## 2001



Site surveys were conducted by lowa 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

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## 2001 SEAT BELT USAGE SURVEY

During October, 2001, 80.92 percent of motorists surveyed on all lowa roadways were wearing seat belts, a increase of nearly 3 percent from last year (see Chart 1-Seat Belt Usage).

The good news is that safety belt usage on three of the four road systems studied increased this year. Safety belt usage on the secondary road system (county roads) lead the way with a 5.65 percent increase over last year.

Chart 1 - Seat Belt Usage

| Road Type | 2000 |  |  | 2001 |  |  | Percent <br> Change |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Observed | Used | Percentage <br> Used | Observed | Used | Percentage <br> Used |  |
| Statewide Total | 20,402 | 15,949 | $77.95 \%$ | 22,597 | 18,171 | $80.92 \%$ | $2.97 \%$ |
| Municipal | 5,730 | 4,179 | $72.93 \%$ | 6,753 | 5,128 | $75.94 \%$ | $3.00 \%$ |
| Interstate | 6,840 | 5,632 | $82.34 \%$ | 6,217 | 5,063 | $81.44 \%$ | $-0.90 \%$ |
| Primary | 6,454 | 5,075 | $78.63 \%$ | 7,831 | 6,493 | $82.91 \%$ | $4.28 \%$ |
| Secondary | 1,378 | 1,063 | $77.14 \%$ | 1,796 | 1,487 | $82.80 \%$ | $5.65 \%$ |

*Estimated statewide total usage weighted by vehicle miles traveled (see Chart 21) and 95\% confidence intervals for the estimated variance are $\mathbf{+} / \mathbf{0 . 2 4 \%}$ This is very good news because 30.20 percent of all motor vehicle crash fatalities occur on the secondary road system ${ }^{1}$. 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 shortdistance trips, must be maintained.

Usage on the primary system (U.S. or state highways) rose 4.28 percent from the previous year. This makes safety belt usage on primary roads the highest in the state and is also welcome news because almost half of all fatalities (47 percent) occur on the primary road system. Municipal road systems (city streets) safety belt usage increased 3.00 percent. This is encouraging since more than 45 percent of all motor vehicle crashes occur on city streets, and usage on the municipal road system has consistently been the lowest of the road systems studied. 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.

There was a decline in interstate belt use ( -0.90 percent). This is a disappointment because it is the third decline since it hit its highest rate in 1995. This is the first year that interstate belt usage has not been the highest of any road system since these surveys began. This trend is worrisome to safety officials because of the increasing traffic density and higher travel speeds on these roadways. Increased enforcement on lowa's freeways and interstates and increased public education could restore these roadways to their highest usage status.

Belt usage for 22,597 front seat occupants of cars, vans and pickups was observed at 99* locations. Of these front seat occupants, 82.52 percent of drivers $(14,147$ out of 17,143 ) and 73.78 percent of passengers $(4,024$ out of 5,454 ) were observed using seat belts. For 1214 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 lowa State Patrol, Department of Public Safety, between the hours of 6 a.m. and 6 p.m., Monday through Sunday. Observations were made for approximately one hour at each site.

## Belt Law Background

The lowa 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

[^0]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 lowa Department of Transportation.

## Enforcement

The seat belt law has been actively enforced in the state. There were 62,432 seat belt citations and 2,893 child restraint citations issued in 2000 through law enforcement

Chart 2
Percentage of Restraint Usage by Year \& 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 | $78 \%$ | $73 \%$ | $82 \%$ | $79 \%$ | $77 \%$ | efforts, a decrease from 70,377 and 3,722, respectively, in 1999 (See Charts 14 through 16 for seat belt/ child restraint citations issued). lowa'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 81 percent.

## Summary

The 81 percent seat belt usage rate in 2001 (up 10 percent since 1992) reflects active enforcement and education efforts that have occurred in lowa 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, lowa will strive to increase the use of seat belts and save more lives on lowa roadways.

Chart 3
Usage Percent by Year- ALL ROAD TYPES


Chart 4
Usage Percent by Year - MUNICIPAL


Chart 6
Usage Percent by Year - PRIMARY


JUN 86 SEP 86 APR 87 SEP 87 SEP 88 SEP 89 SEP 90 SEP 91 SEP 92 SEP 93 SEP 94 SEP 95 SEP 96 NOV OCT 98 OCT 99 OCT 00 OCT 01 97

Chart 7
Usage Percent by Year - SECONDARY


Chart 8
Survey Results by County \& Road System

| County \& Road System | Drivers |  |  | Passengers |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Belted |  | $\begin{aligned} & \text { Number } \\ & \hline \text { Observed } \end{aligned}$ | Belted |  | $\begin{aligned} & \text { Number } \\ & \hline \text { Observed } \end{aligned}$ | Belted |  |
|  | Observed | Number | Percent |  | Number | Percent |  | Number | Percent |
| BUENA VISTA | 342 | 302 | 88.30\% | 118 | 102 | 86.44\% | 460 | 404 | 87.83\% |
| Municipal | 92 | 70 | 76.09\% | 18 | 14 | 77.78\% | 110 | 84 | 76.36\% |
| Interstate | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Primary | 192 | 179 | 93.23\% | 70 | 61 | 87.14\% | 262 | 240 | 91.60\% |
| Secondary | 58 | 53 | 91.38\% | 30 | 27 | 90.00\% | 88 | 80 | 90.91\% |
| BUTLER | 292 | 264 | 90.41\% | 87 | 77 | 88.51\% | 379 | 341 | 89.97\% |
| Municipal | 115 | 93 | 80.87\% | 24 | 17 | 70.83\% | 139 | 110 | 79.14\% |
| Interstate | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Primary | 170 | 164 | 96.47\% | 61 | 58 | 95.08\% | 231 | 222 | 96.10\% |
| Secondary | 7 | 7 | 100.00\% | 2 | 2 | 100.00\% | 9 | 9 | 100.00\% |
| CLARKE | 592 | 430 | 72.64\% | 203 | 118 | 58.13\% | 795 | 548 | 68.93\% |
| Municipal | 323 | 230 | 71.21\% | 107 | 53 | 49.53\% | 430 | 283 | 65.81\% |
| Interstate | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Primary | 269 | 200 | 74.35\% | 96 | 65 | 67.71\% | 365 | 265 | 72.60\% |
| Secondary | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| CLAY | 711 | 512 | 72.01\% | 153 | 59 | 38.56\% | 864 | 571 | 66.09\% |
| Municipal | 470 | 317 | 67.45\% | 95 | 29 | 30.53\% | 565 | 346 | 61.24\% |
| Interstate | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Primary | 193 | 158 | 81.87\% | 47 | 25 | 53.19\% | 240 | 183 | 76.25\% |
| Secondary | 48 | 37 | 77.08\% | 11 | 5 | 45.45\% | 59 | 42 | 71.19\% |
| DALLAS | 166 | 133 | 80.12\% | 51 | 24 | 47.06\% | 217 | 157 | 72.35\% |
| Municipal | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Interstate | 102 | 79 | 77.45\% | 18 | 13 | 72.22\% | 120 | 92 | 76.67\% |
| Primary | 64 | 54 | 84.38\% | 33 | 11 | 33.33\% | 97 | 65 | 67.01\% |
| Secondary | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| DECATUR | 979 | 861 | 87.95\% | 382 | 324 | 84.82\% | 1,361 | 1,185 | 87.07\% |
| Municipal | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Interstate | 699 | 621 | 88.84\% | 295 | 246 | 83.39\% | 994 | 867 | 87.22\% |
| Primary | 174 | 148 | 85.06\% | 50 | 45 | 90.00\% | 224 | 193 | 86.16\% |
| Secondary | 106 | 92 | 86.79\% | 37 | 33 | 89.19\% | 143 | 125 | 87.41\% |
| FRANKLIN | 691 | 656 | 94.93\% | 274 | 257 | 93.80\% | 965 | 913 | 94.61\% |
| Municipal | 152 | 144 | 94.74\% | 32 | 31 | 96.88\% | 184 | 175 | 95.11\% |
| Interstate | 353 | 345 | 97.73\% | 153 | 141 | 92.16\% | 506 | 486 | 96.05\% |
| Primary | 173 | 154 | 89.02\% | 84 | 80 | 95.24\% | 257 | 234 | 91.05\% |
| Secondary | 13 | 13 | 100.00\% | 5 | 5 | 100.00\% | 18 | 18 | 100.00\% |
| KEOKUK | 90 | 73 | 81.11\% | 49 | 41 | 83.67\% | 139 | 114 | 82.01\% |
| 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 | 90 | 73 | 81.11\% | 49 | 41 | 83.67\% | 139 | 114 | 82.01\% |
| Secondary | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| LINN | 1,537 | 1,344 | 87.44\% | 439 | 359 | 81.78\% | 1,976 | 1,703 | 86.18\% |
| Municipal | 314 | 234 | 74.52\% | 146 | 116 | 79.45\% | 460 | 350 | 76.09\% |
| Interstate | 660 | 603 | 91.36\% | 160 | 133 | 83.13\% | 820 | 736 | 89.76\% |
| Primary | 492 | 445 | 90.45\% | 107 | 87 | 81.31\% | 599 | 532 | 88.81\% |
| Secondary | 71 | 62 | 87.32\% | 26 | 23 | 88.46\% | 97 | 85 | 87.63\% |
| LOUISA | 217 | 161 | 74.19\% | 56 | 47 | 83.93\% | 273 | 208 | 76.19\% |
| Municipal | 48 | 28 | 58.33\% | 14 | 10 | 71.43\% | 62 | 38 | 61.29\% |
| Interstate | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Primary | 145 | 113 | 77.93\% | 31 | 27 | 87.10\% | 176 | 140 | 79.55\% |
| Secondary | 24 | 20 | 83.33\% | 11 | 10 | 90.91\% | 35 | 30 | 85.71\% |
| POLK | 2,340 | 1,980 | 84.62\% | 554 | 438 | 79.06\% | 2,894 | 2,418 | 83.55\% |
| Municipal | 995 | 836 | 84.02\% | 259 | 201 | 77.61\% | 1,254 | 1,037 | 82.70\% |
| Interstate | 748 | 649 | 86.76\% | 176 | 144 | 81.82\% | 924 | 793 | 85.82\% |
| Primary | 597 | 495 | 82.91\% | 119 | 93 | 78.15\% | 716 | 588 | 82.12\% |
| Secondary | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| POTTAWATTAMIE | 1,804 | 1,327 | 73.56\% | 622 | 408 | 65.59\% | 2,426 | 1,735 | 71.52\% |
| Municipal | 337 | 219 | 64.99\% | 144 | 86 | 59.72\% | 481 | 305 | 63.41\% |
| Interstate | 1,008 | 745 | 73.91\% | 330 | 220 | 66.67\% | 1,338 | 965 | 72.12\% |
| Primary | 351 | 283 | 80.63\% | 118 | 84 | 71.19\% | 469 | 367 | 78.25\% |
| Secondary | 108 | 80 | 74.07\% | 30 | 18 | 60.00\% | 138 | 98 | 71.01\% |
| SCOTT | 2,107 | 1,748 | 82.96\% | 776 | 580 | 74.74\% | 2,883 | 2,328 | 80.75\% |
| Municipal | 506 | 408 | 80.63\% | 211 | 159 | 75.36\% | 717 | 567 | 79.08\% |
| Interstate | 648 | 558 | 86.11\% | 293 | 222 | 75.77\% | 941 | 780 | 82.89\% |
| Primary | 819 | 669 | 81.68\% | 242 | 179 | 73.97\% | 1,061 | 848 | 79.92\% |
| Secondary | 134 | 113 | 84.33\% | 30 | 20 | 66.67\% | 164 | 133 | 81.10\% |
| STORY | 2,719 | 2,185 | 80.36\% | 602 | 388 | 64.45\% | 3,321 | 2,573 | 77.48\% |
| Municipal | 491 | 363 | 73.93\% | 95 | 59 | 62.11\% | 586 | 422 | 72.01\% |
| Interstate | 1,141 | 935 | 81.95\% | 296 | 211 | 71.28\% | 1,437 | 1,146 | 79.75\% |
| Primary | 990 | 818 | 82.63\% | 184 | 97 | 52.72\% | 1,174 | 915 | 77.94\% |
| Secondary | 97 | 69 | 71.13\% | 27 | 21 | 77.78\% | 124 | 90 | 72.58\% |
| WAPELLO | 1,387 | 1,170 | 84.35\% | 572 | 459 | 80.24\% | 1,959 | 1,629 | 83.15\% |
| Municipal | 757 | 634 | 83.75\% | 289 | 224 | 77.51\% | 1,046 | 858 | 82.03\% |
| Interstate | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Primary | 492 | 423 | 85.98\% | 225 | 187 | 83.11\% | 717 | 610 | 85.08\% |
| Secondary | 138 | 113 | 81.88\% | 58 | 48 | 82.76\% | 196 | 161 | 82.14\% |
| WARREN | 205 | 190 | 92.68\% | 76 | 68 | 89.47\% | 281 | 258 | 91.81\% |
| 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 | 149 | 140 | 93.96\% | 63 | 55 | 87.30\% | 212 | 195 | 91.98\% |
| Secondary | 56 | 50 | 89.29\% | 13 | 13 | 100.00\% | 69 | 63 | 91.30\% |
| WASHINGTON | 964 | 811 | 84.13\% | 440 | 275 | 62.50\% | 1,404 | 1,086 | 77.35\% |
| Municipal | 134 | 102 | 76.12\% | 39 | 19 | 48.72\% | 173 | 121 | 69.94\% |
| Interstate | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Primary | 520 | 423 | 81.35\% | 239 | 113 | 47.28\% | 759 | 536 | 70.62\% |
| Secondary | 310 | 286 | 92.26\% | 162 | 143 | 88.27\% | 472 | 429 | 90.89\% |

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 | 3,031 | 2,395 | 79.02\% | 455 | 15.01\% | 181 | 5.97\% |
| Municipal | 795 | 600 | 75.47\% | 167 | 21.01\% | 28 | 3.52\% |
| Interstate | 1,710 | 1,367 | 79.94\% | 195 | 11.40\% | 148 | 8.65\% |
| Primary | 433 | 352 | 81.29\% | 81 | 18.71\% | - | 0.00\% |
| Secondary | 93 | 76 | 81.72\% | 12 | 12.90\% | 5 | 5.38\% |
| B 150,000 to 199,999 | 4,859 | 4,031 | 82.96\% | 679 | 13.97\% | 149 | 3.07\% |
| Municipal | 1,177 | 917 | 77.91\% | 208 | 17.67\% | 52 | 4.42\% |
| Interstate | 1,761 | 1,516 | 86.09\% | 206 | 11.70\% | 39 | 2.21\% |
| Primary | 1,660 | 1,380 | 83.13\% | 222 | 13.37\% | 58 | 3.49\% |
| Secondary | 261 | 218 | 83.52\% | 43 | 16.48\% | - | 0.00\% |
| C 75,000 to 149,999 | 2,426 | 1,735 | 71.52\% | 530 | 21.85\% | 161 | 6.64\% |
| Municipal | 481 | 305 | 63.41\% | 141 | 29.31\% | 35 | 7.28\% |
| Interstate | 1,338 | 965 | 72.12\% | 247 | 18.46\% | 126 | 9.42\% |
| Primary | 469 | 367 | 78.25\% | 102 | 21.75\% | - | 0.00\% |
| Secondary | 138 | 98 | 71.01\% | 40 | 28.99\% | - | 0.00\% |
| D 25,000 to 74,999 | 5,338 | 4,366 | 81.79\% | 785 | 14.71\% | 187 | 3.50\% |
| Municipal | 2,091 | 1,717 | 82.11\% | 342 | 16.36\% | 32 | 1.53\% |
| Interstate | 771 | 664 | 86.12\% | 86 | 11.15\% | 21 | 2.72\% |
| Primary | 2,180 | 1,747 | 80.14\% | 310 | 14.22\% | 123 | 5.64\% |
| Secondary | 296 | 238 | 80.41\% | 47 | 15.88\% | 11 | 3.72\% |
| E Under 25,000 | 6,943 | 5,644 | 81.29\% | 763 | 10.99\% | 536 | 7.72\% |
| Municipal | 1,663 | 1,157 | 69.57\% | 315 | 18.94\% | 191 | 11.49\% |
| Interstate | 1,500 | 1,353 | 90.20\% | 122 | 8.13\% | 25 | 1.67\% |
| Primary | 2,956 | 2,401 | 81.22\% | 281 | 9.51\% | 274 | 9.27\% |
| Secondary | 824 | 733 | 88.96\% | 45 | 5.46\% | 46 | 5.58\% |

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 | 6,207 | 4,696 | 75.66\% | 1,173 | 18.90\% | 338 | 5.45\% |
| Over 200,000 | 795 | 600 | 75.47\% | 167 | 21.01\% | 28 | 3.52\% |
| 150,000 to 199,999 | 1,177 | 917 | 77.91\% | 208 | 17.67\% | 52 | 4.42\% |
| 75,000 to 149,999 | 481 | 305 | 63.41\% | 141 | 29.31\% | 35 | 7.28\% |
| 25,000 to 74,999 | 2,091 | 1,717 | 82.11\% | 342 | 16.36\% | 32 | 1.53\% |
| Under 25,000 | 1,663 | 1,157 | 69.57\% | 315 | 18.94\% | 191 | 11.49\% |
| Interstate | 7,080 | 5,865 | 82.84\% | 856 | 12.09\% | 359 | 5.07\% |
| Over 200,000 | 1,710 | 1,367 | 79.94\% | 195 | 11.40\% | 148 | 8.65\% |
| 150,000 to 199,999 | 1,761 | 1,516 | 86.09\% | 206 | 11.70\% | 39 | 2.21\% |
| 75,000 to 149,999 | 1,338 | 965 | 72.12\% | 247 | 18.46\% | 126 | 9.42\% |
| 25,000 to 74,999 | 771 | 664 | 86.12\% | 86 | 11.15\% | 21 | 2.72\% |
| Under 25,000 | 1,500 | 1,353 | 90.20\% | 122 | 8.13\% | 25 | 1.67\% |
| Primary | 7,698 | 6,247 | 81.15\% | 996 | 12.94\% | 455 | 5.91\% |
| Over 200,000 | 433 | 352 | 81.29\% | 81 | 18.71\% | - | 0.00\% |
| 150,000 to 199,999 | 1,660 | 1,380 | 83.13\% | 222 | 13.37\% | 58 | 3.49\% |
| 75,000 to 149,999 | 469 | 367 | 78.25\% | 102 | 21.75\% | - | 0.00\% |
| 25,000 to 74,999 | 2,180 | 1,747 | 80.14\% | 310 | 14.22\% | 123 | 5.64\% |
| Under 25,000 | 2,956 | 2,401 | 81.22\% | 281 | 9.51\% | 274 | 9.27\% |
| Secondary | 1,612 | 1,363 | 84.55\% | 187 | 11.60\% | 62 | 3.85\% |
| Over 200,000 | 93 | 76 | 81.72\% | 12 | 12.90\% | 5 | 5.38\% |
| 150,000 to 199,999 | 261 | 218 | 83.52\% | 43 | 16.48\% | - | 0.00\% |
| 75,000 to 149,999 | 138 | 98 | 71.01\% | 40 | 28.99\% | - | 0.00\% |
| 25,000 to 74,999 | 296 | 238 | 80.41\% | 47 | 15.88\% | 11 | 3.72\% |
| Under 25,000 | 824 | 733 | 88.96\% | 45 | 5.46\% | 46 | 5.58\% |

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 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7:00-7:59 a.m. | 1,475 | 1,184 | 80.27\% | 222 | 15.05\% | 69 | 4.68\% |
| Municipal | 305 | 192 | 62.95\% | 92 | 30.16\% | 21 | 6.89\% |
| Interstate | 686 | 615 | 89.65\% | 39 | 5.69\% | 32 | 4.66\% |
| Primary | 484 | 377 | 77.89\% | 91 | 18.80\% | 16 | 3.31\% |
| Secondary | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| 8:00-8:59 a.m. | 938 | 760 | 81.02\% | 151 | 16.10\% | 27 | 2.88\% |
| Municipal | 176 | 113 | 64.20\% | 49 | 27.84\% | 14 | 7.95\% |
| Interstate | 300 | 289 | 96.33\% | 11 | 3.67\% | - | 0.00\% |
| Primary | 360 | 271 | 75.28\% | 85 | 23.61\% | 4 | 1.11\% |
| Secondary | 102 | 87 | 85.29\% | 6 | 5.88\% | 9 | 8.82\% |
| 9:00-9:59 a.m. | 2,445 | 1,927 | 78.81\% | 400 | 16.36\% | 118 | 4.83\% |
| Municipal | 1,152 | 945 | 82.03\% | 194 | 16.84\% | 13 | 1.13\% |
| Interstate | 1,277 | 969 | 75.88\% | 203 | 15.90\% | 105 | 8.22\% |
| Primary | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Secondary | 16 | 13 | 81.25\% | 3 | 18.75\% | - | 0.00\% |
| 10:00-10:59 a.m. | 1,038 | 872 | 84.01\% | 135 | 13.01\% | 31 | 2.99\% |
| Municipal | 540 | 461 | 85.37\% | 69 | 12.78\% | 10 | 1.85\% |
| Interstate | 35 | 22 | 62.86\% | 10 | 28.57\% | 3 | 8.57\% |
| Primary | 290 | 254 | 87.59\% | 25 | 8.62\% | 11 | 3.79\% |
| Secondary | 173 | 135 | 78.03\% | 31 | 17.92\% | 7 | 4.05\% |
| 11:00-11:59 a.m. | 1,489 | 1,271 | 85.36\% | 169 | 11.35\% | 49 | 3.29\% |
| Municipal | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Interstate | 616 | 550 | 89.29\% | 61 | 9.90\% | 5 | 0.81\% |
| Primary | 615 | 505 | 82.11\% | 72 | 11.71\% | 38 | 6.18\% |
| Secondary | 258 | 216 | 83.72\% | 36 | 13.95\% | 6 | 2.33\% |
| 12:00-12:59 p.m. | 1,523 | 1,122 | 73.67\% | 232 | 15.23\% | 169 | 11.10\% |
| Municipal | 891 | 607 | 68.13\% | 137 | 15.38\% | 147 | 16.50\% |
| Interstate | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Primary | 514 | 420 | 81.71\% | 74 | 14.40\% | 20 | 3.89\% |
| Secondary | 118 | 95 | 80.51\% | 21 | 17.80\% | 2 | 1.69\% |
| 1:00-1:59 p.m. | 1,931 | 1,594 | 82.55\% | 223 | 11.55\% | 114 | 5.90\% |
| Municipal | 110 | 84 | 76.36\% | 23 | 20.91\% | 3 | 2.73\% |
| Interstate | 1,167 | 973 | 83.38\% | 109 | 9.34\% | 85 | 7.28\% |
| Primary | 654 | 537 | 82.11\% | 91 | 13.91\% | 26 | 3.98\% |
| Secondary | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| 2:00-2:59 p.m. | 3,057 | 2,460 | 80.47\% | 449 | 14.69\% | 148 | 4.84\% |
| Municipal | 931 | 757 | 81.31\% | 148 | 15.90\% | 26 | 2.79\% |
| Interstate | 796 | 619 | 77.76\% | 133 | 16.71\% | 44 | 5.53\% |
| Primary | 765 | 586 | 76.60\% | 129 | 16.86\% | 50 | 6.54\% |
| Secondary | 565 | 498 | 88.14\% | 39 | 6.90\% | 28 | 4.96\% |
| 3:00-3:59 p.m. | 1,750 | 1,434 | 81.94\% | 232 | 13.26\% | 84 | 4.80\% |
| Municipal | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Interstate | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Primary | 1,662 | 1,354 | 81.47\% | 229 | 13.78\% | 79 | 4.75\% |
| Secondary | 88 | 80 | 90.91\% | 3 | 3.41\% | 5 | 5.68\% |
| 4:00-4:59 p.m. | 2,685 | 2,117 | 78.85\% | 495 | 18.44\% | 73 | 2.72\% |
| Municipal | 1,425 | 1,040 | 72.98\% | 334 | 23.44\% | 51 | 3.58\% |
| Interstate | 891 | 767 | 86.08\% | 110 | 12.35\% | 14 | 1.57\% |
| Primary | 310 | 267 | 86.13\% | 40 | 12.90\% | 3 | 0.97\% |
| Secondary | 59 | 43 | 72.88\% | 11 | 18.64\% | 5 | 8.47\% |
| 5:00-5:59 p.m. | 1,314 | 1,104 | 84.02\% | 123 | 9.36\% | 87 | 6.62\% |
| Municipal | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Interstate | 730 | 583 | 79.86\% | 76 | 10.41\% | 71 | 9.73\% |
| Primary | 420 | 388 | 92.38\% | 16 | 3.81\% | 16 | 3.81\% |
| Secondary | 164 | 133 | 81.10\% | 31 | 18.90\% | - | 0.00\% |
| 6:00-6:59 p.m. | 2,952 | 2,326 | 78.79\% | 381 | 12.91\% | 245 | 8.30\% |
| Municipal | 677 | 497 | 73.41\% | 127 | 18.76\% | 53 | 7.83\% |
| Interstate | 582 | 478 | 82.13\% | 104 | 17.87\% | - | 0.00\% |
| Primary | 1,624 | 1,288 | 79.31\% | 144 | 8.87\% | 192 | 11.82\% |
| Secondary | 69 | 63 | 91.30\% | 6 | 8.70\% | - | 0.00\% |

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 | 3,320 | 2,957 | 89.07\% | 273 | 8.22\% | 90 | 2.71\% |
| Municipal | 783 | 635 | 81.10\% | 112 | 14.30\% | 36 | 4.60\% |
| Interstate | 1,326 | 1,222 | 92.16\% | 65 | 4.90\% | 39 | 2.94\% |
| Primary | 1,087 | 988 | 90.89\% | 84 | 7.73\% | 15 | 1.38\% |
| Secondary | 124 | 112 | 90.32\% | 12 | 9.68\% | - | 0.00\% |
| Northwest | 4,645 | 3,548 | 76.38\% | 627 | 13.50\% | 470 | 10.12\% |
| Municipal | 1,261 | 852 | 67.57\% | 225 | 17.84\% | 184 | 14.59\% |
| Interstate | 1,437 | 1,146 | 79.75\% | 155 | 10.79\% | 136 | 9.46\% |
| Primary | 1,676 | 1,338 | 79.83\% | 215 | 12.83\% | 123 | 7.34\% |
| Secondary | 271 | 212 | 78.23\% | 32 | 11.81\% | 27 | 9.96\% |
| Southeast | 6,658 | 5,365 | 80.58\% | 935 | 14.04\% | 358 | 5.38\% |
| Municipal | 1,998 | 1,584 | 79.28\% | 365 | 18.27\% | 49 | 2.45\% |
| Interstate | 941 | 780 | 82.89\% | 161 | 17.11\% | - | 0.00\% |
| Primary | 2,852 | 2,248 | 78.82\% | 329 | 11.54\% | 275 | 9.64\% |
| Secondary | 867 | 753 | 86.85\% | 80 | 9.23\% | 34 | 3.92\% |
| Southwest | 7,974 | 6,301 | 79.02\% | 1,377 | 17.27\% | 296 | 3.71\% |
| Municipal | 2,165 | 1,625 | 75.06\% | 471 | 21.76\% | 69 | 3.19\% |
| Interstate | 3,376 | 2,717 | 80.48\% | 475 | 14.07\% | 184 | 5.45\% |
| Primary | 2,083 | 1,673 | 80.32\% | 368 | 17.67\% | 42 | 2.02\% |
| Secondary | 350 | 286 | 81.71\% | 63 | 18.00\% | 1 | 0.29\% |

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 | 2,325 | 1,941 | 83.48\% | 316 | 13.59\% | 68 | 2.92\% |
| Municipal | 628 | 485 | 77.23\% | 127 | 20.22\% | 16 | 2.55\% |
| Interstate | 693 | 602 | 86.87\% | 66 | 9.52\% | 25 | 3.61\% |
| Primary | 722 | 609 | 84.35\% | 97 | 13.43\% | 16 | 2.22\% |
| Secondary | 282 | 245 | 86.88\% | 26 | 9.22\% | 11 | 3.90\% |
| Monday | 5,018 | 4,103 | 81.77\% | 661 | 13.17\% | 254 | 5.06\% |
| Municipal | 783 | 635 | 81.10\% | 130 | 16.60\% | 18 | 2.30\% |
| Interstate | 2,178 | 1,813 | 83.24\% | 231 | 10.61\% | 134 | 6.15\% |
| Primary | 1,876 | 1,528 | 81.45\% | 255 | 13.59\% | 93 | 4.96\% |
| Secondary | 181 | 127 | 70.17\% | 45 | 24.86\% | 9 | 4.97\% |
| Tuesday | 1,491 | 1,143 | 76.66\% | 299 | 20.05\% | 49 | 3.29\% |
| Municipal | 979 | 775 | 79.16\% | 176 | 17.98\% | 28 | 2.86\% |
| Interstate | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Primary | 479 | 346 | 72.23\% | 117 | 24.43\% | 16 | 3.34\% |
| Secondary | 33 | 22 | 66.67\% | 6 | 18.18\% | 5 | 15.15\% |
| Wednesday | 1,817 | 1,455 | 80.08\% | 265 | 14.58\% | 97 | 5.34\% |
| Municipal | 415 | 276 | 66.51\% | 115 | 27.71\% | 24 | 5.78\% |
| Interstate | 838 | 675 | 80.55\% | 108 | 12.89\% | 55 | 6.56\% |
| Primary | 564 | 504 | 89.36\% | 42 | 7.45\% | 18 | 3.19\% |
| Secondary | - | - | 0.00\% | - | 0.00\% | - | 0.00\% |
| Thursday | 2,631 | 1,996 | 75.86\% | 327 | 12.43\% | 308 | 11.71\% |
| Municipal | 800 | 505 | 63.13\% | 117 | 14.63\% | 178 | 22.25\% |
| Interstate | 694 | 543 | 78.24\% | 99 | 14.27\% | 52 | 7.49\% |
| Primary | 861 | 711 | 82.58\% | 82 | 9.52\% | 68 | 7.90\% |
| Secondary | 276 | 237 | 85.87\% | 29 | 10.51\% | 10 | 3.62\% |
| Friday | 5,747 | 4,688 | 81.57\% | 874 | 15.21\% | 185 | 3.22\% |
| Municipal | 1,885 | 1,453 | 77.08\% | 374 | 19.84\% | 58 | 3.08\% |
| Interstate | 1,736 | 1,452 | 83.64\% | 191 | 11.00\% | 93 | 5.36\% |
| Primary | 1,793 | 1,510 | 84.22\% | 251 | 14.00\% | 32 | 1.78\% |
| Secondary | 333 | 273 | 81.98\% | 58 | 17.42\% | 2 | 0.60\% |
| Saturday | 3,568 | 2,845 | 79.74\% | 470 | 13.17\% | 253 | 7.09\% |
| Municipal | 717 | 567 | 79.08\% | 134 | 18.69\% | 16 | 2.23\% |
| Interstate | 941 | 780 | 82.89\% | 161 | 17.11\% | - | 0.00\% |
| Primary | 1,403 | 1,039 | 74.06\% | 152 | 10.83\% | 212 | 15.11\% |
| Secondary | 507 | 459 | 90.53\% | 23 | 4.54\% | 25 | 4.93\% |

[^1]Chart 14
Seat Belt/Child Restraint Citations Issued by Month \& Year

| Month | 1989 | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 1}$ | 1992 | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 5}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| January | 4,058 | 4,381 | 3,529 | 5,163 | 4,470 | 4,790 | 6,334 | 5,038 | 4,673 | 5,244 | 4,623 | 4,503 |
| February | 3,445 | 4,605 | 6,014 | 6,465 | 5,236 | 6,558 | 7,452 | 6,778 | 6,391 | 5,820 | 6,578 | 5,272 |
| March | 4,598 | 5,235 | 6,950 | 6,765 | 6,292 | 8,071 | 7,806 | 10,403 | 9,785 | 8,188 | 6,822 | 6,657 |
| April | 5,110 | 4,723 | 7,277 | 6,920 | 6,793 | 8,379 | 7,263 | 8,634 | 8,387 | 7,260 | 6,249 | 7,185 |
| 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 |
| June | 4,380 | 4,625 | 9,029 | 7,043 | 7,015 | 8,070 | 8,727 | 9,416 | 8,367 | 7,138 | 6,148 | 5,292 |
| July | 4,452 | 5,169 | 6,108 | 6,556 | 7,016 | 8,023 | 8,504 | 8,646 | 9,039 | 7,489 | 6,962 | 5,795 |
| August | 4,206 | 4,241 | 5,865 | 5,798 | 6,017 | 6,801 | 7,284 | 8,887 | 7,931 | 6,553 | 7,143 | 5,847 |
| September | 4,410 | 4,127 | 6,215 | 5,740 | 6,889 | 6,381 | 7,773 | 6,458 | 6,489 | 6,827 | 5,540 | 5,382 |
| October | 3,504 | 3,476 | 4,146 | 4,095 | 6,235 | 5,360 | 5,399 | 5,036 | 5,737 | 4,774 | 3,920 | 3,613 |
| November | 3,560 | 3,186 | 3,253 | 3,804 | 5,499 | 5,522 | 6,430 | 5,387 | 4,991 | 6,192 | 6,048 | 5,205 |
| December | 2,750 | 1,850 | 3,491 | 3,705 | 5,442 | 5,191 | 5,433 | 4,116 | 4,345 | 4,901 | 3,987 | 2,306 |
| Total | 49,588 | 51,284 | 70,149 | 69,571 | 75,361 | 82,236 | 87,231 | 90,065 | 85,266 | 80,591 | 74,099 | 65,325 |

Chart 15
Seat Belt/Child Restraint Citations Issued by Year

Chart 16
2000 Seat Belt/Child Restraint Citations Issued by County of Residence
Total Child Restraint Citations: 2, 893 Total Seat Belt Citations: 62, 432


| Site | Total Observed | Total Be Ite d | Usage Kate | County | Area | Population | Day | Time |  | Road System | Loc ation | C ity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | ช | ช | 90．91\％ | buena vista | nvo | t | sun | 3 | rn | seconaary | し 4y＠Hwy／ |  |
| $\angle$ | os | ou | y2．31\％ | buena vista | nvo | t | wea | $\bigcirc$ | rm | rrimary | Hwy／＠Hwy／ |  |
| 3 | 12 | 68 | 94．44\％ | Buena vista | Nw | t | wea | 3 | \％M | Primary | Hwy 110＠Hwy／ |  |
| 4 | 110 | 84 | 10．36\％ | buena vista | nvo | t | wea | 1 | HM | （ ity | La ke＠ınıra | storm Lake |
| $b$ | 123 | 112 | 89．60\％ | Buena vista | Nw | t | sun | $\bigcirc$ | \％m | Primary | Hwy／＠Hwy／1 |  |
| 0 | 9 | 9 | 100．00\％ | Butler | NE | t | lue | 11 | AM | secondary | （ ל ¢＠Hwy 14 |  |
| 1 | 139 | 110 | 19．14\％ | Butler | Nt | t | mon | 9 | AM | City | Main＠Inira | Allison |
| 8 | 68 | 64 | 94．12\％ | Butler | NE | E | Inu | 6 | нм | Primary | Hwy 14 ＠Hwy 20 |  |
| 9 | 14 | 12 | 91．30\％ | Butler | Nt | t | inu | 2 | PM | Primary | Hwy 188＠Hwy s |  |
| 10 | в | во | y0．0s\％ | butier | Ne | t | mon | 11 | Am | rrimary | Hwy 14 ＠Hwy s |  |
| 11 | sos | 203 | 12．00\％ | C la rke | sw | t | ıue | $\angle$ | rim | rrimary | Hwy $34 @$ Hwy by |  |
| 12 | 430 | 283 | 03．81\％ | Clarke | sw | t | rir | 4 | HM | （ ity | Evas snington＠Maı | usceora |
| 13 | $1 / 0$ | 131 | 1／．06\％ | cay | nvo | t | inu | $\bigcirc$ | rm | rrimary | Hwy 18＠Hwy／I |  |
| 14 | so | 36 | 12．00\％ | cay | Nw | t | inu | 10 | AM | Primary | Hwy $240 @$ Hwy $/ 1$ |  |
| 13 | 129 | у8 | 15．91\％ | Lay | nvo | t | ınu | 4 | rm | City | 4 tn ＠ u rana | spencer |
| 16 | 20 | 16 | 80．00\％ | cay | Nw | t | inu | 2 | нм | Primary | Hwy 10＠Hwy／1 |  |
| 1／ | 436 | 248 | 36．88\％ | cay | Nw | t | inu | 12 | нм | City | Grand＠18th | spencer |
| 18 | 23 | 15 | 65．22\％ | cay | nvo | t | mon | 10 | AM | seconaary | N 14 ＠Hwy 18 |  |
| 19 | 36 | 21 | 15．00\％ | Lay | NW | t | inu | 8 | AM | secondary | в bs＠Hwy 11 |  |
| 20 | $9 /$ | 63 | 6／．01\％ | dallas | sw | A | lue | 2 | гм | Primary | Hwy 141 ＠Hwy 210 |  |
| $\angle 1$ | 120 | y／ | 10．01\％ | vailas | sw | A | sun | 1 | Am | inte rsta te | －－80 Exit \＃1u |  |
| 22 | 33 | 28 | 84．85\％ | Decatur | sw | E | Fri | 2 | Рм | Primary | Hwy 206 ＠Hwy 6y | weldon |
| 23 | $1 /$ | 63 | 84．42\％ | Decatur | sw | t | Inu | 10 | AM | secondary | J 60 ＠Hwy 69 | Davis City |
| 24 | 402 | 402 | 81．01\％ | vecatur | sw | t | frir | $\angle$ | rm | intersta te | 1－sctexit 12 |  |
| 23 | 191 | 163 | 86．39\％ | Decatur | sw | t | Inu | 12 | AM | Primary | west Jct．Hwy 69 ＠Hwy 2 | Leon |
| 20 | 351 | 403 | 81．41\％ | vecatur | sw | t | rrir | 4 | rm | inte rsta te | 1－3s Exit \＃ 22 |  |
| 21 | 66 | 60 | 90．91\％ | Decatur | sw | t | Inu | 8 | AM | secondary | J 20 ＠Hwy 204 | Garden Grove |
| 28 | 200 | $19 /$ | 45．03\％ | rrankın | NE | t | mon | 1 | AM | intersta te | $1-35$ Exit \＃10 |  |
| $\angle 9$ | 184 | 1／5 | 93．11\％ | rrankın | NE | t | ıue | $y$ | AM | city | $1 \mathrm{st} @$＠st Ave | нampton |
| 30 | $1 /$ | 16 | 94．12\％ | tranklin | NE | t | lue | 1 | AM | Primary | Hwy 10／＠Hwy s |  |
| 31 | 18 | 18 | 100．00\％ | trankin | NE | t | sun | 12 | гм | secondary | （ 23 ＠Hwy 6b |  |
| 32 | 240 | 218 | 90．83\％ | trankin | NE | E | sun | 10 | AM | Primary | Hwy 6b＠Hwy 3 |  |
| 33 | 300 | 289 | 96．33\％ | tranklin | NE | t | sun | ¢ | AM | intersta te | 1－35 Exit \＃ $1 / 0$ |  |
| 34 | 02 | 38 | 61．29\％ | Lousa | st | t | ınu | 4 | гм | City | south 4th＠Washington | wapello |
| 35 | 215 | 191 | 88．84\％ | Linn | NE | в | Fri | $\angle$ | PM | （ ity | Hrrst Ave＠${ }^{\text {cytn }}$ | Leaarkapıs |
| 36 | 460 | 410 | 89．13\％ | Linn | NE | в | wea | 1 | нм | Intersta te | 1－380＠Mıle Marker 25 | Hla watha |
| 31 | 245 | 159 | 64．90\％ | Linn | NE | в | rir | 0 | rm | （ ity | 8tn Ave＠$n$ na | Leaar карıas |
| 38 | 81 | 12 | 88．89\％ | Lınn | NE | в | inu | 11 | AM | secondary | t 34 ＠Hwy 13 |  |
| 39 | 101 | 82 | $81.19 \%$ | Linn | NE | в | wea | 3 | rm | rrimary | Hwy 1＠Hwy su |  |
| 40 | 10 | 13 | 女1．25\％ | Linn | NE | в | ınu | $y$ | AM | seconaary | ヒノU＠Hwy |  |
| 41 | 360 | 326 | 90．56\％ | Linn | NE | в | Inu | $/$ | AM | Intersta te | 1－380＠Mile Marker 13 |  |
| 42 | 208 | 234 | 81．31\％ | Linn | NE | в | rn | 4 | PM | rrimary | Hwy su＠Hwy I |  |
| 43 | 230 | 216 | 93．91\％ | Linn | NE | в | wea | 51 | PM | Primary | Hwy 13 ＠Hwy 161 |  |
| 44 | $4 / 2$ | 429 | 90．89\％ | washington | st | t | sat | 2 | нм | secondary | G36＠Hwy 218 |  |
| 45 | 452 | 3／2 | 82．su\％ | wa pello | st | t | sun | $y$ | Am | （ity |  | Uttumwa |
| 46 | 1／3 | 121 | 69．94\％ | wa shington | st | t | Inu | 6 | PM | （ ity | tast／th＠North 4th | wasnington |
| $4 /$ | 540 | 461 | 85．31\％ | Poik | sw | A | Fri | 10 | AM | （ ity | Grand＠／th | Desmoines |
| 48 | 119 | ius | 80．55\％ | гоı | sw | A | ıue | $\bigcirc$ | rm | （ Ity | Aurora＠Beaver | vesmoines |
| 49 | 140 | 114 | 81．43\％ | Poik | sw | A | lue | 6 | нм | （ ity | Meredith＠Merle Hay | Desmoines |
| su | ל 4 | s y | 18．90\％ | roik | sw | A | frir | 12 | rm | （ ity | inaranola Ave＠st rtn | vesmoines |
| ¢ | 054 | 3s／ | 82．11\％ | гол | sw | A | mon | 1 | нм | rrimary | Hwy 100＠Hwy oy | Ankeny |
| 31 | 010 | ssu | 89．29\％ | ноı | sw | A | mon | 11 | AM | inte rsta te | 1－8U Exit \＃143 |  |
| 35 | 213 | ＜21 | 80．95\％ | ноı | sw | A | sun | $y$ | AM | intersta te | 1－35 Exit \＃y |  |
| 54 | 33 | 22 | 62．86\％ | Poik | sw | A | fri | 10 | AM | Intersta te | $1-3 b$ kest Area |  |
| 3 | 02 | ¢ | 82．26\％ | ноı | sw | A | Fri | ૪ | Am | primary | Hwy 40 ＠Hwy |  |
| 56 | 1／6 | 113 | 64．20\％ | Potta wa tta mie | sw | c | sun | 8 | AM | City | 9th Ave．＠ S $^{\text {d }}$ th | Council blutts |
| 31 | 10 | 54 | ／／．14\％ | rotta wa tta mie | sw | c | inu | 6 | нм | Primary | Hwy 83 ＠Hwy by |  |
| 58 | 334 | $21 /$ | 64．9／\％ | rotta wa ttame | sw | c | inu | 2 | нм | intersta te | 1－29 Exit \＃4／ |  |
| by | 318 | 205 | 10．11\％ | rotta wa tta mie | sw | c | wea | 9 | AM | Intersta te | 1－80 kest Area |  |
| 60 | 63 | 43 | 66．15\％ | rotta wa tta mie | sw | c | mon | 11 | AM | secondary | M 16 ＠Hwy y |  |
| 01 | 13 | b | 15．34\％ | rotta wa tta mie | sw | c | sun | 10 | am | seconaary | Lo ¢＠Hwy o |  |
| 02 | sus | 192 | 02．95\％ | rotta wa tta mie | sw | c | wea |  | Am | City | A Ave \＆ $2 s t n>t$ | Louncil blutrs |
| 63 | 96 | 18 | 81．25\％ | rotta wa tta mie | sw | c | wea | 11 | AM | Primary | Hwy 0 ＠Hwy 191 |  |
| 04 | 42 | 33 | 18．51\％ | rotta wa ttame | sw | c | inu | 4 | гм | rrimary | Hwy וy＠Hwy ${ }^{\text {¢ }}$ |  |
| 63 | $10 /$ | 86 | 80．3／\％ | Potta wa tta mie | sw | c | Mon |  | AM | Primary | Hwy 92＠Hwy by |  |
| 00 | 154 | 110 | 13．32\％ | rotta wa tta me | sw | － | sun | 12 | PM | rrimary | Hwy o＠Hwy by |  |
| 61 | 026 | 483 | 1／．16\％ | Potta wa tta mie | sw | c | mon | y | AM | Inte rsta te | 1－80 Exit \＃40 |  |
| 68 | 164 | 133 | 81．10\％ | scott | st | в | fri | b | нм | secondary | Y 48 ＠Hwy 61 |  |
| oy | 430 | 341 | 19．30\％ | scott | st | в | sat | 11 | AM | rrimary | Hwy ol＠Long urove txit |  |
| 10 | 15 | 48 | 64．00\％ | scott | st | B | sat | 1 | AM | Primary | Hwy $61 @$ Hwy 22 |  |
| 11 | 356 | 459 | 82．55\％ | scott | st | в | fri | 3 | PM | Primary | Hwy $61 @$ ¢ b bxit |  |
| 12 | syo | 318 | 81．54\％ | xott | st | в | sat | $\angle$ | rim | city | kımberly＠Ha rrison | vavenport |
| 13 | 321 | 249 | 16．15\％ | scott | st | в | sat | 9 | AM | City | Locust＠Brady | Davenport |
| 14 | ゝ8 | 4／8 | 82．13\％ | scott | st | в | sat | 0 | rm | intersta te | 1－8U＠Exit \＃ 284 （Y40） |  |
| 15 | şy | sue | 84．12\％ | scott | st | в | sat | 4 | rm | intersta te | 1－L8U＠Hwy ol txit |  |
| 16 | 50 | 39 | 18．00\％ | story | Nw | $v$ | mon | 9 | AM | City | J Ave．＠6th | Nevada |
| $1 /$ | $81 /$ | 090 | 19．82\％ | story | N v | v | mon | 3 | PM | primary | Hwy $30 @$ Dutt txit | Ames |
| 18 | 326 | 248 | 16．01\％ | story | Nw | ט | lue | 2 | нм | City | 6 th＠Grand | Ames |
| 19 | 01 | 49 | 80．33\％ | story | Nvo | $v$ | fri | 3 | rm | rrimary | Hwy LIU＠Hwy ob |  |
| 80 | 210 | 135 | 64．29\％ | story | nvo | ט | ıue | 4 | нм | （ ity | Main＠しlark | ames |
| 81 | 101 | 363 | 19．63\％ | story | Nw | ט | rr | 1 | нм | intersta te | 1－3b kest Area |  |
| 82 | 100 | ／／ | 1／．00\％ | story | Nw | ט | trir | 12 | гм | secondary | t 23 ＠Hwy 69 |  |
| 83 | 130 | 383 | 19．86\％ | story | Nw | v | Mon | b | нм | intersta te | 1－35 Exit \＃123 |  |
| 84 | 159 | 106 | 60．6／\％ | story | Nw | $\nu$ | $\stackrel{r}{1}$ | 8 | AM | Primary | Hwy 133 ＠Hwy 30 |  |
| ৪ | u | ט | U．0U\％ | story | nvo | ט | rn | $\bigcirc$ | rm | rrimary | Hwy $\angle 10 @$ Hwy by |  |
| вь | $8<$ | 04 | 18．05\％ | story | nvo | ט | mon | 1 | AM | rrimary | Hwy ob erwy su |  |
| $8 /$ | 24 | 13 | 54．1\％ | story | Nw | ט | lue | 4 | гм | secondary | t63＠Hwy 6b |  |
| 88 | ius | y／ | 89．32\％ | wa a elo | st | v | sun | 11 | AM | seconaary | $101 @$ Hwy 34 | bla ke sburg |
| 89 | 12 | 59 | 81．94\％ | wapello | st | $v$ | mon | 6 | PM | Primary | Hwy 10 ＠Hwy 34 |  |
| yo | ＜us | 103 | 80．30\％ | wa a pelo | st | v | sun | 1 | AM | rrimary | tast Jct．Hwy 34 ＠Hwy os |  |
| 41 | 594 | 480 | 81．82\％ | wape॥o | st | $\checkmark$ | mon | 4 | rm | City | C nurcn＠kicnmona | Uttumwa |
| 92 | 139 | 114 | 82．01\％ | кеокик | st | ט | sat | 8 | AM | Primary | Hwy 149＠Hwy 23 |  |
| ys | 442 | ऽ88 | 8／．18\％ | wapello | st | $\checkmark$ | frir | $\bigcirc$ | rm | rrimary | Hwy 1s／＠Hwy os |  |
| 94 | 93 | 69 | 14．19\％ | wapello | st | ט | mon | 2 | \％M | secondary | v 3／（College st）＠Hwy 34 | Agency |
| 93 | 212 | 195 | 91．98\％ | warren | sw | A | fri | 6 | \％M | Primary | Hwy 28 ＠Hwy 92 | Martensale |
| yo | 69 | 03 | Y1．30\％ | wo arren | sw | A | rir | $\bigcirc$ | HM | seconaary | кı／＠Hwy y |  |
| $9 /$ | 590 | $39 /$ | 6／．29\％ | wa shington | st | t | sat | 6 | PM | Primary | Hwy 218 ＠Hwy 22 |  |
| 98 | 169 | 139 | 82．25\％ | wa shington | st | t | sat | 12 | нм | Primary | Hwy $1 @$ Hwy yz |  |
| yy | 3 | su | 8．．1\％ | Loulsa | st | t | sat | 4 | rm | seconaary | $x 43 @$ Hwy yo |  |
| 100 | 1／6 | 140 | 19．55\％ | Louisa | St | t | inu |  | PM | Primary | Hwy 92＠Hwy 61 |  |

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 |  |
| lowa | 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.
*Site \# 44 was unable to be counted due to road construction

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 <br> $\mathbf{2 0 0 , 0 0 0}$ | $\mathbf{B - 1 5 0 , 0 0 0}$ <br> to 200,000 | C-75,000 <br> to $\mathbf{1 5 0 , 0 0 0}$ | D-25,000 <br> to 75,000 | E-Under <br> $\mathbf{2 5 , 0 0 0}$ | 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 2000 | Municipal | Interstate | Primary | Secondary | Totals |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Miles | 566 | 576 | 936 | 422 | 2,500 |
| Percentage | $22.46 \%$ | $22.03 \%$ | $38.46 \%$ | $17.05 \%$ | $100.00 \%$ |


| October 2001 | Municipal | Interstate | Primary | Secondary | Totals |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Miles | 587 | 584 | 964 | 449 | 2,584 |
| Percentage | $22.72 \%$ | $22.60 \%$ | $37.31 \%$ | $17.38 \%$ | $100.00 \%$ |

[^2]
[^0]:    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.

[^1]:    NOTE: Includes both passengers and drivers.

[^2]:    NOTE: Vehicle miles traveled numbers reported in 1,000,000's and provided by the Office of Transportation Data,
    lowa Department of Transportation

