,603
Nov	3,186	3,253	3,804	5,499	5,522	6,430	5,387	4,991	6,192	6,048	5,205	4,797
Dec	1,850	3,491	3,705	5,442	5,191	5,433	4,116	4,345	4,901	3,987	2,306	3,701
Total	51,284	70,149	69,571	75,361	82,236	87,231	90,065	85,266	80,591	74,099	65,325	68,628

Chart 15

Seat Belt/Child Restraint Citations Issued by Year

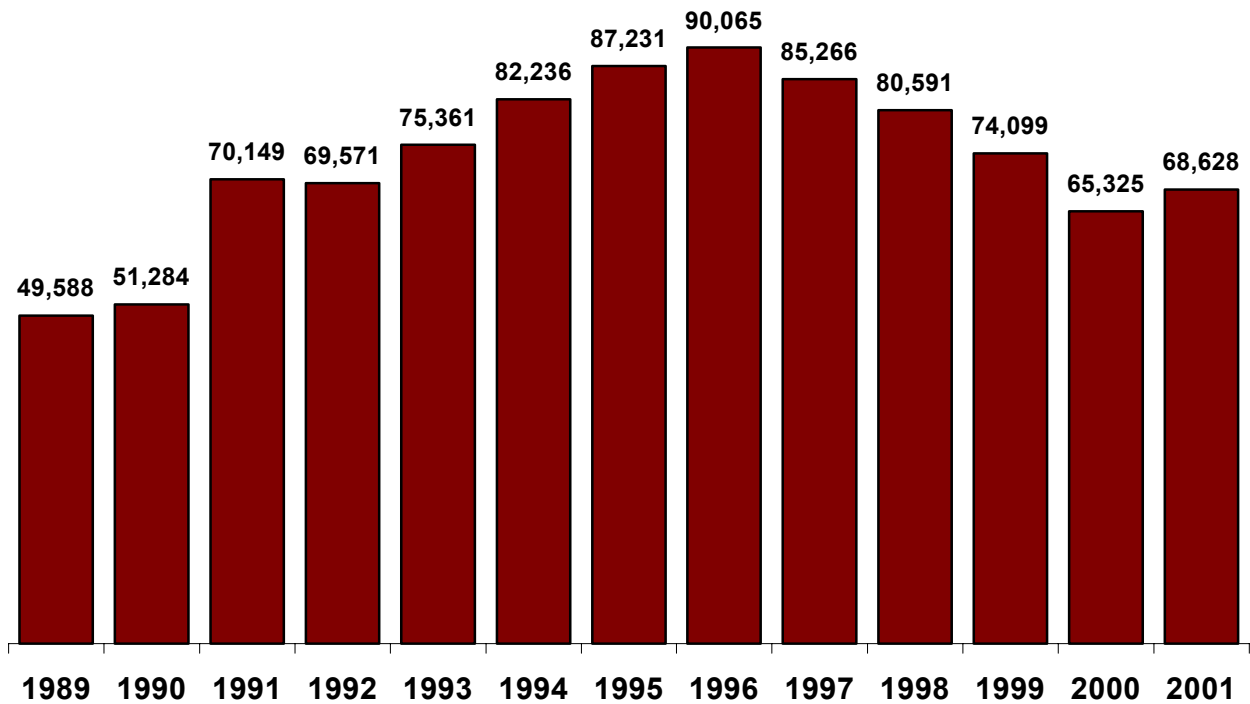


Chart 17 Site Selection Listing

Site	Total Observed	Total Believable	Usage Rate	County	Area	Population	Day	Time	Road System	Location	City
1	110	94	85.45%	Buena Vista	NW	E	Fri	1 PM	Municipal	Lake @ Third	Storm Lake
2	44	38	86.36%	Buena Vista	NW	E	Tue	3 PM	Primary	Hwy 7 @ Hwy 71	
3	148	132	89.19%	Buena Vista	NW	E	Fri	3 PM	Primary	Hwy 110 @ Hwy 7	
4	30	26	86.67%	Buena Vista	NW	E	Tue	1 PM	Primary	Hwy 7 @ Hwy 71	
5	109	99	90.83%	Buena Vista	NW	E	Tue	5 PM	Secondary	C 49 @ Hwy 71	
6	197	158	80.20%	Butler	NE	E	Thu	3 PM	Municipal	Main @ Third	Allison
7	91	83	91.21%	Butler	NE	E	Mon	4 PM	Primary	Hwy 14 @ Hwy 20	
8	97	88	90.72%	Butler	NE	E	Mon	6 PM	Primary	Hwy 188 @ Hwy 3	
9	57	53	92.98%	Butler	NE	E	Thu	1 PM	Primary	Hwy 14 @ Hwy 3	
10	16	15	93.75%	Butler	NE	E	Fri	5 PM	Secondary	C 55 @ Hwy 14	
11	343	260	75.80%	Clarke	SW	E	Fri	12 PM	Municipal	E Washington @ Main St	Osceola
12	436	345	79.13%	Clarke	SW	E	Sat	9 AM	Primary	Hwy 34 @ Hwy 69	
13	146	103	70.55%	Clay	NW	E	Mon	8 AM	Municipal	4th @ Grand	Spencer
14	415	318	76.63%	Clay	NW	E	Tue	4 PM	Municipal	Grand @ 18th	Spencer
15	232	163	70.26%	Clay	NW	E	Tue	2 PM	Primary	Hwy 18 @ Hwy 71	
16	46	34	73.91%	Clay	NW	E	Wed	8 AM	Primary	Hwy 240 @ Hwy 71	
17	35	20	57.14%	Clay	NW	E	Wed	10 AM	Primary	Hwy 10 @ Hwy 71	
18	24	14	58.33%	Clay	NW	E	Tue	6 PM	Secondary	N 14 @ Hwy 18	
19	30	25	83.33%	Clay	NW	E	Wed	12 PM	Secondary	B 53 @ Hwy 71	
20	158	128	81.01%	Dallas	SW	A	Sun	5 PM	Interstate	I-80 Exit #110	
21	124	106	85.48%	Dallas	SW	A	Mon	4 PM	Primary	Hwy 141 @ Hwy 210	
22	104	83	79.81%	Decatur	SW	E	Tue	9 AM	Interstate	I-35 Exit #12	
23	32	29	90.63%	Decatur	SW	E	Sat	11 AM	Interstate	I-35 Exit #22	
24	63	52	82.54%	Decatur	SW	E	Fri	10 AM	Primary	Hwy 266 @ Hwy 69	Weldon
25	92	80	86.96%	Decatur	SW	E	Fri	6 PM	Primary	West Jct. Hwy 69 @ Hwy 2	Leon
26	38	33	86.84%	Decatur	SW	E	Sat	7 AM	Secondary	J 66 @ Hwy 69	Davis City
27	81	77	95.06%	Decatur	SW	E	Fri	8 AM	Secondary	J 20 @ Hwy 204	Garden Grove
28	248	224	90.32%	Franklin	NE	E	Thu	5 PM	Municipal	1st @ 1st Ave	Hampton
29	100	88	88.00%	Franklin	NE	E	Fri	1 PM	Interstate	I-35 Exit #165	
30	11	9	81.82%	Franklin	NE	E	Fri	9 AM	Interstate	I-35 Exit #170	
31	6	6	100.00%	Franklin	NE	E	Fri	11 AM	Primary	Hwy 107 @ Hwy 3	
32	319	290	90.91%	Franklin	NE	E	Mon	2 PM	Primary	Hwy 65 @ Hwy 3	
33	25	25	100.00%	Franklin	NE	E	Fri	7 AM	Secondary	C 25 @ Hwy 65	
34	145	126	86.90%	Keokuk	SE	D	Thu	8 AM	Primary	Hwy 149 @ Hwy 23	
35	237	206	86.92%	Linn	NE	B	Sat	6 PM	Municipal	First Ave @ 29th	Cedar Rapids
36	164	147	89.63%	Linn	NE	B	Sat	4 PM	Municipal	8th Ave @ 2nd	Cedar Rapids
37	115	109	94.78%	Linn	NE	B	Sat	5 PM	Interstate	I-380 Mile Marker 25	
38	99	75	75.76%	Linn	NE	B	Sat	1 PM	Interstate	I-380 Mile Marker 13	
39	114	104	91.23%	Linn	NE	B	Tue	9 AM	Primary	Hwy 1 @ Hwy 30	
40	161	143	88.82%	Linn	NE	B	Tue	7 AM	Primary	Hwy 30 @ Hwy 1	
41	85	71	83.53%	Linn	NE	B	Tue	11 AM	Primary	Hwy 13 @ Hwy 151	
42	248	236	95.16%	Linn	NE	B	Sat	3 PM	Secondary	E 34 @ Hwy 13	
43	40	32	80.00%	Linn	NE	B	Sat	2 PM	Secondary	E 70 @ Hwy 151	
44	32	18	56.25%	Louisa	SE	E	Sun	9 AM	Municipal	South 4th @ Washington	Wapello
45	183	152	83.06%	Louisa	SE	E	Thu	10 AM	Primary	Hwy 92 @ Hwy 61	
46	35	32	91.43%	Louisa	SE	E	Thu	5 PM	Secondary	X 43 @ Hwy 92	
47	147	113	76.87%	Polk	SW	A	Sat	5 PM	Municipal	Grand @ 7th	Des Moines
48	248	201	81.05%	Polk	SW	A	Sat	1 PM	Municipal	Aurora @ Beaver	Des Moines
49	655	560	85.50%	Polk	SW	A	Mon	6 PM	Municipal	Meredith @ Merle Hay	Des Moines
50	395	290	73.42%	Polk	SW	A	Sun	3 PM	Municipal	Indiana Ave @ SE 8th	Des Moines
51	376	322	85.64%	Polk	SW	A	Fri	4 PM	Interstate	I-80 Exit #143	
52	264	218	82.58%	Polk	SW	A	Thu	7 AM	Interstate	I-35 Exit #92	
53	65	50	76.92%	Polk	SW	A	Fri	6 PM	Interstate	I-35 Rest Area	
54	480	418	87.08%	Polk	SW	A	Sat	5 PM	Primary	Hwy 160 @ Hwy 69	Ankeny
55	59	50	84.75%	Polk	SW	A	Sun	1 PM	Primary	Hwy 945 @ Hwy 931	
56	241	173	71.78%	Pottawattamie	SW	C	Sat	4 PM	Municipal	9th Ave. @ S 16th	Council Bluffs
57	174	97	55.75%	Pottawattamie	SW	C	Sat	8 AM	Municipal	A Ave & 25th St	Council Bluffs
58	79	55	69.62%	Pottawattamie	SW	C	Sat	6 PM	Interstate	I-29 Exit #47	
59	204	136	66.67%	Pottawattamie	SW	C	Sat	10 AM	Interstate	I-80 Rest Area	
60	93	65	69.89%	Pottawattamie	SW	C	Sat	2 PM	Interstate	I-80 Exit #40	
61	71	55	77.46%	Pottawattamie	SW	C	Sat	12 PM	Primary	Hwy 83 @ Hwy 59	
62	133	100	75.19%	Pottawattamie	SW	C	Thu	11 AM	Primary	Hwy 6 @ Hwy 191	
63	31	27	87.10%	Pottawattamie	SW	C	Tue	3 PM	Primary	Hwy 191 @ Hwy 83	
64	124	94	75.81%	Pottawattamie	SW	C	Tue	5 PM	Primary	Hwy 92 @ Hwy 59	
65	211	151	71.56%	Pottawattamie	SW	C	Thu	7 AM	Primary	Hwy 6 @ Hwy 59	
66	64	48	75.00%	Pottawattamie	SW	C	Thu	9 AM	Secondary	M 16 @ Hwy 92	
67	90	72	80.00%	Pottawattamie	SW	C	Tue	1 PM	Secondary	L 55 @ Hwy 6	
68	358	295	82.40%	Scott	SE	B	Fri	3 PM	Municipal	Kimberly @ Harrison	Davenport
69	347	291	83.86%	Scott	SE	B	Fri	5 PM	Municipal	Locust @ Brady	Davenport
70	94	77	81.91%	Scott	SE	B	Mon	6 PM	Interstate	I-80 Exit #284 (Y40)	
71	233	210	90.13%	Scott	SE	B	Mon	2 PM	Interstate	I-280 Hwy 61 Exit	
72	16	14	87.50%	Scott	SE	B	Mon	4 PM	Primary	Long Grove Exit @ Hwy 61	
73	74	56	75.68%	Scott	SE	B	Wed	11 AM	Primary	Hwy 61 @ Hwy 22	
74	33	31	93.94%	Scott	SE	B	Wed	9 AM	Primary	F 55 Exit @ Hwy 61	
75	65	49	75.38%	Scott	SE	B	Wed	7 AM	Secondary	Y 48 @ Hwy 61	
76	170	118	69.41%	Story	NW	D	Fri	2 PM	Municipal	J Ave. @ 6th	Nevada
77	147	125	85.03%	Story	NW	D	Sat	9 AM	Municipal	6th @ Grand	Ames
78	206	172	83.50%	Story	NW	D	Sat	11 AM	Municipal	Main @ Clark	Ames
79	44	34	77.27%	Story	NW	D	Fri	6 PM	Interstate	I-35 Rest Area	
80	74	51	68.92%	Story	NW	D	Fri	2 PM	Interstate	I-35 Exit #123	
81	433	354	81.76%	Story	NW	D	Thu	9 AM	Primary	Duff Exit @ Hwy 30	Ames
82	11	9	81.82%	Story	NW	D	Sun	1 PM	Primary	Hwy 210 @ Hwy 65	
83	22	18	81.82%	Story	NW	D	Sun	3 PM	Primary	Hwy 133 @ Hwy 30	
84	201	169	84.08%	Story	NW	D	Fri	4 PM	Primary	Hwy 210 @ Hwy 69	
85	44	31	70.45%	Story	NW	D	Sat	7 AM	Primary	Hwy 65 @ Hwy 30	
86	222	193	86.94%	Story	NW	D	Sat	3 PM	Secondary	E 23 @ Hwy 69	
87	50	44	88.00%	Story	NW	D	Mon	2 PM	Secondary	E 63 @ Hwy 65	
88	302	250	82.78%	Wapello	SE	E	Sat	12 PM	Municipal	Wapello St @ Albia Rd	Ottumwa
89	201	164	81.59%	Wapello	SE	D	Sun	9 AM	Municipal	Church @ Richmond	Ottumwa
90	113	103	91.15%	Wapello	SE	D	Thu	6 PM	Primary	Hwy 16 @ Hwy 34	
91	776	633	81.57%	Wapello	SE	D	Thu	2 PM	Primary	East Jct. Hwy 34 @ Hwy 63	
92	129	115	89.15%	Wapello	SE	D	Sun	7 AM	Primary	Hwy 137 @ Hwy 63	
93	118	103	87.29%	Wapello	SE	D	Thu	4 PM	Secondary	T 61 @ Hwy 34	
94	88	70	79.55%	Wapello	SE	D	Sun	11 AM	Secondary	V 37 (College St) @ Hwy 34	Agency
95	78	70	89.74%	Warren	SW	A	Tue	7 AM	Primary	Hwy 28 @ Hwy 92	Martensdale
96	41	31	75.61%	Warren	SW	A	Tue	11 AM	Secondary	R 57 @ Hwy 92	
97	258	173	67.05%	Washington	SE	E	Thu	3 PM	Municipal	East 7th @ North 4th	Washington
98	87	70	80.46%	Washington	SE	E	Sun	7 AM	Primary	Hwy 218 @ Hwy 92	
99	165	140	84.85%	Washington	SE	E	Sun	11 AM	Primary	Hwy 1 @ Hwy 92	
100	9	7	77.78%	Washington	SE	E	Thu	8 AM	Secondary	G 6W @ Hwy 92	

Chart 18
Site Selection by County

COUNTY	POPULATION	POPULATION CATEGORY	AREA	NUMBER OF SITES SELECTED	COUNTY	POPULATION	POPULATION CATEGORY	AREA	NUMBER OF SITES SELECTED
Adair	8,409	E	SW		Jefferson	16,310	E	SE	
Adams	4,866	E	SW		Johnson	96,119	C	SE	
Allamakee	13,855	E	NE		Jones	19,444	E	SE	
Appanoose	13,743	E	SE		Keokuk	11,624	E	SE	1
Audubon	7,334	E	SW		Kossuth	18,591	E	NW	
Benton	22,429	E	NE		Lee	38,687	D	SE	
Black Hawk	123,798	B	NE		Linn	168,767	B	NE	9
Boone	25,186	D	NW		Louisa	11,592	E	SE	3
Bremer	22,813	B	NE		Lucas	9,070	E	SE	
Buchanan	20,844	E	NE		Lyon	11,952	E	NW	
Buena Vista	19,965	E	NW	5	Madison	12,483	E	SW	
Butler	15,731	E	NE	5	Mahaska	21,522	E	SE	
Calhoun	11,508	E	NW		Marion	30,001	D	SE	
Carroll	21,423	E	NE		Marshall	38,276	D	NE	
Cass	15,128	E	SW		Mills	13,202	E	SW	
Cedar	17,381	E	SE		Mitchell	10,928	E	NE	
Cerro Gordo	46,733	D	NE		Monona	10,034	E	NW	
Cherokee	14,098	E	NW		Monroe	8,114	E	SE	
Chickasaw	13,295	E	NE		Montgomery	12,076	E	SW	
Clarke	8,287	E	SW	2	Muscatine	39,907	E	SE	
Clay	17,585	E	NW	7	O'Brien	15,444	E	NW	
Clayton	19,054	E	NE		Osceola	7,267	E	NW	
Clinton	51,040	D	SE		Page	16,870	E	SW	
Crawford	16,775	E	NW		Palo Alto	10,669	E	NW	
Dallas	29,755	A	SW	2	Plymouth	23,388	E	NW	
Davis	8,312	E	SE		Pocahontas	9,525	E	NW	
Decatur	8,338	E	SW	6	Polk	327,140	A	SW	9
Delaware	18,035	E	NE		Pottawattamie	82,628	C	SW	12
Des Moines	42,614	D	SE		Poweshiek	19,033	E	SE	
Dickinson	14,909	E	NW		Ringgold	5,420	E	SW	
Dubuque	86,403	C	NE		Sac	12,324	E	NW	
Emmet	11,569	E	NW		Scott	150,979	B	SE	8
Fayette	21,843	D	NE		Shelby	13,230	E	SW	
Floyd	17,058	E	NE		Sioux	29,903	D	NW	
Franklin	11,364	E	NE	6	Story	74,252	D	NW	12*
Fremont	8,226	E	SW		Tama	17,419	E	NE	
Greene	10,045	E	NW		Taylor	7,114	E	SW	
Grundy	12,029	E	NE		Union	12,750	E	SW	
Guthrie	10,935	E	NW		Van Buren	7,676	E	SE	
Hamilton	16,071	E	NW		Wapello	35,687	D	SE	7
Hancock	12,638	E	NW		Warren	36,033	A	SW	2
Hardin	19,094	E	NE		Washington	19,612	E	SE	4
Harrison	14,730	E	SW		Wayne	7,067	E	SE	
Henry	19,226	E	SE		Webster	40,342	D	NW	
Howard	9,809	E	NE		Winnebago	12,122	E	NW	
Humboldt	10,756	E	NW		Winneshiek	20,847	E	NE	
Ida	8,365	E	NW		Woodbury	98,276	C	NW	
Iowa	14,630	E	SE		Worth	7,991	E	NE	
Jackson	19,950	E	NE		Wright	14,269	E	NW	
Jasper	34,795	D	SE		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

September, 2001	Municipal	Interstate	Primary	Secondary	Totals
Miles	579	614	1,042	478	2,713
Percentage	21.34%	22.63%	38.41%	17.62%	100.00%

September, 2002	Municipal	Interstate	Primary	Secondary	Totals
Miles	580	580	956	423	2,539
Percentage	22.84%	22.84%	37.65%	16.66%	100.00%

NOTE: Vehicle miles traveled numbers reported in 1,000,000's and provided by the Iowa Department of Transportation's Office of Transportation Data.