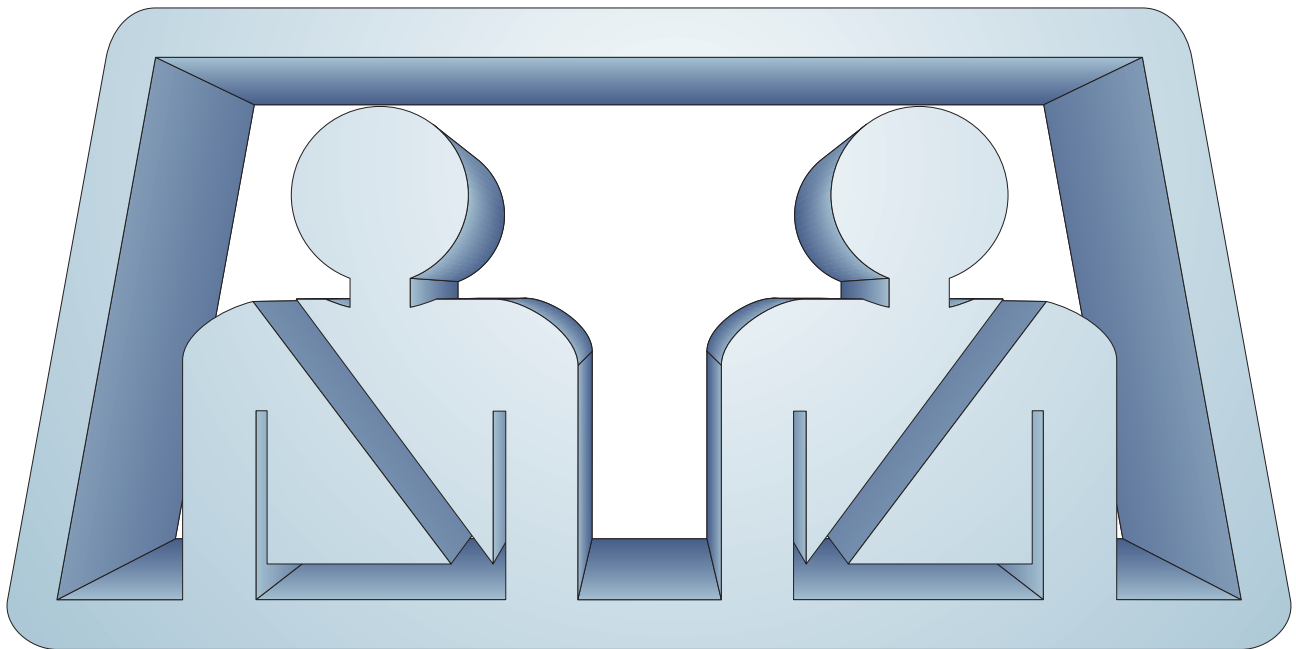


# **2004 Seat Belt Usage Survey**



**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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# 2004 SAFETY BELT USAGE SURVEY

## Introduction

During the spring and summer of 2004, two surveys were taken of motor vehicle drivers' and passengers' safety belt usage. These surveys are the before and after components of the "Click it or Ticket" education and enforcement campaign. The whole project started with a pre-campaign survey followed by the four-week public information, education and enforcement campaign. Finally the post-campaign survey was taken to test the effectiveness of the education and enforcement campaign. In the pre-campaign survey of belt usage, the usage/non-usage of 13,745 front-seat occupants of cars, vans, SUVs and pick-ups was observed at 100 locations. In the post-campaign survey of belt usage, 14,444 observations were made of front-seat occupants of cars, vans, SUVs, and pick-ups at the same 100 locations. The day of the week and time of day the observations took place were selected for each site using a random number generation computer program.

## Statewide Data

In the survey taken before the safety belt usage campaign (April 2004 Survey), 83.6 percent were observed buckled-up statewide, an increase of nearly 1.5 percent from the previous year's pre-campaign survey. In the post-campaign survey (July 2004 Survey), 86.4 percent were observed as buckled-up (see Chart 1—Safety Belt Usage) which is a 0.4 percent increase over the post-campaign survey in 2003 (see Appendix A for 2003 numbers cited in this report). There were 12,402 occupants observed belted and 1,653 observed unbelted in the post-campaign survey. For 382 front-seat occupants, belt usage or non-usage could not be determined.

Chart 1  
Seat Belt Usage

Road Type	April 2004 Usage			July 2004 Usage			Change
	Observed	Used	Percentage Used	Observed	Used	Percentage Used	
Statewide Total*	13,745	11,335	83.59%	14,444	12,402	86.41%	2.82%
Municipal	5,180	4,088	78.92%	5,567	4,658	83.67%	4.75%
Primary	5,451	4,587	84.15%	5,929	5,174	87.27%	3.12%
Secondary	1,181	1,039	87.98%	1,060	915	86.32%	-1.66%
Interstate	1,933	1,621	83.86%	1,888	1,655	87.66%	3.80%

Estimated statewide total April survey usage weighted by vehicles miles traveled and 95% confidence intervals for the estimated variance are +/- 0.21%

Estimated statewide total July survey usage weighted by vehicles miles traveled and 95% confidence intervals for the estimated variance are +/- 0.19%

## Usage By Roadway System

The good news is that safety belt usage increased on three of the four road systems studied in 2004. The highest safety belt usage was recorded on the Interstate System. Only secondary roads decreased in usage between the April and the July surveys. Municipal Road Systems had the lowest usage. In 2004, safety belt use increased on all road systems; however, the increase was lowest on secondary roads.

## Interstate System

In 2004, safety belt usage increased by more than three percentage points between the April (83.9 percent) and July surveys (87.7 percent). This gave interstate usage the highest percentage of any road system. There was a decline, however, in interstate belt use (-1.98 percent) between the post-campaign survey of 2003 (89.6 percent) and 2004 (87.7 percent). This is the second year in a row that usage on the Interstate System has been the highest of all the roadway systems, after trailing primary highways for two years. Safety belt usage has been historically highest on these routes because people travel longer distances on these roads (see charts 2 and 7 for historical usage rates for this system.) Even though the interstate highways have the lowest crash rate due to their design, drivers often perceive them to be more dangerous because of high traffic density and higher travel speeds. Increased enforcement and public education, and additional signage, could help retain the highest usage ranking for these roadways.

## Primary System

Belt usage on the Primary System (U.S. and state highways) rose three percentage points between the April (84.2 percent) and July surveys (87.3 percent) in 2004. The post-campaign usage is 0.3 percent lower in 2004 compared to the post-campaign usage in 2003 (87.6 percent). That is very near the margin of error. The usage ranking on state and U.S. highways second highest in the state. (See charts 2 and 5 for historical data.) Achieving increased safety belt usage on these roads is an emphasis area for safety specialists because almost half of the traffic fatalities (47 percent) occur on the Primary System.

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.

**Secondary System**

Safety belt usage on the Secondary System (county roads) in the July 2004 survey (86.3 percent) dropped 1.7 percent from the nearly 88 percent registered in the April 2004 survey. However, there were 3.3 percent more occupants buckled up in 2004 (86.3 percent) than in 2003 (83 percent). (See charts 2 and 6 for historical data.) This is very good news because over 30 percent of all motor vehicle fatalities occur on the Secondary System. 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 System, even for short distance trips, must be maintained.

**Municipal System**

Safety belt use on the Municipal System (city streets) increased 4.8 percent between the April 2004 (78.9 percent) and July 2004 surveys (83.8 percent). There was also a 1.5 percent increase in safety belt usage between the July 2003 survey (82.2 percent) in and the July 2003 survey (83.7 percent). (See charts 2 and 4 for historical data.) This is encouraging since more than 45 percent of all motor vehicle crashes occur on city streets and belt usage on the Municipal System has been traditionally the lowest of the road systems studied. In communities where usage is good, enforcement and public education must be maintained to improve usage further. In communities where usage remains low, enforcement and public education must both be increased.

**Belt Law Historical Background**

The Iowa law mandating safety belt usage went into effect July 1, 1986. A fine of \$10, plus court costs, was effective January 1, 1987. The fine was increased to \$25, plus court costs, effective July 1, 2001. The original law requires all front-seat occupants over the age of 6 to wear a safety belt, meeting federal motor vehicle standards. The law allows primary enforcement (i.e. officers can stop a vehicle when non-use of safety belts is observed). Medical exemptions and other limited exemptions are allowed. Children under the age of 6 are covered by the child restraint law, which went into effect January 1, 1985. Children under age 3, seated anywhere in the car, must be secured in an approved child safety seat. Children between the ages of 3 and 6 must be secured in a child safety seat or safety belt. Effective July 1, 2004, the child restraint law was changed to include children up to age 11. Requirements include the use of rear-facing safety seats for children under the age of 1 and weighing less than 20 pounds. Children under age 6 are required to be secured in a child restraint system. Children over the age of 6, but under the age of 11, are required to be secured in an approved child restraint system, safety belt or safety harness. Copies of the annual child restraint survey results are also available from the Governor’s Traffic Safety Bureau.

**Chart 2  
Restraint Usage by Year & Road Type**

Survey	Statewide	Municipal	Primary	Secondary	Interstate
Jun 86	27%	20%	27%	24%	43%
Sep 86	46%	34%	48%	42%	62%
Apr 87	63%	54%	65%	64%	69%
Sep 87	56%	48%	56%	55%	67%
Sep 88	55%	46%	55%	52%	69%
Sep 89	59%	49%	56%	61%	72%
Sep 90	61%	49%	60%	61%	76%
Sep 91	68%	64%	64%	64%	79%
Sep 92	71%	62%	69%	71%	83%
Sep 93	73%	59%	73%	71%	80%
Sep 94	73%	63%	72%	72%	82%
Sep 95	75%	65%	75%	76%	85%
Sep 96	75%	69%	74%	71%	85%
Nov 97	75%	69%	74%	71%	85%
Oct 98	77%	70%	76%	79%	84%
Oct 99	78%	72%	78%	80%	84%
Oct 00	78%	73%	79%	77%	82%
Oct 01	81%	76%	83%	83%	81%
Sep 02	82%	79%	83%	87%	81%
Apr 03	82%	78%	86%	81%	82%
Jul 03	86%	82%	88%	83%	90%
Apr 04	84%	79%	84%	88%	84%
Jul 04	86%	84%	87%	86%	88%

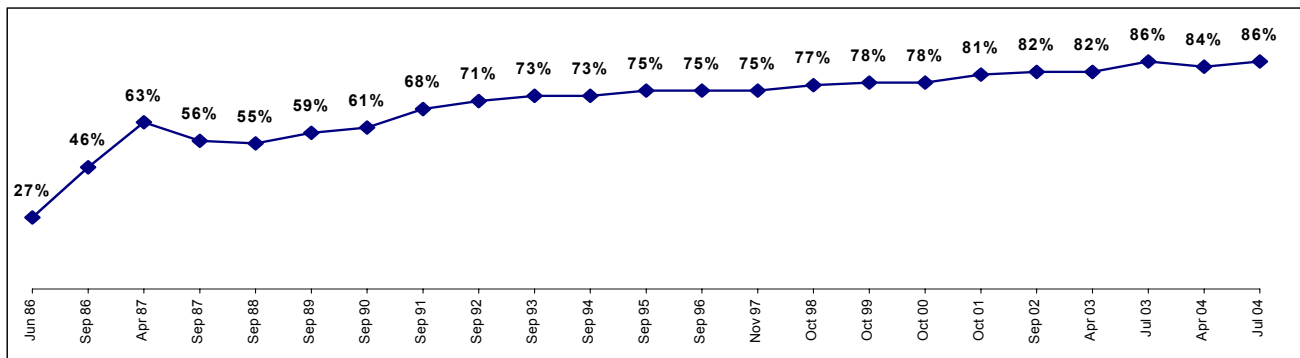
**Enforcement**

The safety-belt law continues to be enforced in the state. There were 56,127 safety-belt violation convictions and 2,586 child-restraint violation convictions in 2003, for a total of 58,713 convictions. This was a decrease from the 63,311 convictions in 2002. Iowa’s safety-belt usage rates followed trends similar to other states. There was a large increase after the 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 86.4 percent.

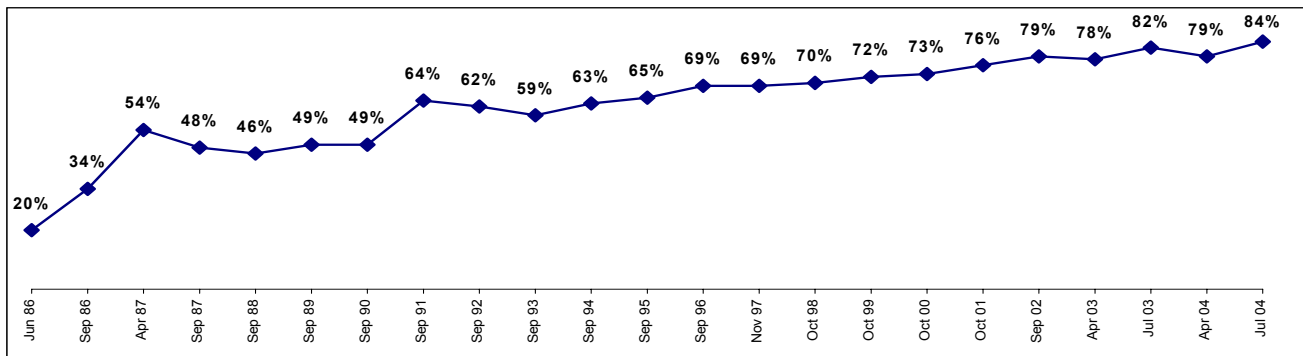
**Summary**

The 86.4 percent safety-belt usage rate in 2004 (an increase of 13 percent since 1994) reflects active enforcement and education efforts that have occurred in Iowa over the course of the last decade. Through continuing education of the public with programs in the school and communities, the “Click it or Ticket” campaign, an active “Life Toll” campaign, year-long safety belt enforcement, and other cooperative efforts between state and local law enforcement, Iowa will strive to increase the use of safety belts and save more lives on Iowa roadways.

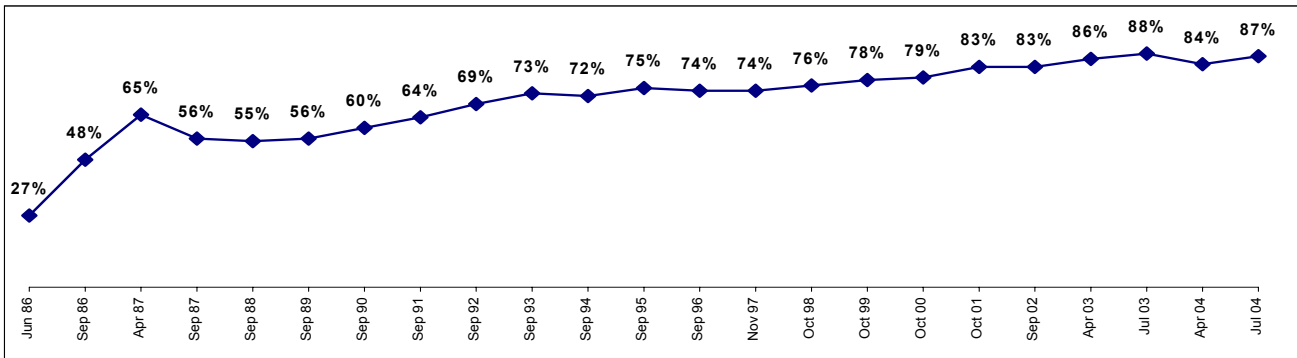
**Chart 3  
Usage Percent by Year—All Road Types**



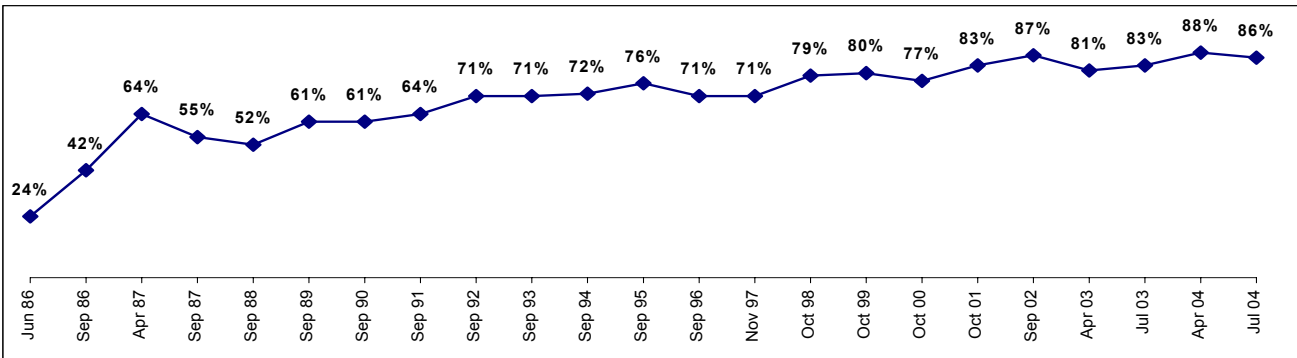
**Chart 4  
Usage Percent by Year—Municipal Roads**



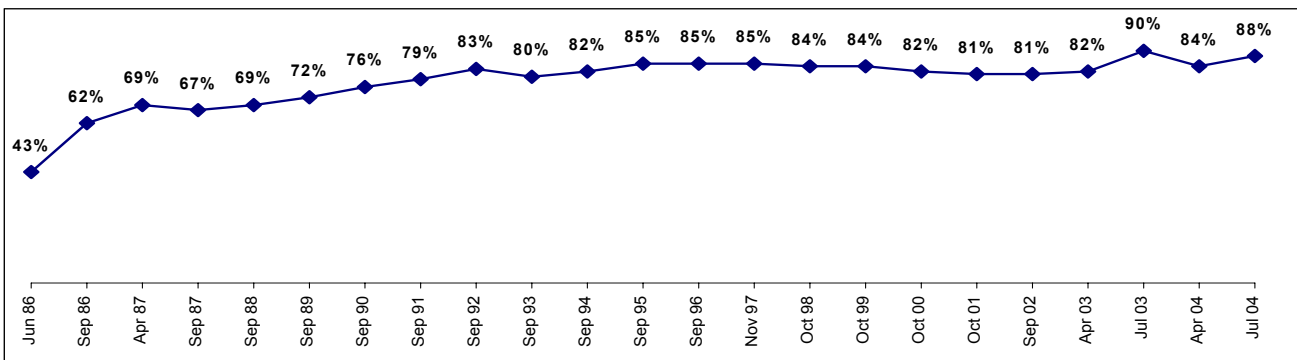
**Chart 5  
Usage Percent by Year—Primary Roads**



**Chart 6  
Usage Percent by Year—Secondary Roads**



**Chart 7  
Usage Percent by Year—Interstates**



**Chart 8  
April Survey by Road System**

Road System	Drivers						
	Belt		None		Unknown		Total
	#	%	#	%	#	%	#
Municipal	3,208	79.7%	640	15.9%	175	4.3%	4,023
Primary	3,590	85.4%	464	11.0%	148	3.5%	4,202
Secondary	850	89.0%	88	9.2%	17	1.8%	955
Interstate	1,303	84.7%	187	12.2%	48	3.1%	1,538
<b>Total</b>	<b>8,951</b>	<b>83.5%</b>	<b>1,379</b>	<b>12.9%</b>	<b>388</b>	<b>3.6%</b>	<b>10,718</b>
	Passengers						
Municipal	880	76.1%	242	20.9%	35	3.0%	1,157
Primary	997	79.8%	178	14.3%	74	5.9%	1,249
Secondary	189	83.6%	24	10.6%	13	5.8%	226
Interstate	318	80.5%	65	16.5%	12	3.0%	395
<b>Total</b>	<b>2,384</b>	<b>78.8%</b>	<b>509</b>	<b>16.8%</b>	<b>134</b>	<b>4.4%</b>	<b>3,027</b>
	Total						
Municipal	4,088	78.9%	882	17.0%	210	4.1%	5,180
Primary	4,587	84.1%	642	11.8%	222	4.1%	5,451
Secondary	1,039	88.0%	112	9.5%	30	2.5%	1,181
Interstate	1,621	83.9%	252	13.0%	60	3.1%	1,933
<b>Total</b>	<b>11,335</b>	<b>82.5%</b>	<b>1,888</b>	<b>13.7%</b>	<b>522</b>	<b>3.8%</b>	<b>13,745</b>

**Chart 9  
July Survey by Road System**

Road System	Drivers						
	Belt		None		Unknown		Total
	#	%	#	%	#	%	#
Municipal	3,716	84.5%	554	12.6%	130	3.0%	4,400
Primary	3,889	88.1%	435	9.9%	91	2.1%	4,415
Secondary	705	87.8%	85	10.6%	13	1.6%	803
Interstate	1,146	89.3%	120	9.3%	18	1.4%	1,284
<b>Total</b>	<b>9,456</b>	<b>86.7%</b>	<b>1,194</b>	<b>11.0%</b>	<b>252</b>	<b>2.3%</b>	<b>10,902</b>
	Passengers						
Municipal	942	80.7%	183	15.7%	42	3.6%	1,167
Primary	1,285	84.9%	165	10.9%	64	4.2%	1,514
Secondary	210	81.7%	31	12.1%	16	6.2%	257
Interstate	509	84.3%	80	13.2%	15	2.5%	604
<b>Total</b>	<b>2,946</b>	<b>83.2%</b>	<b>459</b>	<b>13.0%</b>	<b>137</b>	<b>3.9%</b>	<b>3,542</b>
	Total						
Municipal	4,658	83.7%	737	13.2%	172	3.1%	5,567
Primary	5,174	87.3%	600	10.1%	155	2.6%	5,929
Secondary	915	86.3%	116	10.9%	29	2.7%	1,060
Interstate	1,655	87.7%	200	10.6%	33	1.7%	1,888
<b>Total</b>	<b>12,402</b>	<b>85.9%</b>	<b>1,653</b>	<b>11.4%</b>	<b>389</b>	<b>2.7%</b>	<b>14,444</b>

**Chart 10  
April / July Change**

Road System	Drivers						
	Belt		None		Unknown		Total
	#	%	#	%	#	%	#
Municipal	508	4.7%	-86	-3.3%	-45	-1.4%	377
Primary	299	2.7%	-29	-1.2%	-57	-1.5%	213
Secondary	-145	-1.2%	-3	1.4%	-4	-0.2%	-152
Interstate	-157	4.5%	-67	-2.8%	-30	-1.7%	-254
<b>Total</b>	<b>505</b>	<b>3.2%</b>	<b>-185</b>	<b>-1.9%</b>	<b>-136</b>	<b>-1.3%</b>	<b>184</b>
	Passengers						
Municipal	62	4.7%	-59	-5.2%	7	0.6%	10
Primary	288	5.1%	-13	-3.4%	-10	-1.7%	265
Secondary	21	-1.9%	7	1.4%	3	0.5%	31
Interstate	191	3.8%	15	-3.2%	3	-0.6%	209
<b>Total</b>	<b>562</b>	<b>4.4%</b>	<b>-50</b>	<b>-3.9%</b>	<b>3</b>	<b>-0.6%</b>	<b>515</b>
	Total						
Municipal	570	4.8%	-145	-3.8%	-38	-1.0%	387
Primary	587	3.1%	-42	-1.7%	-67	-1.5%	478
Secondary	-124	-1.7%	4	1.5%	-1	0.2%	-121
Interstate	34	3.8%	-52	-2.4%	-27	-1.4%	-45
<b>Total</b>	<b>1,067</b>	<b>3.4%</b>	<b>-235</b>	<b>-2.3%</b>	<b>-133</b>	<b>-1.1%</b>	<b>699</b>

Chart 11

Usage by Road System & Population

Population & Road System	Usage			
	April		July	
<b>A Over 200,000</b>	2,300	76.39%	2,857	81.00%
Municipal	1,203	73.26%	1,480	78.22%
Primary	365	82.39%	739	84.36%
Secondary	88	90.72%	30	90.91%
Interstate	644	77.68%	608	83.75%
<b>B 150,000 TO 199,999</b>	2,521	89.65%	2,376	90.00%
Municipal	955	88.67%	911	88.96%
Primary	796	90.87%	738	92.25%
Secondary	262	88.22%	474	88.93%
Interstate	508	90.39%	253	89.40%
<b>C 75,000 TO 149,999</b>	1,310	83.49%	1,482	88.00%
Municipal	644	79.90%	739	87.15%
Primary	426	85.71%	486	89.17%
Secondary	78	97.50%	112	83.58%
Interstate	162	87.10%	145	92.36%
<b>D 25,000 TO 74,999</b>	2,266	79.76%	2,587	86.06%
Municipal	473	80.58%	981	88.62%
Primary	1,344	77.42%	1,200	89.55%
Secondary	351	88.41%	310	71.43%
Interstate	98	80.99%	96	76.80%
<b>E Under 25,000</b>	2,938	83.66%	3,100	86.42%
Municipal	813	76.12%	758	82.84%
Primary	1,656	87.20%	1,832	87.82%
Secondary	260	83.87%	366	85.51%
Interstate	209	88.94%	144	91.14%
<b>Total</b>	11,335	82.47%	12,402	85.86%
Municipal	4,088	78.92%	4,869	84.15%
Primary	4,587	84.15%	4,995	88.45%
Secondary	1,039	87.98%	1,292	82.71%
Interstate	1,621	83.86%	1,246	85.99%

Chart 12

Usage by Population & Road System

Population & Road System	Usage			
	April		July	
<b>Municipal</b>	4,088	78.92%	4,869	51.47%
<b>Over 200,000</b>	1,203	73.26%	1,480	78.22%
<b>150,000 to 199,999</b>	955	88.67%	911	48.15%
<b>75,000 to 149,999</b>	644	79.90%	739	39.06%
<b>25,000 to 74,999</b>	473	80.58%	981	51.85%
<b>Under 25,000</b>	813	76.12%	758	40.06%
<b>Primary</b>	4,587	21.85%	4,995	88.45%
<b>Over 200,000</b>	365	2.56%	739	84.36%
<b>150,000 to 199,999</b>	796	54.90%	738	92.25%
<b>75,000 to 149,999</b>	426	54.41%	486	89.17%
<b>25,000 to 74,999</b>	1,344	77.42%	1,200	89.55%
<b>Under 25,000</b>	1,656	60.31%	1,832	87.82%
<b>Secondary</b>	440	90.72%	150	90.91%
<b>Over 200,000</b>	88	90.72%	30	90.91%
<b>150,000 to 199,999</b>	88	90.72%	30	90.91%
<b>75,000 to 149,999</b>	88	90.72%	30	90.91%
<b>25,000 to 74,999</b>	88	90.72%	30	90.91%
<b>Under 25,000</b>	88	90.72%	30	90.91%
<b>Interstate</b>	1,621	83.86%	1,246	85.99%
<b>Over 200,000</b>	644	77.68%	608	83.75%
<b>150,000 to 199,999</b>	508	90.39%	253	89.40%
<b>75,000 to 149,999</b>	162	87.10%	145	92.36%
<b>25,000 to 74,999</b>	98	80.99%	96	76.80%
<b>Under 25,000</b>	209	88.94%	144	91.14%
<b>Total</b>	1,621	83.86%	1,246	85.99%
<b>Over 200,000</b>	644	77.68%	608	83.75%
<b>150,000 to 199,999</b>	508	90.39%	253	89.40%
<b>75,000 to 149,999</b>	162	87.10%	145	92.36%
<b>25,000 to 74,999</b>	98	80.99%	96	76.80%
<b>Under 25,000</b>	209	88.94%	144	91.14%

Chart 13

Usage by Area of State & Road System

Area of State & Road system	Usage			
	April		July	
<b>Northeast</b>	2,034	87.48%	1,989	87.89%
Municipal	547	86.41%	419	83.97%
Primary	641	90.92%	731	92.07%
Secondary	442	82.31%	361	91.62%
Interstate	404	89.78%	478	82.99%
<b>Northwest</b>	2,913	82.90%	3,613	86.62%
Municipal	923	80.54%	1,309	88.63%
Primary	1,562	85.87%	1,883	85.79%
Secondary	292	75.65%	268	80.72%
Interstate	136	83.44%	153	91.62%
<b>Southeast</b>	2,291	84.04%	2,631	83.79%
Municipal	416	87.39%	494	79.94%
Primary	1,006	83.49%	774	84.41%
Secondary	423	78.19%	1,003	82.89%
Interstate	446	88.49%	360	91.14%
<b>Southwest</b>	4,097	79.09%	4,169	85.61%
Municipal	771	83.35%	1,272	90.34%
Primary	1,467	83.83%	1,638	87.55%
Secondary	752	81.03%	324	85.94%
Interstate	1,107	70.20%	935	77.02%
<b>Total</b>	11,335	82.47%	12,402	85.86%
Municipal	2,657	83.55%	3,494	87.31%
Primary	4,676	85.34%	5,026	87.00%
Secondary	1,909	79.81%	1,956	84.57%
Interstate	2,093	77.69%	1,926	81.89%



Chart 14

Usage by Day of Week & Road System

Day of Week & Road System	Usage			
	April		July	
<b>Sunday</b>	1,892	78.47%	2,098	89.39%
Municipal	496	83.93%	795	91.48%
Primary	823	86.54%	895	88.44%
Secondary	81	84.38%	92	82.14%
Interstate	492	63.65%	316	89.27%
<b>Monday</b>	2,140	87.56%	1,839	84.90%
Municipal	192	91.87%	66	94.29%
Primary	1,049	84.39%	1,273	83.92%
Secondary	411	89.15%	113	80.14%
Interstate	488	91.90%	387	88.36%
<b>Tuesday</b>	1,324	80.15%	1,546	86.90%
Municipal	295	86.76%	243	88.04%
Primary	629	80.64%	652	85.79%
Secondary	163	77.62%	154	87.50%
Interstate	237	73.60%	497	87.65%
<b>Wednesday</b>	2,598	81.83%	3,345	87.04%
Municipal	1,337	81.52%	1,908	87.36%
Primary	751	86.22%	1,111	87.55%
Secondary	430	74.39%	228	81.14%
Interstate	80	93.02%	98	89.91%
<b>Thursday</b>	503	87.18%	670	86.56%
Municipal	56	84.85%	161	94.15%
Primary	180	87.38%	114	91.94%
Secondary	58	82.86%	74	76.29%
Interstate	209	88.94%	321	84.03%
<b>Friday</b>	1,079	86.81%	911	88.62%
Municipal	198	91.24%	148	92.50%
Primary	703	85.01%	517	86.60%
Secondary	152	88.89%	178	93.68%
Interstate	26	92.86%	68	83.95%
<b>Saturday</b>	1,799	80.21%	1,993	79.50%
Municipal	83	70.94%	173	63.60%
Primary	541	90.02%	464	93.17%
Secondary	614	76.18%	1,117	84.88%
Interstate	561	78.03%	239	56.77%
<b>Total</b>	11,335	82.47%	12,402	85.86%
Municipal	2,657	83.55%	3,494	87.31%
Primary	4,676	85.34%	5,026	87.00%
Secondary	1,909	79.81%	1,956	84.57%
Interstate	2,093	77.69%	1,926	81.89%

Chart 15

Usage by Time of Day & Road System

Population & Time of Day	Usage			
	April		July	
<b>7 a.m. to 7:59 a.m.</b>	474	82.87%	614	84.92%
Municipal	63	91.30%	82	94.25%
Primary	411	81.71%	532	83.65%
Secondary	0	0.00%	0	0.00%
Interstate	0	0.00%	0	0.00%
<b>8 a.m. to 8:59 a.m.</b>	1,452	78.11%	1,304	79.51%
Municipal	317	90.83%	467	88.28%
Primary	384	77.89%	393	84.52%
Secondary	476	73.68%	304	61.91%
Interstate	275	74.12%	140	90.32%
<b>9 a.m. to 9:59 a.m.</b>	777	86.62%	609	84.23%
Municipal	153	81.38%	130	86.09%
Primary	10	76.92%	35	92.11%
Secondary	314	91.55%	271	92.18%
Interstate	300	84.99%	173	72.08%
<b>10 a.m. to 10:59 a.m.</b>	1,361	81.21%	2,057	87.87%
Municipal	156	82.54%	246	92.83%
Primary	846	79.21%	1,199	87.65%
Secondary	359	85.68%	612	86.44%
Interstate	0	0.00%	0	0.00%
<b>11 a.m. to 11:59 a.m.</b>	355	76.84%	807	82.18%
Municipal	130	89.66%	453	86.45%
Primary	97	61.78%	120	82.19%
Secondary	76	86.36%	76	92.68%
Interstate	52	72.22%	158	68.70%
<b>12 p.m. to 12:59 p.m.</b>	1,351	81.00%	1,483	84.69%
Municipal	671	83.15%	740	86.55%
Primary	557	80.26%	661	83.46%
Secondary	123	73.65%	82	78.85%
Interstate	0	0.00%	0	0.00%
<b>1 p.m. to 1:59 p.m.</b>	795	88.24%	627	86.72%
Municipal	60	82.19%	46	82.14%
Primary	368	90.42%	143	87.73%
Secondary	128	91.43%	158	91.86%
Interstate	239	85.05%	280	84.34%
<b>2 p.m. to 2:59 p.m.</b>	1,471	85.37%	1,609	87.73%
Municipal	148	93.08%	162	93.10%
Primary	502	91.61%	408	87.37%
Secondary	221	75.95%	482	93.77%
Interstate	600	82.76%	557	82.03%
<b>3 p.m. to 3:59 p.m.</b>	368	84.21%	247	84.30%
Municipal	58	82.86%	74	76.29%
Primary	310	84.47%	173	88.27%
Secondary	0	0.00%	0	0.00%
Interstate	0	0.00%	0	0.00%
<b>4 p.m. to 4:59 p.m.</b>	1,116	75.87%	776	87.19%
Municipal	351	56.43%	214	89.92%
Primary	165	89.19%	221	89.84%
Secondary	262	92.91%	61	82.43%
Interstate	338	88.48%	280	84.34%
<b>5 p.m. to 5:59 p.m.</b>	592	88.10%	594	85.96%
Municipal	168	90.32%	158	81.44%
Primary	424	87.24%	436	87.73%
Secondary	0	0.00%	0	0.00%
Interstate	0	0.00%	0	0.00%
<b>6 p.m. to 6:59 p.m.</b>	1,223	86.92%	1,675	90.39%
Municipal	673	89.73%	761	92.02%
Primary	253	84.33%	322	86.56%
Secondary	132	91.67%	433	90.40%
Interstate	165	77.46%	159	90.86%
<b>Total</b>	11,335	82.47%	12,402	85.86%
Municipal	2,948	81.73%	3,533	88.39%
Primary	4,327	82.88%	4,643	86.20%
Secondary	2,091	82.98%	2,479	84.96%
Interstate	1,969	82.14%	1,747	81.52%

Chart 16  
Site Selection by County

County	Population	Category	Area	Sites	County	Population	Category	Area	Sites
Adair	8,243	E	SW		Jefferson	16,181	E	SE	
Adams	4,482	E	SW		Johnson	111,006	C	SE	
Allamakee	14,675	E	NE		Jones	20,221	E	SE	
Appanoose	13,721	E	SE		Keokuk	11,400	E	SE	1
Audubon	6,830	E	SW		Kossuth	17,163	E	NW	
Benton	25,308	E	NE		Lee	38,052	D	SE	
Black Hawk	128,012	B	NE		Linn	191,701	B	NE	9
Boone	26,224	D	NW		Louisa	12,183	E	SE	3
Bremer	23,325	B	NE		Lucas	9,422	E	SE	
Buchanan	21,093	E	NE		Lyon	11,763	E	NW	
Buena Vista	20,411	E	NW	5	Madison	14,019	E	SW	
Butler	15,305	E	NE	5	Mahaska	22,335	E	SE	
Calhoun	11,115	E	NW		Marion	32,052	D	SE	
Carroll	21,421	E	NE		Marshall	39,311	D	NE	
Cass	14,684	E	SW		Mills	14,547	E	SW	
Cedar	18,187	E	SE		Mitchell	10,874	E	NE	
Cerro Gordo	46,447	D	NE		Monona	10,020	E	NW	
Cherokee	13,035	E	NW		Monroe	8,016	E	SE	
Chickasaw	13,095	E	NE		Montgomery	11,771	E	SW	
Clarke	9,133	E	SW	2	Muscatine	41,722	E	SE	
Clay	17,372	E	NW	7	O'Brien	15,102	E	NW	
Clayton	18,678	E	NE		Osceola	7,003	E	NW	
Clinton	50,149	D	SE		Page	16,976	E	SW	
Crawford	16,942	E	NW		Palo Alto	10,147	E	NW	
Dallas	40,750	A	SW	2	Plymouth	24,849	E	NW	
Davis	8,541	E	SE		Pocahontas	8,662	E	NW	
Decatur	8,689	E	SW	6	Polk	374,601	A	SW	9
Delaware	18,404	E	NE		Pottawattamie	87,704	C	SW	12
Des Moines	42,351	D	SE		Poweshiek	18,815	E	SE	
Dickinson	16,424	E	NW		Ringgold	5,469	E	SW	
Dubuque	89,143	C	NE		Sac	11,529	E	NW	
Emmet	11,027	E	NW		Scott	158,668	B	SE	8
Fayette	22,008	D	NE		Shelby	13,173	E	SW	
Floyd	16,900	E	NE		Sioux	31,589	D	NW	
Franklin	10,704	E	NE	6	Story	79,981	D	NW	12
Fremont	8,010	E	SW		Tama	18,103	E	NE	
Greene	10,366	E	NW		Taylor	6,958	E	SW	
Grundy	12,369	E	NE		Union	12,309	E	SW	
Guthrie	11,353	E	NW		Van Buren	7,809	E	SE	
Hamilton	16,438	E	NW		Wapello	36,051	D	SE	7
Hancock	12,100	E	NW		Warren	40,671	A	SW	2
Hardin	18,812	E	NE		Washington	20,670	E	SE	4
Harrison	15,666	E	SW		Wayne	6,730	E	SE	
Henry	20,336	E	SE		Webster	40,235	D	NW	
Howard	9,932	E	NE		Winnebago	11,723	E	NW	
Humboldt	10,381	E	NW		Winneshiek	21,310	E	NE	
Ida	7,837	E	NW		Woodbury	103,877	C	NW	
Iowa	15,671	E	SE		Worth	7,909	E	NE	
Jackson	20,296	E	NE		Wright	14,334	E	NW	
Jasper	37,213	D	SE		Totals	2,926,324			100

NOTE: Population data based on the 2000 Census

**Chart 17**  
**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	835,135	777,502	599,002	714,685	2,926,324.00
Percentage of Total State Population	28.54%	26.57%	20.47%	24.42%	100.00%

**Chart 18**  
**Site Selection by Population Category**

Area of State	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	Total
Number of Selected Sites	13	17	12	19	39	61
Number of Possible Counties	3	4	4	13	75	24
Number of Selected Counties	3	2	1	2	9	17
Percentage of Counties Selected	3.00%	2.00%	1.00%	2.00%	9.00%	17.00%
Total Population in Area	456,022	501,706	391,730	521,663	1,055,203	2,926,324.00
Percentage of Total State Population	15.58%	17.14%	13.39%	17.83%	36.06%	100.00%

**Chart 19**  
**Statewide Vehicle Miles Traveled**

2003 Vehicle Miles Traveled	Municipal	Rural	Total	Percentage of Total
Statewide Total	12,691,578	18,905,115	31,596,693	100.00%
Municipal	6,925,405	N/A	6,925,405	21.92%
Primary	3,484,874	8,362,023	11,846,897	37.49%
Secondary	N/A	5,427,372	5,427,372	17.18%
Interstate	2,281,299	5,115,720	7,397,019	23.41%

NOTE: Vehicle miles traveled reported in 1,000,000 and provided by the Iowa Dept. of Transportations Office of Transportation Data



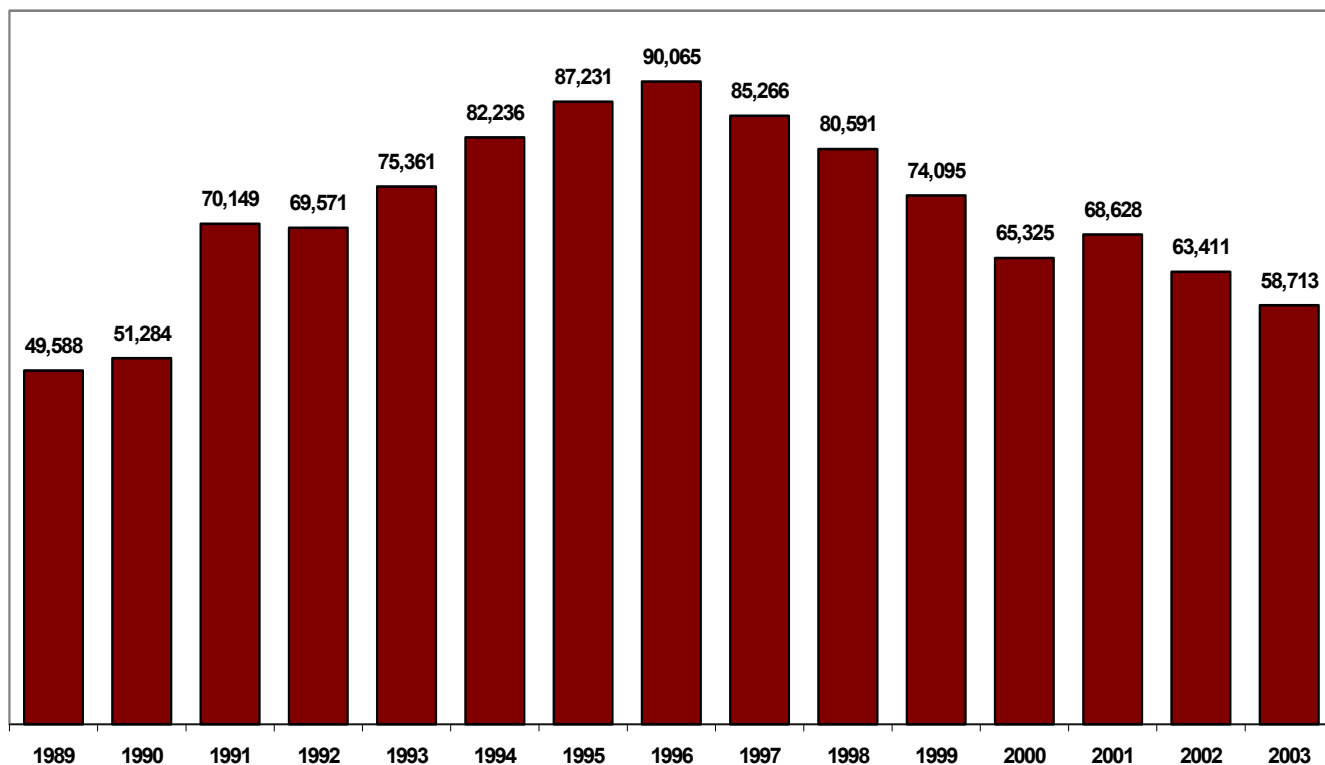
**Chart 21  
July Seat Belt Survey Sites**

No	County	Area	Day	Time	Location	City	Population	Road Type	Observed	Belted
1	Buena Vista	NW	Sat	6 PM	Lake @ Third	Storm Lake	E	M	171	161
2	Buena Vista	NW	Sat	4 PM	Hwy 7 @ Hwy 71		E	P	82	76
3	Buena Vista	NW	Sat	5 PM	Hwy 110 @ Hwy 7		E	P	76	70
4	Buena Vista	NW	Sat	3 PM	Hwy 7 @ Hwy 71		E	P	127	118
5	Buena Vista	NW	Sat	1 PM	C 49 @ Hwy 71		E	S	99	94
6	Butler	NE	Wed	7 AM	Main @ Third	Allison	E	M	72	55
7	Butler	NE	Thu	3 PM	C 55 @ Hwy 14		E	S	41	34
8	Butler	NE	Wed	9 AM	Hwy 14 @ Hwy 20		E	P	61	50
9	Butler	NE	Thu	5 PM	Hwy 188 @ Hwy 3		E	P	89	80
10	Butler	NE	Wed	10 AM	Hwy 14 @ Hwy 3		E	P	55	39
11	Clarke	SW	Sat	9 AM	E Washington @ Main St	Osceola	E	M	161	128
12	Clarke	SW	Sat	11 AM	Hwy 34 @ Hwy 69		E	P	388	300
13	Clay	NW	Mon	7 AM	4th @ Grand	Spencer	E	M	83	74
14	Clay	NW	Thu	8 AM	Grand @ 18th	Spencer	E	M	155	140
15	Clay	NW	Mon	11 AM	Hwy 18 @ Hwy 71		E	P	81	74
16	Clay	NW	Mon	9 AM	N 14 @ Hwy 18		E	S	12	8
17	Clay	NW	Thu	10 AM	Hwy 240 @ Hwy 71		E	P	34	30
18	Clay	NW	Thu	12 PM	Hwy 10 @ Hwy 71		E	P	32	27
19	Clay	NW	Thu	1 PM	B 53 @ Hwy 71		E	S	26	24
20	Dallas	SW	Mon	6 PM	Hwy 141 @ Hwy 210		A	P	151	130
21	Dallas	SW	Tue	5 PM	I-80 Exit #110		A	I	167	127
22	Decatur	SW	Fri	7 AM	J 66 @ Hwy 69	Davis City	E	S	37	29
23	Decatur	SW	Thu	4 PM	J 20 @ Hwy 204	Garden Grove	E	S	56	46
24	Decatur	SW	Fri	9 AM	West Jct. Hwy 69 @ Hwy 2	Leon	E	P	69	63
25	Decatur	SW	Tue	1 PM	Hwy 266 @ Hwy 69	Weldon	E	P	75	63
26	Decatur	SW	Thu	6 PM	I-35 Exit #12		E	I	80	73
27	Decatur	SW	Thu	2 PM	I-35 Exit #22		E	I	20	17
28	Franklin	NE	Wed	11 AM	1st @ 1st Ave	Hampton	E	M	66	47
29	Franklin	NE	Thu	1 PM	Hwy 107 @ Hwy 3		E	P	20	19
30	Franklin	NE	Tue	3 PM	C 25 @ Hwy 65		E	S	38	35
31	Franklin	NE	Tue	5 PM	Hwy 65 @ Hwy 3		E	P	269	239
32	Franklin	NE	Tue	1 PM	I-35 Exit #165		E	I	133	122
33	Franklin	NE	Wed	12 PM	I-35 Exit #170		E	I	51	50
34	Keokuk	SE	Thu	1 PM	Hwy 149 @ Hwy 23		D	P	124	111
35	Linn	NE	Mon	7 AM	First Ave @ 29th	Cedar Rapids	B	M	244	230
36	Linn	NE	Mon	11 AM	8th Ave @ 2nd	Cedar Rapids	B	M	172	158
37	Linn	NE	Mon	9 AM	Hwy 1 @ Hwy 30		B	P	87	82
38	Linn	NE	Wed	5 PM	I-380 Mile Marker 25		B	I	70	66
39	Linn	NE	Wed	1 PM	E 34 @ Hwy 13		B	S	157	150
40	Linn	NE	Sat	11 AM	Hwy 30 @ Hwy 1		B	P	325	284
41	Linn	NE	Sat	9 AM	E 70 @ Hwy 151		B	S	37	32
42	Linn	NE	Wed	3 PM	I-380 Mile Marker 13		B	I	153	139
43	Linn	NE	Sat	7 AM	Hwy 13 @ Hwy 151		B	P	205	194
44	Louisa	SE	Thu	8 AM	South 4th @ Washington	Wapello	E	M	61	37
45	Louisa	SE	Thu	12 PM	X 43 @ Hwy 92		E	S	22	16
46	Louisa	SE	Fri	2 PM	Hwy 92 @ Hwy 61		E	P	204	183
47	Polk	SW	Mon	8 AM	Hwy 160 @ Hwy 69	Ankeny	A	P	575	490
48	Polk	SW	Tue	1 PM	Grand @ 7th	Des Moines	A	M	326	160
49	Polk	SW	Tue	12 PM	Aurora @ Beaver	Des Moines	A	M	253	212
50	Polk	SW	Mon	4 PM	Meredith @ Merle Hay	Des Moines	A	M	753	654
51	Polk	SW	Tue	8 AM	Indianola Ave @ SE 8th	Des Moines	A	M	560	454
52	Polk	SW	Sat	8 AM	I-80 Exit #143		A	I	133	113
53	Polk	SW	Tue	10 AM	I-35 Exit #92		A	I	373	315
54	Polk	SW	Mon	12 PM	I-35 Rest Area		A	I	69	50
55	Polk	SW	Tue	3 PM	Hwy 945 @ Hwy 931		A	P	38	34
56	Pottawattamie	SW	Fri	1 PM	9th Ave. @ S 16th	Council Bluffs	C	M	390	335
57	Pottawattamie	SW	Fri	5 PM	A Ave & 25th St	Council Bluffs	C	M	458	404
58	Pottawattamie	SW	Thu	11 AM	I-29 Exit #47		C	I	77	70
59	Pottawattamie	SW	Fri	3 PM	I-80 Rest Area		C	I	60	55
60	Pottawattamie	SW	Thu	7 AM	M 16 @ Hwy 92		C	S	20	20
61	Pottawattamie	SW	Wed	12 PM	L 55 @ Hwy 6		C	S	47	44
62	Pottawattamie	SW	Thu	7 AM	I-80 Exit #40		C	I	80	74
63	Pottawattamie	SW	Thu	9 AM	Hwy 83 @ Hwy 59		C	P	42	38
64	Pottawattamie	SW	Thu	9 AM	Hwy 6 @ Hwy 191		C	P	306	269
65	Pottawattamie	SW	Wed	8 AM	Hwy 191 @ Hwy 83		C	P	70	61
66	Pottawattamie	SW	Thu	11 AM	Hwy 92 @ Hwy 59		C	P	81	68
67	Pottawattamie	SW	Wed	10 AM	Hwy 6 @ Hwy 59		C	P	53	44
68	Scott	SE	Sun	5 PM	Kimberly @ Harrison	Davenport	B	M	332	280
69	Scott	SE	Sun	1 PM	Locust @ Brady	Davenport	B	M	276	243
70	Scott	SE	Tue	2 PM	Long Grove Exit @ Hwy 61		B	P	33	28
71	Scott	SE	Tue	4 PM	Hwy 61 @ Hwy 22 Ramp		B	P	93	77
72	Scott	SE	Sun	3 PM	I-80 Exit #284 (Y40)		B	I	195	174
73	Scott	SE	Wed	7 AM	F 55 Exit @ Hwy 61		B	P	120	108
74	Scott	SE	Wed	11 AM	I-280 Hwy 61 Exit		B	I	86	80
75	Scott	SE	Wed	9 AM	Y 48 @ Hwy 61		B	S	55	51
76	Story	NW	Mon	2 PM	Duff Exit @ Hwy 30	Ames	D	P	343	321
77	Story	NW	Sat	4 PM	6th @ Grand	Ames	D	M	221	193
78	Story	NW	Mon	6 PM	Main @ Clark	Ames	D	M	124	110
79	Story	NW	Sat	6 PM	J Ave. @ 6th	Nevada	D	M	19	14
80	Story	NW	Mon	4 PM	I-35 Rest Area		D	I	28	22
81	Story	NW	Sat	12 PM	E 23 @ Hwy 69		D	S	97	74
82	Story	NW	Mon	10 AM	I-35 Exit #123		D	I	113	108
83	Story	NW	Sat	2 PM	Hwy 210 @ Hwy 65		D	P	23	19
84	Story	NW	Mon	2 PM	Hwy 133 @ Hwy 30		D	P	120	87
85	Story	NW	Mon	7 AM	E 63 @ Hwy 65		D	S	54	39
86	Story	NW	Mon	9 AM	Hwy 210 @ Hwy 69		D	P	114	84
87	Story	NW	Mon	11 AM	Hwy 65 @ Hwy 30		D	P	141	78
88	Wapello	SE	Sun	10 AM	V 37 (College St) @ Hwy 34	Agency	D	S	125	103
89	Wapello	SE	Sun	12 PM	Church @ Richmond	Ottumwa	D	M	524	453
90	Wapello	SE	Sun	8 AM	Wapello St @ Albia Rd	Ottumwa	E	M	84	69
91	Wapello	SE	Thu	3 PM	Hwy 16 @ Hwy 34		D	P	79	76
92	Wapello	SE	Thu	5 PM	East Jct. Hwy 34 @ Hwy 63		D	P	380	341
93	Wapello	SE	Tue	12 PM	Hwy 137 @ Hwy 63		D	P	323	309
94	Wapello	SE	Tue	8 AM	T 61 @ Hwy 34		D	S	54	45
95	Warren	SW	Fri	11 AM	Hwy 28 @ Hwy 92	Martensdale	A	P	96	88
96	Warren	SW	Sat	7 AM	R 57 @ Hwy 92		A	S	33	30
97	Washington	SE	Thu	10 AM	East 7th @ North 4th	Washington	E	M	62	47
98	Washington	SE	Sun	5 PM	Hwy 218 Ramp @ Hwy 92		E	P	152	138
99	Washington	SE	Sun	1 PM	Hwy 1 @ Hwy 92		E	P	193	184
100	Washington	SE	Sun	3 PM	G6W @ Hwy 92		E	S	50	41
									14,444	12,402

**Chart 22**  
**Seat Belt & Child Restraint Citations Issued by Month & Year**

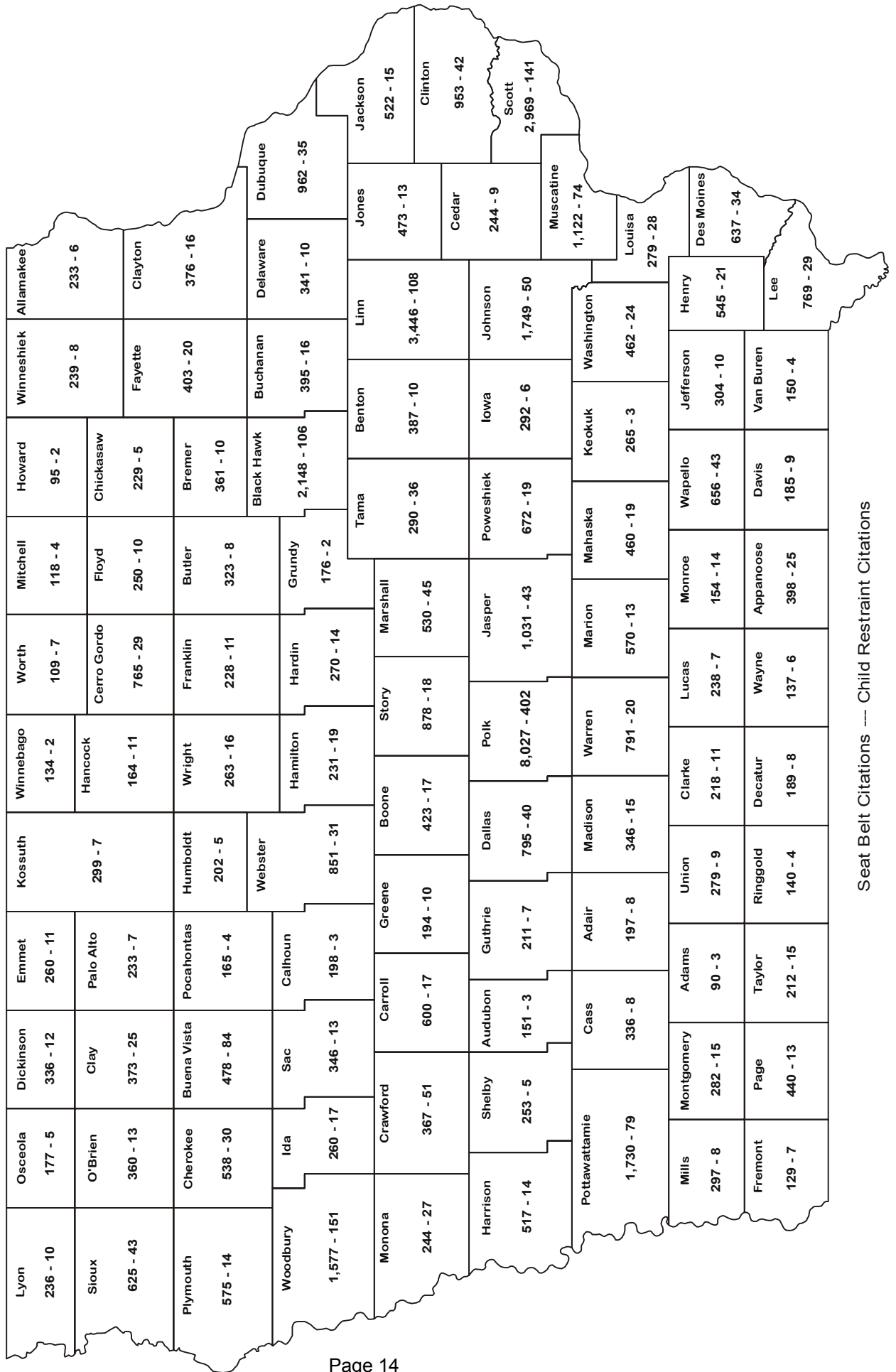
Month	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Jan	4,058	4,381	3,529	5,163	4,470	4,790	6,334	5,038	4,673	5,244	4,623	4,503	4,271	4,305	4,203
Feb	3,445	4,605	6,014	6,465	5,236	6,558	7,452	6,778	6,391	5,820	6,578	5,272	6,133	5,977	4,846
Mar	4,598	5,235	6,950	6,765	6,292	8,071	7,806	10,403	9,785	8,188	6,822	6,657	6,242	4,394	4,816
Apr	5,110	4,723	7,277	6,920	6,793	8,379	7,263	8,634	8,387	7,260	6,249	7,185	6,284	5,804	4,773
May	5,115	5,666	8,272	7,517	8,457	9,090	8,826	11,266	9,131	10,205	10,075	8,268	8,374	8,147	8,359
Jun	4,380	4,625	9,029	7,043	7,015	8,070	8,727	9,416	8,367	7,138	6,148	5,292	5,816	5,141	4,971
Jul	4,452	5,169	6,108	6,556	7,016	8,023	8,504	8,646	9,039	7,489	6,962	5,795	6,574	6,760	5,512
Aug	4,206	4,241	5,865	5,798	6,017	6,801	7,284	8,887	7,931	6,553	7,143	5,847	7,269	6,076	5,437
Sep	4,410	4,127	6,215	5,740	6,889	6,381	7,773	6,458	6,489	6,827	5,540	5,382	5,564	5,176	4,798
Oct	3,504	3,476	4,146	4,095	6,235	5,360	5,399	5,036	5,737	4,774	3,920	3,613	3,603	3,194	3,182
Nov	3,560	3,186	3,253	3,804	5,499	5,522	6,430	5,387	4,991	6,192	6,048	5,205	4,797	4,506	4,459
Dec	2,750	1,850	3,491	3,705	5,442	5,191	5,433	4,116	4,345	4,901	3,987	2,306	3,701	3,931	3,357
<b>Total</b>	<b>49,588</b>	<b>51,284</b>	<b>70,149</b>	<b>69,571</b>	<b>75,361</b>	<b>82,236</b>	<b>87,231</b>	<b>90,065</b>	<b>85,266</b>	<b>80,591</b>	<b>74,095</b>	<b>65,325</b>	<b>68,628</b>	<b>63,411</b>	<b>58,713</b>

**Chart 23**  
**Seat Belt & Child Restraint Citations Issued by Month & Year—Graph**



**Chart 24**  
**2003 Seat Belt/Child Restraint Citations Issued by County of**  
**Residence**

Total Seat Belt Citations: 56,127    Total Child Restraint Citations: 2,586



Seat Belt Citations --- Child Restraint Citations

**Appendix A**  
**Seat Belt Usage from 2003 Survey**

Road Type	April 2003 Usage			July 2003 Usage			Change
	Observed	Used	Percentage	Observed	Used	Percentage	
<b>Statewide Total*</b>	15,306	12,535	82.11%	14,856	12,689	86.16%	4.05%
<b>Municipal</b>	5,227	4,058	77.64%	5,905	4,856	82.24%	4.60%
<b>Primary</b>	2,542	2,072	81.51%	1,814	1,626	89.64%	8.13%
<b>Secondary</b>	6,560	5,619	85.66%	6,189	5,421	87.59%	1.94%
<b>Interstate</b>	977	786	80.45%	948	787	83.02%	2.57%

Estimated statewide total usage weighted by vehicle miles traveled (for 2002) and 95% confidence intervals for the estimated variance are +/- 0.29%