# Community-Wide Youth Impaired Driving Programs: Findings from Student Surveys in 1994 and 1996 

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| 16. Abstract <br> Recent projects in five Michigan counties involved activities to prevent impaired driving by youth, with the support of the Michigan Department of State Police, Office of Highway Safety Planning (OHSP). Staff at the University of Michigan Transportation Research Institute (UMTRI) served as a resource to these projects. This report summarizes the results of several thousand student surveys administered in four of these counties in 1994 and 1996. The timing of the surveys does not permit interpretation of program effects, but the data represent two cross-sectional viewpoints of students' knowledge, attitudes, and behaviors regarding alcohol use, alcohol laws, and impaired driving. Alcohol use and impaired driving by youth are challenging problems nationwide, as well as in the counties surveyed. Several findings highlight the need to enhance and maintain comprehensive, community-based prevention activities. Basic student knowledge about alcohol and alcohol laws was disappointingly low. Students showed little concern about alcohol use, riding with an impaired driver, friends' reactions to an impaired driving arrest, and enforcement. Parents' activity regarding teen drinking should be enhanced. Students' behavior regarding obtaining and drinking alcohol, and riding with impaired drivers remain at too high levels. Comprehensive prevention efforts are needed that begin early, are ongoing, coordinated, and deliver clear, consistent messages from several community sources to young people regarding their alcohol use and impaired driving. |  |  |  |
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## INTRODUCTION

Beginning in 1992 and continuing through 1995 with the support of the Michigan Department of State Police, Office of Highway Safety Planning (OHSP), project coordinators in five counties in Michigan (Delta, Gladwin, Lapeer, Marquette, and Washtenaw) developed activities to prevent impaired driving by youth. Staff at the University of Michigan Transportation Research Institute (UMTRI) served as a resource to these project coordinators in several phases of their projects, primarily questionnaire development and evaluation. The prevention activities included, among others, school-based programs, enforcement activity, and public information/education, and are summarized in tables for each year in Appendix A.

A summary of the enforcement activity in the five counties was completed in September 1995 (Community-Wide Youth Impaired Driving Program: Summary of Enforcement Activity ${ }^{1}$ ) and submitted to the Office of Highway Safety Planning. In 1995-1996, UMTRI staff interviewed the county project coordinators regarding their activities and the process involved in implementing their programs. The content of the interviews was used, along with other resources, to develop a set of guidelines for use by communities interested in developing or enhancing their efforts to prevent impaired driving among youth (Impaired Driving Programs for Youth: Guidelines for Success ${ }^{2}$ ), and submitted to the Office of Highway Safety Planning.

This report summarizes the results of the student surveys administered in the communities in 1994 and 1996, in an attempt to evaluate the effectiveness of the community-wide prevention efforts. Because of changes in staffing, timing of support, delays in questionnaire development, varying activities, and coordination with school schedules, the first survey was not administered as a pretest, but was completed by students after at least some program components were underway. The second survey, originally designed as a posttest, was administered in 1996, a year later than initially planned. One county (Lapeer) had developed its own questionnaire, which was administered earlier and was different than that used by the other four, so those data were analyzed independently. Even though the timing of the program activities and the survey administration was such that clear conclusions could not be drawn regarding program effectiveness, the findings are useful to the communities where efforts were expended, and to others interested in students' responses on the survey topics for future program planning purposes. At a minimum, the data collected are useful because they represent a cross-section of students' knowledge, attitudes, and behaviors regarding an important topic at two points in time. Individual counties may be able to interpret their own data in light of activities they knew to be underway at the time.

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## METHODS

## QUESTIONNAIRE DEVELOPMENT

The questionnaire instrument was developed through several rounds of discussions and revisions involving OHSP staff, county project coordinators, and UMTRI staff. Initial items were written by county project coordinators and were subsequently modified and revised to address issues of concern raised by school representatives and by UMTRI evaluation staff. The final questionnaire instrument was printed on optical scan forms to facilitate data collection, management, and analysis. A copy of the questionnaire is contained in Appendix B.

## QUESTIONNAIRE ADMINISTRATION

Four counties (Delta, Gladwin, Marquette, and Washtenaw) participated in the student survey in spring 1994. The surveys were administered by school staff, cooperating with the county project coordinators, and completed surveys were sent to UMTRI. In 1996, the same four counties agreed to administer questionnaires to students in schools in the spring. Three counties successfully completed survey administration and sent the completed student surveys to UMTRI. The staff of one county believed that they would be able to obtain school cooperation, but, at the last moment, were not able to do so.

DATA MANAGEMENT AND ANALYSIS

Completed surveys received at UMTRI were scanned and the data entered directly into computer files. A SAS (Statistical Analysis Software) data set was built. Data were cleaned for wild codes, and univariate analyses were completed. The 1994 and 1996 data sets were merged, so that analyses could be run by year, and tables of frequencies were produced. Data in the majority of this report are presented exactly as the students responded-- we tried to clean the data to exclude nondrinkers from items to which they should not have responded, but decided to use the data as given because of inconsistencies in the students' responses (e.g., the number of students who reported they did not drink did not match the number who did not answer certain questions about drinking). Because of the lack of a controlled evaluation design, statistical comparisons between 1994 and 1996 are not reported.

## SUBJECTS

In 1994, a total of 3,179 Delta County seventh- through twelfth-grade students from six school districts (15 buildings) were surveyed. In Gladwin County, 842 ninth- through twelfth-grade students from two school districts (two buildings) were surveyed. In Marquette County, 910 seventh- through twelfth-grade students from two school districts (three buildings) completed surveys, and in Washtenaw County, 705 ninth- through twelfth-grade students from one school district (one building) completed surveys. In 1996, Delta County was unable to administer the student surveys. In Gladwin County, 814 ninth- through twelfth-grade students were surveyed. In Marquette County, 1022 seventh- through twelfth-grade students completed surveys, and in Washtenaw County, 562 ninth- through twelfth-grade students completed surveys. The numbers of students by county, grade, and year are presented in the table just below. County-wide response rates (percentage of all enrolled students in eligible grades who completed surveys) ranged from a low of $51.2 \%$ in 1996
in Washtenaw County to a high of $85.5 \%$ in 1996 in Marquette County. Response rates varied due to teacher participation in administering the survey, as well as to students who may have been absent, involved in other activities, or declined to participate at the time of the survey.

Completed Surveys and Response Rates by County, Grade, and Survey Year

| County | Grade |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7th-8th |  | 9th-10th |  | 11th-12th |  | All grades |  |
|  | Completed Surveys | Response Rate | Completed Surveys | Response Rate | Completed Surveys | Response Rate | Completed Surveys | $\begin{gathered} \text { Response } \\ \text { Rate } \end{gathered}$ |
| $\left.\right\|_{1994} \text { Delta }^{2}$ | 1126 | 93.4\% | 1174 | 83.3\% | 872 | 75.5\% | 3179 | 84.3\% |
| $\begin{array}{\|r} \text { Gladwin } \\ 1994 \\ 1996 \end{array}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ | -- | $\begin{aligned} & 491 \\ & 506 \end{aligned}$ | $\begin{aligned} & 79.2 \% \\ & 83.0 \% \end{aligned}$ | $\begin{aligned} & 349 \\ & 302 \end{aligned}$ | $\begin{aligned} & 69.4 \% \\ & 58.6 \% \end{aligned}$ | $\begin{aligned} & 842 \\ & 814 \end{aligned}$ | $\begin{aligned} & 75.08 \\ & 72.48 \end{aligned}$ |
| $\begin{array}{\|r} \text { Marquette } \\ 1994 \\ 1996 \end{array}$ | $\begin{aligned} & 333 \\ & 403 \end{aligned}$ | $\begin{aligned} & 63.3 \% \\ & 81.1 \% \end{aligned}$ | $\begin{aligned} & 334 \\ & 367 \end{aligned}$ | $\begin{aligned} & 75.6 \% \\ & 87.8 \% \end{aligned}$ | $\begin{aligned} & 243 \\ & 252 \end{aligned}$ | $\begin{aligned} & 85.3 \% \\ & 90.0 \% \end{aligned}$ | $\begin{array}{r} 910 \\ 1022 \end{array}$ | $\begin{aligned} & 72.6 \% \\ & 85.5 \% \end{aligned}$ |
| $\begin{array}{\|r} \text { Washtenaw } \\ 1994 \\ 1996 \end{array}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ | -- | $\begin{aligned} & 406 \\ & 317 \end{aligned}$ | $\begin{aligned} & 58.0 \% \\ & 48.3 \% \end{aligned}$ | $\begin{aligned} & 295 \\ & 243 \end{aligned}$ | $\begin{aligned} & 57.7 \% \\ & 55.0 \% \end{aligned}$ | $\begin{aligned} & 705 \\ & 562 \end{aligned}$ | $\begin{aligned} & 58.2 \% \\ & 51.2 \% \end{aligned}$ |

## RESULTS

The students' survey results are presented separately for each of the four counties. Within each county, results are presented for all the survey questionnaire items by year of survey administration. Data are presented in the primary categories of interest: demographics, knowledge, attitudes and perceptions, and behavior with subgroupings under each heading.

Tables in this section are headed by the questionnaire item number and item wording, directly from the survey instrument. The survey year is listed in the left column of the tables. Response choices are listed across the top row. Response choices are sometimes abbreviated out of necessity, but the complete wording is available in the survey instrument in Appendix B. The tables contain the number of students choosing each response (frequency), with the row percentage underneath. Totals for each response are given at the bottom. Below the table, the "frequency missing" refers to the number of students who did not provide a response to that item. In some cases, the item may not have applied to them; in other cases they did not respond for other reasons. It is important to note the number of nonresponses, so that the percentages are not necessarily interpreted as representing the entire group of respondents. Due to the lack of adequate experimental controls, we cannot be certain that observed differences or lacks thereof are due to the program activities themselves or to other, nonprogram-related factors that affected survey responses independent of the programs. Different students completed the surveys at each point in time. Differences in percentages therefore should be viewed with caution.

Following the overview of all the survey results, selected items of particular interest to the program staff were further analyzed by age groupings. These results are also presented in tables, with brief comments provided.

## DELTA COUNTY

## Demographics

Two demographic variables were included in the questionnaire, school grade and sex. The students who completed the survey in Delta County in 1994 included 1,135 seventh-eighth graders, 605 ninth graders, 577 tenth graders, 516 eleventh graders, 357 twelfth graders, and 7 with grade missing on the questionnaire. Slightly over half of the students for whom sex was reported were male (52.4\%). The results for these questionnaire items (Questions 1 and 2) are reported in the tables just below.

1. What grade are you in?

2. Sex

| Frequency |  |  |  |
| :--- | ---: | ---: | ---: |
| Row Pct | Female | Male | Total |
| 1994 | 1514 | 1669 | 3183 |
|  | 47.57 | 52.43 |  |
| Total | 1514 | 1669 | 3183 |
| Frequency Missing $=14$ |  |  |  |

## Knowledge

Two areas of knowledge content were included in the questionnaire, the effects of alcohol consumption, and Michigan laws about alcohol.

## Alcohol Effects

Questionnaire items 3, 4, and 16 covered the effects of alcohol. Students' responses regarding the number of drinks it takes to become intoxicated in a one-hour time period covered the full range of response choices (1 to 7), with the largest proportion of students selecting 2 to 3 drinks (39.2\%), and many selecting 4 to 5 drinks (35.3\%). Students' responses regarding the blood alcohol level at which a person's ability to drive becomes significantly impaired also covered the full range of response choices (. 03 to .10) , with the largest proportion of students selecting . 05 (31.4\%), and a fair proportion, however, selecting .10 (26.8\%). Regarding which drink has more alcohol, less than half the students (43.4\%) gave the correct answer (all equal). A mixed drink was most commonly incorrectly selected (44.8\%) as having the most alcohol, with beer and wine each incorrectly selected by about 6\%.
3. How many drinks over a one hour time period do you think it takes to become intoxicated?

| Frequency <br> Row Pct | 1 | \|2-3 | \|4-5 | 16-7 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 351 11.25 | 1223 39.19 | 1101 35.28 | 446 14.29 | 3121 |
| Total | 351 | 1223 | 1101 | 446 | 3121 |
| Frequency | Missing | $=76$ |  |  |  |

4. At what blood alcohol level does a normal person's ability to drive become significantly impaired?

| Frequency <br> Row Pct | .03 | 1.05 | .07 | .10 | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1994 | 742 | 967 | 549 | 826 | 3084 |

16. Which has more alcohol?

| Frequency <br> Row Pct | 1 can beer | $\left\lvert\, \begin{aligned} & 1 \text { glass } \\ & \text { wine } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 1 \text { mixed } \\ & \text { drink } \end{aligned}\right.$ | $\text { \| } \begin{aligned} & \text { All } \\ & \text { equal } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 175 5.56 | 199 6.32 | 1409 44.76 | 1365 43.36 | 3148 |
| Total | 175 | 199 | 1409 | 1365 | 3148 |
| Frequency | Missing | 49 |  |  |  |

## Alcohol Laws

Questionnaire items 5, 39, 44, 45, and 46 covered Michigan laws regarding alcohol impairment, purchase, and possession. The correct blood alcohol level for legal impairment for students' driving in 1994 was .08, a level selected by only $8.1 \%$ of the students. However, $25.1 \%$ selected . 02 (now correct for drivers under 21, but not in 1994), and $36.9 \%$ selected. 10 , the level at which a person is legally drunk. The majority of students (78.5\%) were correct in responding that it is against the law for a person under age 21 to attempt to purchase alcohol. A smaller majority ( $64.8 \%$ ) were correct in responding that the primary reason Michigan raised the drinking age to 21 was traffic safety. The majority of students (84.0\%) knew that a person less than age 21 convicted of Operating Under the Influence of Liquor can be jailed. Not quite two-thirds of the students (62.7\%) knew that a person less than age 21 convicted of possession of an alcoholic beverage can be jailed for that offense.
5. At what blood alcohol level are you legally impaired for driving?

| Frequency Row Pct | . 02 | \|. 04 | 1.06 | 1.08 | \| 10 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | $\begin{array}{r} 765 \\ 25.06 \end{array}$ | 525 17.20 | 389 12.74 | 247 8.09 | 1127 36.91 | 3053 |
| Total | 765 | 525 | 389 | 247 | 1127 | 3053 |

39. In Michigan, is it against the law for a person under the age of 21 to attempt to purchase alcohol?
$\left.\begin{array}{l|r|r|r}\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array} & \text { Yes } & \text { No } & \text { Total } \\ \hdashline 1994 & 2451 & 673 & 3124 \\ & & 78.46 & 21.54\end{array}\right)$
40. What is the primary reason that Michigan raised the drinking age to 21 ?

| Frequency Row Pct | Matthews Act | Moral issue | $\begin{aligned} & \text { Traffic } \\ & \text { safety } \end{aligned}$ | $\left\|\begin{array}{l} \text { Teen } \\ \text { pregncy. } \end{array}\right\|$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 394 12.97 | 530 17.45 | 1967 64.77 | 146 4.81 | 3037 |
| Total | 394 | 530 | 1967 | 146 | 3037 |

45. Can a person less than age 21 convicted of Operating Under the Influence of Liquor be jailed for that offense?
$\left.\begin{array}{l|r|r|r}\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array} & \text { Yes } & \text { |No } & \text { Total } \\ \hdashline 1994 & 2599 & 497 & 3096 \\ & & 83.95 & 16.05\end{array}\right)$
46. Can a person less than age 21 convicted of possession of an alcoholic beverage be jailed for that offense?

| Frequency <br> Row Pct | Yes | No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 1936 62.73 | 1150 37.27 | 3086 |
| Total | 1936 | 1150 | 3086 |

## Attitudes/Perceptions

Four areas of attitudes/perceptions were included in the questionnaire. They covered attitudes and perceptions regarding drinking, drinking and driving, enforcement, and morality.

## Drinking

Questionnaire items $19,32,35,43$, and 47 covered attitudes and perceptions regarding alcohol use. When asked for their most important concern regarding alcohol use, the largest percentage of students responded "being caught by police" (30.1\%), followed by "being caught by parents" (24.0\%). Perceptions of harm done "to your body with 5 or more drinks in a row" were generally high with very few students responding "no harm" (5.2\%). The punishment the greatest proportion of students wanted to avoid for drinking alcohol was jail (39.2\%), followed by "parents contacted by police" (27.5\%), and "loss of driver's license" (23.3\%). Attitudes regarding the age at which a person should legally be permitted to drink alcohol ranged across the 17 to over 21 year-old choices, with the largest proportion of students selecting age 21 (37.0\%), followed by age 18 (29.7\%). Students reported that their attitudes toward alcohol use were most influenced by their peer group (42.6\%) and life experience (22.9\%).
19. In regard to alcohol use, which of the following is your most important concern?

| Frequency <br> Row Pct | Parents catch | Police catch | Be alcoholic | Health concerns | $\left\|\begin{array}{l} \text { No } \\ \text { concerns } \end{array}\right\|$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 739 24.00 | 927 30.11 | 538 17.47 | 613 19.91 | 262 8.51 | 3079 |
| Total | 739 | 927 | 538 | 613 | 262 | 3079 |

Frequency Missing $=118$
32. How much harm do you think you are doing to your body with 5 or more drinks in a row?

35. If you were to drink alcohol, what punishment would you most want to avoid?

| Frequency <br> Row Pct |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Jail | Comm. <br> service | Loss of <br> license | Notify <br> parents | Fines | Total |
| 1994 | 1193 | 77 | 710 | 836 | 230 | 3046 |

Frequency Missing $=151$
43. At what age should a person be permitted to drink alcoholic beverages legally?

| Frequency <br> Row Pct | 17 | 118 | \|19 | 120 | $\mid 21$ | \| $>21$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 255 8.10 | 934 29.66 | 240 7.62 | 157 4.99 | 1165 37.00 | 398 12.64 | 3149 |
| Total | 255 | 934 | 240 | 157 | 1165 | 398 | 3149 |
| Frequency | Missing | $=48$ |  |  |  |  |  |

47. What is your attitude toward the use of alcohol most influenced by?

| Frequency <br> Row Pct | TV/ movies | $\left\lvert\, \begin{aligned} & \text { Peer } \\ & \text { group } \end{aligned}\right.$ | Family | $\left\lvert\, \begin{aligned} & \text { Exper- } \\ & \text { ience } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Adver- } \\ & \text { tising }\end{aligned}\right.$ | Music | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 306 10.45 | 1247 42.59 | 309 10.55 | 670 22.88 | 341 11.65 | 55 1.88 | 2928 |
| Total | 306 | 1247 | 309 | 670 | 341 | 55 | 2928 |
| Frequency | Missing | $=269$ |  |  |  |  |  |

## Drinking and Driving

Questionnaire items 15, 17, 30, and 48 addressed attitudes and perceptions regarding drinking and driving. Students reported that they most likely would listen to warnings about drinking alcohol and driving from people who had been in a crash (50.9\%), parents (22.4\%), and friends/peers (19.9\%). Only slightly over a third of the students (39.2\%) said they would be "not at all comfortable" riding with a driver who has had 3 beers in the last hour. When asked if before turning 21, they would be involved in a crash as a driver after drinking, $9.4 \%$ said yes. If arrested for drunk driving, $38.4 \%$ thought their friends would be upset at them but still remain friends; $38.0 \%$ thought their friends would say nothing; while $14.7 \%$ thought their friends would congratulate them.
15. I would most likely listen to warnings about drinking alcohol and driving from:

| Frequency <br> Row Pct | Friends <br> or peers | Parents | Police <br> officers | People <br> in crash |
| :--- | ---: | ---: | ---: | ---: | Total

17. How comfortable are you riding with a driver who has had 3 beers in the last hour?

18. Do you think that before you turn 21 you will be involved in a crash as a driver after you have been drinking?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 292 9.38 | 2822 90.62 | 3114 |
| Total | 292 | 2822 | 3114 |
| Frequency | Missing | $=83$ |  |

48. If you were arrested for drunk driving, your friends probably would:

| Frequency <br> Row Pct | Congratulate | Not be friends | $\left\lvert\, \begin{aligned} & \text { Say } \\ & \text { nothing } \end{aligned}\right.$ | $\left\|\begin{array}{l} \text { Upset/be } \\ \text { friends } \end{array}\right\|$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 452 14.73 | 271 8.83 | 1167 38.04 | 1178 38.40 | 3068 |
| Total | 452 | 271 | 1167 | 1178 | 3068 |
| Frequency | Missing | $=129$ |  |  |  |

## Enforcement

Questionnaire items 36,37 , and 38 reflect students' perceptions about enforcement of alcohol laws in their county. Only $10.2 \%$ felt that a person under age 21 would "always" be arrested for possessing alcohol in public. Only $4.8 \%$ felt that parties where guests under age 21 are drinking alcohol are "always" broken up by police. Only $5.9 \%$ felt that a person under age 21 who drinks and drives is "always" arrested.
36. When a person under age 21 in your county has alcoholic beverages in his or her possession in public, how often do you think that person is arrested for a "minor in possession" offense?

| Frequency <br> Row Pct | Never | 12 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 340 10.88 | 862 27.59 | 1060 33.93 | 543 17.38 | 319 10.21 | 3124 |
| Total | 340 | 862 | 1060 | 543 | 319 | 3124 |

Frequency Missing = 73
37. When there are parties in your county where guests under age 21 are drinking alcoholic beverages, how often are these parties broken up by police?

| Frequency <br> Row Pct | Never | 12 | 13 | 14 | \| Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 518 16.80 | 1121 36.36 | 944 30.62 | 353 11.45 | 147 4.77 | 3083 |
| Total | 518 | 1121 | 944 | 353 | 147 | 3083 |

Frequency Missing = 114
38. When a person under age 21 in your county has been drinking alcoholic beverages then drives, how often is he or she arrested for a drinking and driving offense?

| Frequency <br> Row Pct | Never | $\mid 2$ | 13 | \| 4 | \| Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 336 10.88 | 1066 34.51 | 1028 33.28 | 477 15.44 | 182 5.89 | 3089 |
| Total | 336 | 1066 | 1028 | 477 | 182 | 3089 |

Frequency Missing = 108

## Morality

Questionnaire items 49-52 dealt with how wrong students felt various alcohol-related behaviors to be. In each case, the largest proportion, but not necessarily the majority, of students chose "wrong" rather than other response options graded toward "acceptable." Students felt it is wrong to drive under the influence (59.0\%), to be a minor in possession of alcohol (38.7\%), to be a minor and attempt to purchase alcohol (38.6\%), and to provide alcohol to minors (51.3\%).
49. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Driving under the influence:

| Frequency <br> Row Pct | Wrong | 12 | 13 | 14 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 1835 58.98 | 610 19.61 | 433 13.92 | 114 3.66 | 119 3.83 | 3111 |
| Total | 1835 | 610 | 433 | 114 | 119 | 3111 |
| Frequency | Missing | $=86$ |  |  |  |  |

50. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Minor in possession of alcohol:

| Frequency <br> Row Pct | Wrong | 2 | 3 | 4 | Accept- |
| :--- | :--- | :--- | :--- | :--- | :--- |
| able |  |  |  |  |  |$|$ Total

51. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Minor attempting to purchase alcohol:

| Frequency <br> Row Pct | Wrong | 12 | 13 | 14 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 1200 38.56 | 579 18.61 | 704 22.62 | 317 10.19 | 312 10.03 | 3112 |
| Total | 1200 | 579 | 704 | 317 | 312 | 3112 |
| Frequency | Missing | 85 |  |  |  |  |

52. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Providing alcohol to minors:

| Frequency <br> Row Pct | Wrong | 2 | 3 | 14 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 1596 51.30 | 440 14.14 | 507 16.30 | 238 7.65 | 330 10.61 | 3111 |
| Total | 1596 | 440 | 507 | 238 | 330 | 3111 |

## BEHAVIOR

Five behavioral areas were addressed in the questionnaire. They included parents' behavior, and students' drinking alcohol, obtaining alcohol, riding with a drinking driver, and drinking and driving.

## Parents

Questionnaire items 8, 9, 10, 11, 18, and 29 covered various aspects of parents' behavior as perceived by the students. A majority of students (64.0\%) reported that their parents had talked to them regarding their attitudes about drinking and about teenage drinking in general (61.1\%). A majority of students (69.5\%) reported that their parents drank alcohol. Among those who answered the question regarding the frequency of a parent's intoxication, just one-quarter (25.4\%) reported intoxication "never" occurring. If caught drinking by parents, over half the students (57.4\%) felt that they would be punished severely. In an item that obliquely asks about parents' monitoring of teens' alcohol behavior, a surprising $32.1 \%$ of the students reported that they can "always" hide their drinking from their parents.
8. Have your parents talked to you regarding your attitudes about drinking?

| Frequency <br> Row PCt$\|$ Yes | \|No | Total |  |
| :--- | ---: | ---: | ---: |
| 1994 | 2001 | 1128 | 3129 |
|  | 63.95 | 36.05 |  |
| Total | 2001 | 1128 | 3129 |
| Frequency Missing $=68$ |  |  |  |

9. Have your parents talked to you about teenage drinking in general?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 1937 61.12 | 1232 38.88 | 3169 |
| Total | 1937 | 1232 | 3169 |
| Frequency | Missing | $=28$ |  |

10. Do your parents (or guardian) drink alcohol?

| Frequency <br> Row Pct | Yes | INo | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 2198 69.49 | 965 30.51 | 3163 |
| Total | 2198 | 965 | 3163 |

11. If yes, think about your parent or guardian that drinks most often. How often do they become intoxicated?

| Frequency Row Pct | Never | $\left\lvert\, \begin{aligned} & \text { Once } \\ & \text { year } \end{aligned}\right.$ | Once month | Once week | $\left\lvert\, \begin{aligned} & \text { Once } \\ & \text { day } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 575 25.42 | 666 29.44 | 530 23.43 | 376 16.62 | 115 5.08 | 2262 |
| Total | 575 | 666 | 530 | 376 | 115 | 2262 |
| Frequency | Missing | $=935$ |  |  |  |  |

18. If my parents (or guardian) catch me drinking, they will:

| Frequency <br> Row Pct | Do <br> nothing | Do very <br> little | Punish <br> lightly | Punish <br> severely | Get help | Not know |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | Total

29. On a scale of 1 to 5, how often can you hide your drinking from your parents?

| Frequency <br> Row Pct | Never | \| 2 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 851 31.68 | 185 6.89 | 362 13.48 | 425 15.82 | 863 32.13 | 2686 |
| Total | 851 | 185 | 362 | 425 | 863 | 2686 |
| Frequency | Missing | $=511$ |  |  |  |  |

## Drinking Alcohol

Students' own drinking behavior was characterized in responses to items 20 , 27, 28, 31, 33, and 34. Nearly half the students overall (47.18) said they drank alcohol. Of those who drank, the highest percentages (16.0\%) reported drinking $1-3$ drinks/day (but no response choice was offered for less than one drink a day, for instance one drink a week or month), and drinking less than once a week ( $28.8 \%$ ). In response to the item inquiring about number of times students drank 5 or more drinks in a row in the last month, most students (73.4\%) said none; however, $19.3 \%$ said 1 - 5 times, with smaller percentages in the higher frequency categories. Most students who drank reported beer as their usual alcoholic beverage, and weekends as their usual drinking time.
20. Do you drink alcoholic beverages?


Frequency Missing $=31$
27. When you drink, how many drinks do you have in a day?

| Frequency <br> Row Pct | 1-3 | 4-6 | 7-10 | > 10 | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 495 16.01 | 394 12.74 | 344 11.13 | 271 8.76 | 1588 51.36 | 3092 |
| Total | 495 | 394 | 344 | 271 | 1588 | 3092 |

Frequency Missing $=105$
28. How many times a week do you drink?

| Frequency |
| :--- |
| Row Pct |$|<1$

31. How many times in the last month did you have 5 or more drinks in a row?

| Frequency Row Pct | 0 | 11-5 | 16-10 | 111-15 | \| $>15$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 2293 73.40 | 602 19.27 | 120 3.84 | 41 <br> 1.31 | 68 2.18 | 3124 |
| Total | 2293 | 602 | 120 | 41 | 68 | 3124 |

[^1]33. What alcoholic beverage do you usually drink?

| Frequency Row Pct | Beer | Liquor | \| Wine | $\left\lvert\, \begin{aligned} & \text { Wine } \\ & \text { cooler } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 813 27.21 | 377 12.62 | 67 2.24 | 258 8.63 | 1473 49.30 | 2988 |
| Total | 813 | 377 | 67 | 258 | 1473 | 2988 |

34. When do you normally drink?
$\left.\begin{array}{l|l|l|l|l|l}\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array} & \begin{array}{l}\text { Weekday } \\ \text { mornings }\end{array} & \begin{array}{l}\text { Weekday } \\ \text { days }\end{array} & \begin{array}{l}\text { Weekday } \\ \text { evenings }\end{array} & \text { Weekends } & \begin{array}{l}\text { Non- } \\ \text { drinker }\end{array} \\ \hline 1994 & 0.39 & 1.03 & 1.84 & 45.25 & 51.49\end{array}\right) 3096$

## Obtaining Alcohol

Questionnaire items 21-26 asked students about their behavior related to obtaining alcohol. There are a fair number of missing responses on some of these items, perhaps from students who were younger or had no experience with obtaining alcohol. Many students (37.2\%) felt that it is easy for them to obtain alcohol. While $63.1 \%$ of the students had not attempted to obtain alcohol in the last month, $27.7 \%$ had done so 1 - 5 times, $5.4 \% 6$ - 10 times, and $3.9 \%$ more than 10 times. Among those who responded to Question 23, many were able to obtain alcohol in the last month (32.2\% 1 - 5 times, $6.0 \% 6$ - 10 times, and $7.0 \%$ more than 10 times). For those who responded about how they obtain alcohol (Question 24), the most frequently reported source was an adult's buying, followed by an underage friend's buying. A false ID card showing age 21 or over was possessed by $3.0 \%$ of the students. For those who responded about where they obtain alcohol (Question 26), it usually came from a grocery store, home, party store, or "other source."
21. On a scale of 1 to 5 how easy is it for you to obtain alcohol?

| Frequency Row Pct | Easy | 2 | 3 | 4 | \| $\begin{aligned} & \text { Diffi- } \\ & \text { cult }\end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 1139 37.22 | 614 20.07 | 600 19.61 | 275 8.99 | 432 14.12 | 3060 |
| Total | 1139 | 614 | 600 | 275 | 432 | 3060 |
| Frequency | Missing | 137 |  |  |  |  |

22. How many times in the last month have you attempted to obtain alcohol?
$\left.\begin{array}{l|r|r|r|r|r}\text { Frequency } & & & \\ \text { Row Pct } & 0 & \mid 1-5 & \mid 6-10 & \mid>10 & \text { Total } \\ \hdashline 1994 & 1993 & 874 & 172 & 122 & 3161 \\ & & 63.05 & 27.65 & 5.44 & 3.86\end{array}\right)$

Frequency Missing $=36$
23. How many times were you able to obtain alcohol in the last month?

24. How do you normally obtain alcohol?

25. Do you have a false I.D. card that shows you to be 21 or over?

| Frequency |  |  |  |
| :--- | ---: | ---: | ---: |
| Row Pct | Yes | \|No | Total |
| 1994 | 96 | 3068 | 3164 |
|  | 3.03 | 96.97 |  |
| Total | 96 | 3068 | 3164 |
| Frequency Missing $=33$ |  |  |  |

26. Where do you normally obtain your alcohol?

| Frequency <br> Row Pct | Party <br> store | \| Bar | Grocery store | Home | $\left\|\begin{array}{l} \text { School } \\ \text { property } \end{array}\right\|$ | Nondrinker | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 373 12.77 | 51 1.75 | 453 15.51 | 381 13.04 | 26 0.89 | 1276 43.68 | 361 12.36 | 2921 |
| Total | 373 | 51 | 453 | 381 | 26 | 1276 | 361 | 2921 |

## Riding with Drinking Driver

Questionnaire items 12-14 asked students about their experiences riding with a drunk or drinking driver. About half the students (49.5\%) reported never having this experience, while $13.2 \%$ reported doing so in the last week, $17.0 \%$ in the last month, and $20.2 \%$ in the last year. Among those who answered Questions 13 and 14 regarding riding with a drunk or drinking driver in the last month, most ( $80.0 \%$ ) reported this to have happened $1-3$ times, and mostly (81.0\%) with a driver under age 21.
12. How recently have you driven with a drunk or drinking driver? In the past:

| Frequency |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Row Pct | Year | Month | Week | Never | Total |
| 1994 | 635 | 534 | 416 | 1556 | 3141 |
|  | 20.22 | 17.00 | 13.24 | 49.54 |  |
| Total | 635 | 534 | 416 | 1556 | 3141 |
| Frequency Missing $=56$ |  |  |  |  |  |

13. How many times in the last month have you ridden with a drunk or drinking driver?

| Frequency <br> Row Pct | -3 | 14-6 | \|7-10 | \| $>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 1162 79.97 | 140 9.64 | 52 3.58 | 99 6.81 | 1453 |
| Total | 1162 | 140 | 52 | 99 | 1453 |
| Frequency | issing |  |  |  |  |

14. How many of these times was the driver under 21?

| Frequency <br> Row Pct | $1-3$ | $14-6$ | $7-10$ | $\mid>10$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1994 | 997 | 94 | 45 | 96 | 1232 |

## Drinking and Driving

Questionnaire items 6, 7, 40, and 41 address, indirectly, drinking and driving or operating recreational vehicles. A substantial percentage (13.2\%) of students reported having been stopped by police with alcohol in the vehicle. For many of these (46.0\%), the alcohol was not found, but $23.5 \%$ were let go; for $10.2 \%$ the alcohol was poured out; and $20.2 \%$ were ticketed or arrested. Among the less than two-thirds who used recreational vehicles, the largest proportion of students used more than one vehicle, followed by ATV/dirt bike, snowmobile, and boat/jet ski. Most of those students ( $81.6 \%$ ) reported never drinking alcohol when using these vehicles.
6. While not in the company of an adult or your parent, have you ever been stopped by the police when there was alcohol in the vehicle?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 413 13.19 | 2717 86.81 | 3130 |
| Total | 413 | 2717 | 3130 |
| Frequency | Missing | $=67$ |  |

7. If yes, were you: ticketed/arrested alcohol offense, let go, alcohol not found, alcohol poured out, never happened?

| Frequency <br> Row Pct | Ticket/ arrest | Let go | Not found | Poured out | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 79 20.20 | 92 23.53 | 180 46.04 | 40 10.23 | 391 |
| Total | 79 | 92 | 180 | 40 | 391 |
| Frequency | Missing | 2806 |  |  |  |

40. Which of the following recreational vehicles do you use most often?

| Frequency <br> Row Pct | Boats/ <br> jet ski | Snowmobiles | $\left\|\begin{array}{c} \text { ATV/dirt } \\ \text { bike } \end{array}\right\|$ | Combination | $\left\lvert\, \begin{aligned} & \text { Do not } \\ & \text { use } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | $\begin{array}{r} 237 \\ 7.76 \end{array}$ | 427 13.98 | 502 16.44 | 712 23.31 | 1176 38.51 | 3054 |
| Total | 237 | 427 | 502 | 712 | 1176 | 3054 |

41. How often do you drink alcohol when using recreational vehicles?

| Frequency <br> Row Pct | Never | 12 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 1752 81.56 | 204 9.50 | 112 5.21 | 29 1.35 | 51 2.37 | 2148 |
| Total | 1752 | 204 | 112 | 29 | 51 | 2148 |
| Frequency | Missing | $=1049$ |  |  |  |  |

## GLADWIN COUNTY

## DEMOGRAPHICS

Two demographic variables were included in the questionnaire, school grade and sex. The 841 students who completed the survey in Gladwin County in 1994 and gave their grade included 272 ninth graders, 219 tenth graders, 205 eleventh graders, and 144 twelfth graders. In 1996, 809 students completed the survey and gave their grade: there were slightly more tenth graders, and fewer eleventh and twelfth graders. In 1994, $49.3 \%$ of the students were male, and in 1996, 51.5\% were male. The results for these questionnaire items (Questions 1 and 2) are reported in the tables just below.

1. What grade are you in?

2. Sex

| Frequency <br> Row Pct | Female |  |  |
| :--- | ---: | ---: | ---: |
| 1994 | 424 | 413 | 8 |
|  | 50.66 | 49.34 |  |
| 1996 | 391 | 415 | 806 |

Frequency Missing = 13

## Knowledge

Two areas of knowledge content were included in the questionnaire, the effects of alcohol consumption, and Michigan laws about alcohol.

## Alcohol Effects

Questionnaire items 3, 4, and 16 covered the effects of alcohol. Students' responses regarding the number of drinks it takes to become intoxicated in a one-hour time period (Question 3) covered the full range of response choices (1 to 7), with the largest proportions of students selecting 4 to 5 drinks in 1994 (39.2\%) and 2 to 3 drinks in 1996 (41.5\%). Students in the 1996 survey believed that one could become intoxicated with fewer drinks. Students' responses regarding the blood alcohol level at which a person's ability to drive becomes significantly impaired (Question 4) also covered the full range of response choices (. 03 to .10 ), with almost equal proportions of students selecting .03, . 05, and . 10 in 1994, and the greatest proportion selecting . 03 in 1996 (35.3\%). Again, students surveyed in 1996 seemed to believe that one's ability to drive could become significantly impaired at a lower blood alcohol level. Regarding which drink has more alcohol (Question 16), about half the students (49.8\%) gave the correct answer (all equal) in 1994, and substantially more (59.4\%) gave the correct answer in 1996. A mixed drink was the most common incorrect response ( $40.1 \%$ in 1994, $32.3 \%$ in 1996).
3. How many drinks over a one hour time period do you think it takes to become intoxicated?

| Frequency <br> Row Pct |  | \|2-3 | \|4-5 | \|6-7 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 95 11.52 | 261 31.64 | 323 39.15 | 146 17.70 | 825 |
| 1996 | 100 12.66 | 328 41.52 | 251 31.77 | 111 14.05 | 790 |
| Total | 195 | 589 | 574 | 257 | 1615 |
| Frequency | issing | 41 |  |  |  |

4. At what blood alcohol level does a normal person's ability to drive become significantly impaired?

| Frequency <br> Row Pct | 03 | 1.05 | 1.07 | 1.10 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 231 27.90 | 238 28.74 | 129 15.58 | 230 27.78 | 828 |
| 1996 | 275 35.26 | 204 26.15 | 112 14.36 | 189 24.23 | 780 |
| Total | 506 | 442 | 241 | 419 | 1608 |

16. Which has more alcohol?

| Frequency Row Pct | $\left\lvert\, \begin{aligned} & 1 \text { can } \\ & \text { beer } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 1 \text { glass } \\ & \text { wine } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 1 \text { mixed } \\ & \text { drink } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Al1 } \\ & \text { equal } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 43 5.14 | 41 4.90 | 336 40.14 | 417 49.82 | 837 |
| 1996 | 30 3.82 | 35 4.45 | 254 32.32 | 467 59.41 | 786 |
| Total | 73 | 76 | 590 | 884 | 1623 |
| Frequency | Missing | $=33$ |  |  |  |

## Alcohol Laws

Questionnaire items 5, 39, 44, 45, and 46 covered Michigan laws regarding alcohol impairment, purchase, and possession. The correct blood alcohol level for legal impairment for students' driving in 1994 (Question 5) was . 08, a level selected by only $7.4 \%$ of the students. However, $25.1 \%$ selected .02 (now correct for drivers under 21 , but not in 1994), and $35.6 \%$ selected . 10 , the level at which a person is legally drunk. In 1996, $39.9 \%$ of the students were correct in selecting . 02, although $30.2 \%$ still selected . 10 . Nonetheless, students in 1996 believed lower blood alcohol levels to represent legal impairment than did students in 1994. The majority of students ( 73.78 in 1994 and $75.0 \%$ in 1996) were correct in responding that it is against the law for a person under age 21 to attempt to purchase alcohol (Question 39). A smaller majority ( $62.6 \%$ in 1994 and $61.5 \%$ in 1996) were correct in responding that the primary reason Michigan raised the drinking age to 21 was traffic safety (Question 44). The majority of students ( $83.8 \%$ in 1994 and even more, $88.0 \%$ in 1996) knew that a person less than age 21 convicted of Operating Under the Influence of Liquor can be jailed (Question 45). Not quite two-thirds of the students (61.8\%) in 1994 knew that a person less than age 21 convicted of possession of an alcoholic beverage can be jailed for that offense (Question 46), but more knew the correct answer in 1996 (67.6\%).
5. At what blood alcohol level are you legally impaired for driving?

| Frequency <br> Row Pct | .02 |  | .04 | .06 | .08 | .10 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | Total

Frequency Missing $=48$
39. In Michigan, is it against the law for a person under the age of 21 to attempt to purchase alcohol?

44. What is the primary reason that Michigan raised the drinking age to 21 ?

TABLE OF SURVEY BY WHYAGE
SURVEY (Survey Year) WHYAGE(Survey Item 44)

| Frequency <br> Row Pct | Matthews Act | Moral issues | $\begin{aligned} & \text { Traffic } \\ & \text { safety } \end{aligned}$ | $\left\lvert\, \begin{aligned} & \text { Teen } \\ & \text { pregncy. } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 127 15.53 | 124 15.16 | 512 62.59 | 55 6.72 | 818 |
| 1996 | 149 19.87 | 106 14.13 | 461 61.47 | 34 4.53 | 750 |
| Total | 276 | 230 | 973 | 89 | 1568 |

45. Can a person less than age 21 convicted of Operating Under the Influence of Liquor be jailed for that offense?
$\left.\begin{array}{l|r|r|r}\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array} & \text { Yes } & \text { No } & \text { Total } \\ \hdashline 1994 & 691 & 134 & 825 \\ & & 83.76 & 16.24\end{array}\right)$
46. Can a person less than age 21 convicted of possession of an alcoholic beverage be jailed for that offense?

| Frequency <br> Row Pct$\|$ Yes | No | Total |  |
| :--- | ---: | ---: | ---: |
| 1994 | 509 | 315 | 824 |
|  | 61.77 | 38.23 |  |
| 1996 | 526 | 252 | 778 |
|  | 67.61 | 32.39 |  |
| Total | 1035 | 567 | 1602 |
| Frequency Missing $=54$ |  |  |  |

## Attitudes/Perceptions

Four areas of attitudes/perceptions were included in the questionnaire. They covered attitudes and perceptions regarding drinking, drinking and driving, enforcement, and morality.

## Drinking

Questionnaire items 19, 32, 35, 43, and 47 covered attitudes and perceptions regarding alcohol use. When asked for their most important concern regarding alcohol use (Question 19), the largest proportion of students in both years responded "being caught by police" (about 33 and 34\%), followed by "being caught by parents" (about 20 and 23\%). Perceptions of harm done "to your body with 5 or more drinks in a row" (Question 32) were generally high with very few students responding "no harm" (6.7\% in 1994 and 8.9\% in 1996). The punishment the greatest proportion of students wanted to avoid for drinking alcohol (Question 35) was jail (about 41\% both years), followed by "parents contacted by police" (26.6\%) in 1994, and interestingly, "loss of driver's license" (29.5\%) in 1996. Attitudes regarding the age at which a person should legally be permitted to drink alcohol (Question 43) ranged across the 17 to over 21 year-old choices, with the highest proportion of students selecting age 21 (33.1\%) in 1994 and age 18 (35.4\%) in 1996. Students reported in both years that their attitudes toward alcohol use were most influenced (Question 47) by their peer group (about 47\%) and their life experience (about 24 and 27\%).
19. In regard to alcohol use, which of the following is your most important concern?

| Frequency Row Pct | Parents catch | $\left\lvert\, \begin{aligned} & \text { Police } \\ & \text { catch } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Be alc- } \\ & \text { oholic } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Health } \\ & \text { concerns }\end{aligned}\right.$ | $\left\|\begin{array}{l} \text { No } \\ \text { concerns } \end{array}\right\|$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 165 20.17 | 273 33.37 | 110 13.45 | 159 19.44 | 111 13.57 | 818 |
| 1996 | 174 22.54 | 265 34.33 | 106 13.73 | 116 15.03 | 111 14.38 | 772 |
| Total | 339 | 538 | 216 | 275 | 222 | 1590 |
| Frequency | Missing | 66 |  |  |  |  |

32. How much harm do you think you are doing to your body with 5 or more drinks in a row?

| Frequency <br> Row Pct | No harm | 2 | 3 | 14 | Much harm | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 55 6.70 | 81 9.87 | 222 27.04 | 176 21.44 | 287 34.96 | 821 |
| 1996 | 68 8.94 | 81 10.64 | 208 27.33 | 168 22.08 | 236 31.01 | 761 |
| Total | 123 | 162 | 430 | 344 | 523 | 1582 |

35. If you were to drink alcohol, what punishment would you most want to avoid?

| Frequency Row Pct | Jail | $\left\lvert\, \begin{aligned} & \text { Comm. } \\ & \text { service }\end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Loss of } \\ & \text { license }\end{aligned}\right.$ | Notify parents | Fines | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 327 41.44 | 11 1.39 | 168 21.29 | 210 26.62 | 73 9.25 | 789 |
| 1996 | 307 41.10 | 16 2.14 | 220 29.45 | 162 21.69 | 42 5.62 | 747 |
| Total | 634 | 27 | 388 | 372 | 115 | 1536 |
| Frequency | Missing | 120 |  |  |  |  |

43. At what age should a person be permitted to drink alcoholic beverages legally?

| Frequency Row Pct | 17 | $\mid 18$ | $\mid 19$ | 120 | $\mid 21$ | \| $>21$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 116 13.98 | 262 31.57 | 47 5.66 | 34 4.10 | 275 33.13 | 96 11.57 | 830 |
| 1996 | 74 9.38 | 279 35.36 | 41 5.20 | 32 4.06 | 272 34.47 | 91 11.53 | 789 |
| Total | 190 | 541 | 88 | 66 | 547 | 187 | 1619 |

Frequency Missing $=37$
47. What is your attitude toward the use of alcohol most influenced by?

| Frequency <br> Row Pct | TV/ movies | Peer group | Family | Experience | $\left\lvert\, \begin{aligned} & \text { Adver- } \\ & \text { tising }\end{aligned}\right.$ | Music | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 46 5.84 | 369 46.89 | 89 11.31 | 188 23.89 | 71 9.02 | 24 3.05 | 787 |
| 1996 | 45 6.16 | 344 47.12 | 70 9.59 | 195 26.71 | 65 8.90 | 11 1.51 | 730 |
| Total | 91 | 713 | 159 | 383 | 136 | 35 | 1517 |

Frequency Missing $=139$

## Drinking and Driving

Questionnaire items 15, 17, 30, and 48 addressed attitudes and perceptions regarding drinking and driving. Students reported that they most likely would listen to warnings about drinking alcohol and driving (Question 15) from people who had been in a crash (about 50 and 47\%), friends or peers (about 27 and 31\%), and parents (about 15 and 16\%). In 1994, slightly over a third of the students ( $35.5 \%$ ) said they would be "not at all comfortable" riding with a driver who has had 3 beers in the last hour (Question 17), and in $199640.7 \%$ said they would be "not at all comfortable." When asked if before turning 21, they would be involved in a crash as a driver after drinking (Question 30), $11.3 \%$ in 1994 and $8.9 \%$ in 1996 said yes. If arrested for drunk driving (Question 48), in both years the largest proportions of students thought their friends would say nothing or that their friends would be upset at them but still remain friends. A surprising $20.5 \%$ in 1994 and $17.6 \%$ in 1996 thought their friends would congratulate them.
15. I would most likely listen to warnings about drinking alcohol and driving from:

| Frequency <br> Row Pct | Friends <br> or peers | Parents | Police <br> officers | People <br> in crash |
| :--- | :--- | :--- | :--- | :--- | Total

17. How comfortable are you riding with a driver who has had 3 beers in the last hour?

| Frequency Row Pct | $\left\lvert\, \begin{aligned} & \text { Not at } \\ & \text { all } \end{aligned}\right.$ | 12 | 3 | 4 | Very | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 295 35.46 | 141 16.95 | 189 22.72 | 112 13.46 | 95 11.42 | 832 |
| 1996 | 325 40.73 | 125 15.66 | 183 22.93 | 89 11.15 | 76 9.52 | 798 |
| Total | 620 | 266 | 372 | 201 | 171 | 1630 |
| Frequency | Missing | $=26$ |  |  |  |  |

30. Do you think that before you turn 21 you will be involved in a crash as a driver after you have been drinking?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 93 11.25 | 734 88.75 | 827 |
| 1996 | 69 8.88 | 708 91.12 | 777 |
| Total | 162 | 1442 | 1604 |
| Frequency | Missing | $=52$ |  |

48. If you were arrested for drunk driving, your friends probably would:

| Frequency <br> Row Pct | Congra- <br> tulate | Not be <br> friends | Say <br> nothing | Upset/be <br> friends |
| :--- | :--- | :--- | :--- | :--- | Total

[^2]
## Enforcement

Questionnaire items 36,37 , and 38 reflect students' perceptions about enforcement of alcohol laws in their county. Only about 7 and $8 \%$ felt that a person under age 21 would "always" be arrested for possessing alcohol in public. Only about $4 \%$ in both years felt that parties where guests under age 21 are drinking alcohol are "always" broken up by police, while $14.5 \%$ in 1994 and $21.0 \%$ in 1996 thought that parties were "never" broken up by police. And only about 4 and $5 \%$ felt that a person under age 21 who drinks and drives is "always" arrested.
36. When a person under age 21 in your county has alcoholic beverages in his or her possession in public, how often do you think that person is arrested for a "minor in possession" offense?

37. When there are parties in your county where guests under age 21 are drinking alcoholic beverages, how often are these parties broken up by police?

| Frequency <br> Row Pct | Never | \| 2 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 120 14.48 | 356 42.94 | 240 28.95 | 77 9.29 | 36 4.34 | 829 |
| 1996 | 163 21.03 | 341 44.00 | 182 23.48 | 61 7.87 | 28 3.61 | 775 |
| Total | 283 | 697 | 422 | 138 | 64 | 1604 |

Frequency Missing $=52$
38. When a person under age 21 in your county has been drinking alcoholic beverages then drives, how often is he or she arrested for a drinking and driving offense?

| Frequency <br> Row Pct | Never | 12 | 13 | 14 | \| Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 107 12.95 | 331 40.07 | 268 32.45 | 89 10.77 | 31 3.75 | 826 |
| 1996 | 76 9.86 | 306 39.69 | 273 35.41 | 79 10.25 | 37 4.80 | 771 |
| Total | 183 | 637 | 541 | 168 | 68 | 1597 |

## Morality

Questionnaire items 49 - 52 dealt with how wrong students felt various alcohol-related behaviors to be. In each case and in each year, the largest percentages, but not necessarily the majority, of students chose "wrong" rather than other response options graded toward "acceptable." Students felt it is wrong to drive under the influence (53.6 and 56.0\%), to be a minor in possession of alcohol (30.6 and 32.6\%), to be a minor and attempt to purchase alcohol (30.7 and 32.4\%), and to provide alcohol to minors (40.4 and 45.6\%).
49. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Driving under the influence:

| Frequency <br> Row Pct | Wrong | 2 | 3 | 4 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 445 53.55 | 150 18.05 | 141 16.97 | 41 4.93 | 54 6.50 | 831 |
| 1996 | 442 55.95 | 132 16.71 | 145 18.35 | 31 3.92 | 40 5.06 | 790 |
| Total | 887 | 282 | 286 | 72 | 94 | 1621 |

Frequency Missing $=35$
50. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Minor in possession of alcohol:

| Frequency Row Pct | Wrong | 2 | 3 | 4 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | $\begin{array}{r} 254 \\ 30.57 \end{array}$ | 138 16.61 | 204 24.55 | 118 14.20 | 117 14.08 | 831 |
| 1996 | 256 32.57 | 148 18.83 | 182 23.16 | 107 13.61 | 93 11.83 | 786 |
| Total | 510 | 286 | 386 | 225 | 210 | 1617 |

Frequency Missing $=39$
51. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Minor attempting to purchase alcohol:

| Frequency <br> Row Pct | Wrong | 2 | 3 | 4 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 256 30.73 | 141 16.93 | 204 24.49 | 107 12.85 | 125 15.01 | 833 |
| 1996 | 254 32.36 | 144 18.34 | 189 24.08 | 92 11.72 | 106 13.50 | 785 |
| Total | 510 | 285 | 393 | 199 | 231 | 1618 |

52. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Providing alcohol to minors:

| Frequency <br> Row Pct | Wrong | 2 | 13 | 4 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | $\begin{array}{r} 336 \\ 40.38 \end{array}$ | 113 13.58 | 180 21.63 | 91 10.94 | 112 13.46 | 832 |
| 1996 | 359 45.56 | 101 12.82 | 161 20.43 | 82 10.41 | 85 10.79 | 788 |
| Total | 695 | 214 | 341 | 173 | 197 | 1620 |

Frequency Missing $=36$

## Behavior

Five behavioral areas were addressed in the questionnaire. They included parents' behavior, and students' drinking alcohol, obtaining alcohol, riding with a drinking driver, and drinking and driving.

## Parents

Questionnaire items $8,9,10,11,18$, and 29 covered various aspects of parents' behavior as perceived by the students. A majority of students (about 62\%) reported that their parents had talked to them regarding their attitudes about drinking and about teenage drinking in general (about 61\%). In 1994, $63.5 \%$ and in $199657.0 \%$ of the students reported that their parents drank alcohol. Among those who answered the question regarding the frequency of a parent's intoxication, about 21 and $24 \%$ reported intoxication "never" occurring. If caught drinking by parents, about half the students ( 46 and 51\%) felt that they would be punished severely. In an item that obliquely asks about parents' monitoring of teens' alcohol behavior (Question 29), a surprising 36 and $39 \%$ of the students reported that they can "always" hide their drinking from their parents, while 26 and $28 \%$ can "never" hide their drinking from their parents.
8. Have your parents talked to you regarding your attitudes about drinking?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 520 62.73 | 309 37.27 | 829 |
| 1996 | 495 62.42 | 298 37.58 | 793 |
| Total | 1015 | 607 | 1622 |
| Frequency | Missing | $=34$ |  |

9. Have your parents talked to you about teenage drinking in general?

| Frequency <br> Row Pct | Yes | No | Total |
| :--- | ---: | ---: | ---: |
| 1994 | 513 | 322 | 835 |
|  | 61.44 | 38.56 |  |
| 1996 | 490 | 313 | 803 |
|  | 61.02 | 38.98 |  |
| Total | 1003 | 635 | 1638 |
| Frequency Missing $=18$ |  |  |  |

10. Do your parents (or guardian) drink alcohol?

| Frequency <br> Row Pct$\|$ Yes | No | Total |  |
| :--- | ---: | ---: | ---: |
| 1994 | 359 | 206 | 565 |
|  | 63.54 | 36.46 |  |
| 1996 | 352 | 265 | 617 |
|  | 57.05 | 42.95 |  |
| Total | 711 | 471 | 1182 |
| Frequency Missing $=474$ |  |  |  |

11. If yes, think about your parent or guardian that drinks most often. How often do they become intoxicated?

| Frequency <br> Row Pct | Never | $\left\lvert\, \begin{aligned} & \text { Once } \\ & \text { year } \end{aligned}\right.$ | Once month | Once <br> week | $\left\lvert\, \begin{aligned} & \text { Once } \\ & \text { day } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 78 21.37 | 112 30.68 | 74 20.27 | 61 16.71 | 40 10.96 | 365 |
| 1996 | 86 23.89 | 96 26.67 | 69 19.17 | 68 18.89 | 41 11.39 | 360 |
| Total | 164 | 208 | 143 | 129 | 81 | 725 |
| Frequency | Missing | $=931$ |  |  |  |  |

18. If my parents (or guardian) catch me drinking, they will:

| Frequency <br> Row Pct | Do nothing | $\left\lvert\, \begin{aligned} & \text { Do very } \\ & \text { little } \end{aligned}\right.$ | $\begin{aligned} & \text { Punish } \\ & \text { lightly } \end{aligned}$ | $\left\|\begin{array}{l} \text { Punish } \\ \text { severely } \end{array}\right\|$ | Get help\| | Not know | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 89 10.80 | 100 12.14 | 145 17.60 | 382 46.36 | 38 4.61 | 70 8.50 | 824 |
| 1996 | 72 9.15 | 83 10.55 | 131 16.65 | 401 50.95 | 30 3.81 | 70 8.89 | 787 |
| Total | 161 | 183 | 276 | 783 | 68 | 140 | 1611 |

Frequency Missing $=45$
29. On a scale of 1 to 5, how often can you hide your drinking from your parents?

| Frequency <br> Row Pct | Never | \| 2 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 204 27.79 | 52 7.08 | 94 12.81 | 123 16.76 | 261 35.56 | 734 |
| 1996 | 177 26.14 | 46 6.79 | 91 13.44 | 98 14.48 | 265 39.14 | 677 |
| Total | 381 | 98 | 185 | 221 | 526 | 1411 |
| Frequency | Missing | $=245$ |  |  |  |  |

## Drinking Alcohol

Students' own drinking behavior was characterized by responses to items 20 , 27, 28, 31, 33, and 34. More than half the students overall (59.8\% in 1994, and $54.9 \%$ in 1996) said they drank alcohol. Of those who drank, the largest percentage reported drinking $1-3$ drinks/day (but no response choice was offered for less than one drink a day, for instance one drink a week or month), and drinking less than once a week. In response to the item inquiring about number of times students drank 5 or more drinks in a row in the last month (Question 31), most students (63.1 and 68.8\%) said none; however, 21 and $22 \%$ said 1 - 5 times, with smaller percentages in the higher frequency categories. Most students who drank reported beer as their usual alcoholic beverage, and weekends as their usual drinking time.
20. Do you drink alcoholic beverages?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 502 59.83 | 337 40.17 | 839 |
| 1996 | 435 54.85 | 358 45.15 | 793 |
| Total | 937 | 695 | 1632 |

27. When you drink, how many drinks do you have in a day?

| Frequency <br> Row Pct | 1-3 | 4-6 | 17-10 | 1>10 | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 174 21.30 | 124 15.18 | 97 11.87 | 117 14.32 | 305 37.33 | 817 |
| 1996 | 157 20.05 | 114 14.56 | 86 10.98 | 84 10.73 | 342 43.68 | 783 |
| Total | 331 | 238 | 183 | 201 | 647 | 1600 |
| Frequency | Missing | 56 |  |  |  |  |

28. How many times a week do you drink?

| Frequency <br> Row Pct | <1 | 11 | 12 | 3-5 | $\mid>5$ | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 251 30.76 | 86 10.54 | 92 11.27 | 46 5.64 | 35 4.29 | 306 37.50 | 816 |
| 1996 | 239 30.52 | 60 7.66 | 78 9.96 | 34 4.34 | 27 3.45 | 345 44.06 | 783 |
| Total | 490 | 146 | 170 | 80 | 62 | 651 | 1599 |
| Frequency | Missing | $=57$ |  |  |  |  |  |

31. How many times in the last month did you have 5 or more drinks in a row?

| Frequency <br> Row Pct |  | \|1-5 | \|6-10 | \|11-15 | \|>15 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 525 63.10 | 184 22.12 | 53 6.37 | 20 2.40 | 50 6.01 | 832 |
| 1996 | $\begin{array}{r} 540 \\ 68.79 \end{array}$ | 166 21.15 | 34 4.33 | 13 1.66 | 32 4.08 | 78 |
| Total | 1065 | 35 | 87 | 33 | 82 |  |

Frequency Missing $=39$
33. What alcoholic beverage do you usually drink?

| Frequency <br> Row Pct | Beer | Liquor | Wine | $\left\lvert\, \begin{aligned} & \text { Wine } \\ & \text { cooler }\end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 251 31.97 | 128 16.31 | 11 1.40 | 93 11.85 | 302 38.47 | 785 |
| 1996 | 188 25.44 | 126 17.05 | 1. 22 | 92 12.45 | 324 43.84 | 739 |
| Total | 439 | 254 | 20 | 185 | 626 | 1524 |
| Frequency | Missing | 132 |  |  |  |  |

34. When do you normally drink?

| Frequency <br> Row Pct | Weekday <br> mornings | Weekday <br> days | Weekday <br> evenings | Weekends | Non- <br> drinker |
| :--- | ---: | ---: | ---: | ---: | ---: | Total

Frequency Missing = 82

## Obtaining Alcohol

Questionnaire items 21-26 asked students about their behavior related to obtaining alcohol. There are a fair number of missing responses on some of these items, perhaps from students who were younger or had no experience with obtaining alcohol. Over one-third of the students (36.9 and 38.8\%) felt that it was easy for them to obtain alcohol (Question 21). While just over half the students ( $51.4 \%$ in 1994 and $55.5 \%$ in 1996) had not attempted to obtain alcohol in the last month (Question 22), about 30 and $33 \%$ had done so $1-5$ times, $9 \%$ in 1994 and $6 \%$ in 1996 had done so $6-10$ times, and $9.9 \% 1994$ and $5.7 \%$ in 1996 had done so more than 10 times. A substantial portion of students were able to obtain alcohol (Question 23) in the last month (about 35\% 1 - 5 times, 8 and $10 \% 6-10$ times, and 7 and $10 \%$ more than 10 times. For those who responded about how they obtain alcohol (Question 24), the most frequently reported source was an adult's buying, followed by an underage friend's buying. A false ID card showing age 21 or over was possessed by 5 and $6 \%$ of the students. For those who responded about where they obtain alcohol (Question 26), it usually came from a party store, "other source," or home.
21. On a scale of 1 to 5 how easy is it for you to obtain alcohol?

| Frequency Row Pct | Easy | 12 | 3 | 4 | $\left\lvert\, \begin{aligned} & \text { Diffi- } \\ & \text { cult }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 317 38.75 | 180 22.00 | 160 19.56 | 72 8.80 | 89 10.88 | 818 |
| 1996 | 287 36.94 | 172 22.14 | 171 22.01 | 66 8.49 | 81 10.42 | 777 |
| Total | 604 | 352 | 331 | 138 | 170 | 1595 |

22. How many times in the last month have you attempted to obtain alcohol?

| Frequency <br> Row Pct |  | 1-5 | 16-10 | $1>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 431 51.43 | 249 29.71 | 75 8.95 | 83 9.90 | 838 |
| 1996 | 441 55.47 | 261 32.83 | 48 6.04 | 45 5.66 | 795 |
| Total | 872 | 510 | 123 | 128 | 1633 |
| Frequency | issing | 23 |  |  |  |

23. How many times were you able to obtain alcohol in the last month?

| Frequency Row Pct | 0 | 1-5 | 16-10 | $1>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 366 44.42 | 292 35.44 | 81 9.83 | 85 10.32 | 824 |
| 1996 | 377 48.46 | 279 35.86 | 64 8.23 | 58 7.46 | 778 |
| Total | 743 | 571 | 145 | 143 | 1602 |
| Frequency | Missing | $=54$ |  |  |  |

24. How do you normally obtain alcohol?

| Frequency <br> Row Pct | Parent | \| Underage | Stranger | Self | $\begin{aligned} & \text { Older } \\ & \text { sibling } \end{aligned}$ | Adult | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 36 4.69 | 103 13.41 | 18 2.34 | 25 3.26 | 38 4.95 | 273 35.55 | 275 35.81 | 768 |
| 1996 | 34 4.74 | 66 9.19 | 16 2.23 | 24 3.34 | 42 5.85 | 236 32.87 | 300 41.78 | 718 |
| Total | 70 | 169 | 34 | 49 | 80 | 509 | 575 | 1486 |

Frequency Missing $=170$
25. Do you have a false I.D. card that shows you to be 21 or over?

| Frequency <br> Row Pct | Yes | \|No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 53 6.32 | 785 93.68 | 838 |
| 1996 | 43 5.42 | 750 94.58 | 793 |
| Total | 96 | 1535 | 1631 |
| Frequency | Missing | $=25$ |  |

26. Where do you normally obtain your alcohol?

| Frequency <br> Row Pct | Party store | Bar | $\begin{aligned} & \text { Grocery } \\ & \text { store } \end{aligned}$ | Home | $\left\|\begin{array}{l} \text { School } \\ \text { property } \end{array}\right\|$ | Nondrinker | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 264 34.20 | 8 1.04 | 39 5.05 | 81 10.49 | 12 1.55 | 247 31.99 | 121 15.67 | 772 |
| 1996 | 206 28.45 | 7 0.97 | 34 4.70 | 79 10.91 | 18 2.49 | 269 37.15 | 111 15.33 | 724 |
| Total | 470 | 15 | 73 | 160 | 30 | 516 | 232 | 1496 |

[^3]
## Riding with Drinking Driver

Questionnaire items 12 - 14 asked students about their experiences riding with a drunk or drinking driver. Less than half the students (36.3 and 42.2\%) reported never having this experience, while 19.0 and $21.2 \%$ reported doing so in the last week, about $18 \%$ in the last month, and 20.8 and $23.5 \%$ in the last year. Among those who answered Questions 13 and 14 regarding riding with a drunk or drinking driver in the last month, most ( 68 and 74\%) reported this to have happened 1 - 3 times, and most often ( 68.6 and $76.5 \%$ ) with a driver under age 21.
12. How recently have you driven with a drunk or drinking driver? In the past:

| Frequency |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Row Pct | Year | Month | \|Week | \|Never | Total |
| 1994 | 195 | 157 | 176 | 301 | 829 |
|  | 23.52 | 18.94 | 21.23 | 36.31 |  |
| 1996 | 166 | 144 | 151 | 336 | 797 |
|  | 20.83 | 18.07 | 18.95 | 42.16 |  |
| Total | 361 | 301 | 327 | 637 | 1626 |

Frequency Missing $=30$
13. How many times in the last month have you ridden with a drunk or drinking driver?

| Frequency <br> Row Pct | 1-3 | \|4-6 | \|7-10 | \| $>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 332 68.03 | 62 12.70 | 30 6.15 | 64 13.11 | 488 |
| 1996 | 307 73.98 | 47 11.33 | 16 3.86 | 45 10.84 | 415 |
| Total | 639 | 109 | 46 | 109 | 903 |
| Frequency | Missing | $=753$ |  |  |  |

14. How many of these times was the driver under 21 ?

| Frequency <br> Row Pct | 1-3 | \|4-6 | \|7-10 | \| $>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 302 68.64 | 59 13.41 | 16 3.64 | 63 14.32 | 440 |
| 1996 | 273 76.47 | 34 9.52 | 10 2.80 | 11.20 | 357 |
| Total | 575 | 93 | 26 | 103 | 797 |
| Frequency | Missing | $=859$ |  |  |  |

## Drinking and Driving

Questionnaire items 6, 7, 40, and 41 address, indirectly, drinking and driving or operating recreational vehicles. A substantial percentage (21.5\% in 1994 and $17.4 \%$ in 1996) of students reported having been stopped by police with alcohol in the vehicle. For about half of those students (47.6 and 50.4\%), the alcohol was not found; 22.6 and $29.8 \%$ were let go; and in 1994, $22.0 \%$ were ticketed or arrested, with that percentage at 13.7 in 1996. Among the approximately two-thirds who used recreational vehicles, most used more than one vehicle, followed by ATV/dirt bikes, snowmobiles, and boat/jet skis. About three-quarters of those (72.5 and 75.5\%) reported never drinking alcohol when using these vehicles.
6. While not in the company of an adult or your parent, have you ever been stopped by the police when there was alcohol in the vehicle?

| Frequency Row Pct | Yes | No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 179 21.46 | 655 78.54 | 834 |
| 1996 | 139 17.38 | 661 82.63 | 800 |
| Total | 318 | 1316 | 1634 |

7. If yes, were you: ticketed/arrested alcohol offense, let go, alcohol not found, alcohol poured out, never happened?

| Frequency <br> Row Pct | Ticket/ <br> arrest | Let go | Not <br> found | Poured <br> out |
| :--- | ---: | ---: | ---: | ---: | Total

Frequency Missing $=1361$
40. Which of the following recreational vehicles do you use most often?

| Frequency <br> Row Pct | Boats/ <br> jet ski | Snowmobiles | $\left\lvert\, \begin{aligned} & \text { ATV/dirt } \\ & \text { bikes } \end{aligned}\right.$ | Combination | $\begin{aligned} & \text { Do not } \\ & \text { use } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 104 12.70 | 74 9.04 | 134 16.36 | 227 27.72 | 280 34.19 | 819 |
| 1996 | 115 14.88 | 66 8.54 | 125 16.17 | 215 27.81 | 252 32.60 | 773 |
| Total | 219 | 140 | 259 | 442 | 532 | 1592 |

41. How often do you drink alcohol when using recreational vehicles?

| Frequency <br> Row Pct | Never | $\mid 2$ | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 428 72.54 | 62 10.51 | 54 9.15 | 22 3.73 | 24 4.07 | 590 |
| 1996 | 435 75.52 | 54 9.38 | 38 6.60 | 21 3.65 | 28 4.86 | 576 |
| Total | 863 | 116 | 92 | 43 | 52 | 1166 |
| Frequency | Missing | $=490$ |  |  |  |  |

## MARQUETTE COUNTY

## Demographics

Two demographic variables were included in the questionnaire, school grade and sex. The 910 students who completed the survey in Marquette County in 1994 and gave their grade included 333 seventh-eighth graders, 195 ninth graders, 139 tenth graders, 125 eleventh graders, and 118 twelfth graders. In 1996, 1,022 students completed the survey and gave their grade: there were more seventh-eighth graders and ninth graders. In both years, about $52 \%$ of the students were male. The results for these questionnaire items (Questions 1 and 2) are reported in the tables just below.

1. What grade are you in?

| Frequency <br> Row Pct | 7-8 | 9 | 10 | 11 | 12 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 333 36.59 | 195 21.43 | 139 15.27 | 125 13.74 | 118 12.97 | 910 |
| 1996 | 403 39.43 | 238 23.29 | 129 12.62 | 129 12.62 | 123 12.04 | 1022 |
| Total | 736 | 433 | 268 | 254 | 241 | 1932 |

2. Sex

| Frequency <br> Row Pct | Female | \|Male | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 437 48.23 | 469 51.77 | 906 |
| 1996 | 486 47.60 | 535 52.40 | 1021 |
| Total | 923 | 1004 | 1927 |
| Frequency | Missing | $=5$ |  |

## KNOWLEDGE

Two areas of knowledge content were included in the questionnaire, the effects of alcohol consumption, and Michigan laws about alcohol.

## Alcohol Effects

Questionnaire items 3, 4, and 16 covered the effects of alcohol. Students' responses regarding the number of drinks it takes to become intoxicated in a one-hour time period (Question 3) resulted in the full range of response choices (1 to 7), with the greatest proportion of students in both years selecting 2 to 3 drinks and 4 to 5 drinks. Students' responses regarding the blood alcohol level at which a person's ability to drive becomes significantly impaired (Question 4) also resulted in the full range of response choices (.03 to .10), with the greatest proportion selecting . 05 in 1994 (34.2\%), and . 03 in 1996 (29.5\%). The students surveyed in 1996 believed that one's ability to drive could become significantly impaired at a lower blood alcohol level than did the 1994 students. Regarding which drink has more alcohol (Question 16), less than half the students (47.4\%) gave the correct answer (all equal) in 1994, and fewer (45.3\%) gave the correct answer in 1996. A mixed drink was the most common incorrect response (about $39 \%$ both years).
3. How many drinks over a one hour time period do you think it takes to become intoxicated?

| Frequency |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Row Pct | 1 | $\mid 2-3$ | $\mid 4-5$ | $6-7$ | Total |
| 1994 | 85 | 342 | 333 | 125 | 885 |

Frequency Missing $=49$
4. At what blood alcohol level does a normal person's ability to drive become significantly impaired?

| Frequency <br> Row Pct | . 03 | 1.05 | 1.07 | 1.10 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 179 20.32 | 301 34.17 | 144 16.35 | 257 29.17 | 881 |
| 1996 | 290 29.50 | 271 27.57 | 148 15.06 | 274 27.87 | 983 |
| Total | 469 | 572 | 292 | 531 | 1864 |
| Frequency | Missing | $=68$ |  |  |  |

16. Which has more alcohol?

| Frequency <br> Row Pct | 1 can beer | $\left\lvert\, \begin{aligned} & 1 \text { glass } \\ & \text { wine } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 1 \text { mixed } \\ & \text { drink } \end{aligned}\right.$ | All equal | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 64 7.14 | 58 6.47 | 349 38.95 | 425 47.43 | 896 |
| 1996 | 73 7.29 | 78 7.79 | 397 39.66 | 453 45.25 | 1001 |
| Total | 137 | 136 | 746 | 878 | 1897 |

Frequency Missing = 35

## Alcohol Laws

Questionnaire items 5, 39, 44, 45, and 46 covered Michigan laws regarding alcohol impairment, purchase, and possession. The correct blood alcohol level for legal impairment for students' driving in 1994 (Question 5) was .08, a level selected by only $6.1 \%$ of the students in that year. However, $27.7 \%$ selected . 02 (now correct for persons under 21, but not in 1994), and 38.4\% selected .10, the level at which a person is legally drunk. In 1996, 39.5\% of the students were correct in selecting . 02, although $31.8 \%$ selected .10 . Nonetheless, students in 1996 believed lower blood alcohol levels to represent legal impairment than did students in 1994. The majority of students (75.8\% in 1994 and an even higher $80.6 \%$ in 1996) were correct in responding that it is against the law for a person under age 21 to attempt to purchase alcohol (Question 39). A smaller majority ( $63.9 \%$ in 1994 and $66.2 \%$ in 1996) were correct in responding that the primary reason Michigan raised the drinking age to 21 was traffic safety (Question 44). The majority of students ( $86.0 \%$ in 1994 and $83.6 \%$ in 1996) knew that a person less than age 21 convicted of Operating Under the Influence of Liquor can be jailed (Question 45). Less than two-thirds of the students (60.1\% in 1994 and $63.2 \%$ in 1996 knew that a person under age 21 convicted of possession of an alcoholic beverage can be jailed for that offense (Question 46).
5. At what blood alcohol level are you legally impaired for driving?

| Frequency <br> Row Pct | 02 | 1.04 | 1.06 | 1.08 | 1.10 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 241 27.67 | 148 16.99 | 95 10.91 | 53 6.08 | 334 38.35 | 871 |
| 1996 | 385 39.49 | 123 12.62 | 83 8.51 | 74 7.59 | 310 31.79 | 975 |
| Total | 626 | 271 | 178 | 127 | 644 | 1846 |

Frequency Missing $=86$
39. In Michigan, is it against the law for a person under the age of 21 to attempt to purchase alcohol?
$\left.\begin{array}{l|r|r|r}\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array} \text { Yes } & \text { |No } & \text { Total } \\ \hdashline 1994 & 687 & 219 & 906 \\ & & 75.83 & 24.17\end{array}\right)$
44. What is the primary reason that Michigan raised the drinking age to 21 ?

| Frequency <br> Row Pct | Matthews Act | Moral issue | $\left\lvert\, \begin{aligned} & \text { Traffic } \\ & \text { safety } \end{aligned}\right.$ | Teen pregncy. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 102 11.62 | 169 19.25 | 561 63.90 | 46 5.24 | 878 |
| 1996 | 108 11.01 | 165 16.82 | 649 66.16 | 59 6.01 | 981 |
| Total | 210 | 334 | 1210 | 105 | 1859 |
| Frequency | Missing $=$ | $=73$ |  |  |  |

45. Can a person less than age 21 convicted of Operating Under the Influence of Liquor be jailed for that offense?

| Frequency <br> Row Pct | Yes | \|No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 771 85.95 | 126 14.05 | 897 |
| 1996 | 838 83.63 | 164 16.37 | 1002 |
| Total | 1609 | 290 | 1899 |
| Frequency | Missing | $=33$ |  |

46. Can a person less than age 21 convicted of possession of an alcoholic beverage be jailed for that offense?

| Frequency |  |  |  |
| :--- | ---: | ---: | ---: |
| Row Pct | Yes | No | Total |
| 1994 | 537 | 356 | 893 |

## Attitudes/Perceptions

Four areas of attitudes/perceptions were included in the questionnaire. They covered attitudes and perceptions regarding drinking, drinking and driving, enforcement, and morality.

## Drinking

Questionnaire items 19, 32, 35, 43, and 47 covered attitudes and perceptions regarding alcohol use. When asked for their most important concern regarding alcohol use (Question 19), the most common responses of students in both years were "being caught by police" and "being caught by parents" (25 and 26\%). Perceptions of harm done "to your body with 5 or more drinks in a row" (Question 32) were generally high with very few students responding "no harm" ( $4.8 \%$ in 1994 and $6.0 \%$ in 1996). The punishment the greatest proportion of students wanted to avoid for drinking alcohol (Question 35) was jail (about $38 \%$ both survey years), followed by "parents contacted by police" (about 28\% in both years), and "loss of license" (23 and $24 \%$ in both years). Attitudes regarding the age at which a person should legally be permitted to drink alcohol (Question 43) ranged across the 17 to over 21 year-old choices, with the greatest proportion of students selecting age 21 ( 38 and $39 \%$ in both years) and age 18 ( 26 and $30 \%$ in both years). Students reported in both years that their attitudes toward alcohol use were most influenced (Question 47) by their peer group (about 40 and $43 \%$ ) and their life experience (about 22 and 24\%).
19. In regard to alcohol use, which of the following is your most important concern?

| Frequency <br> Row Pct | Parents catch | $\left\lvert\, \begin{aligned} & \text { Police } \\ & \text { catch } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Be alc- } \\ & \text { oholic } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Health } \\ & \text { concerns }\end{aligned}\right.$ | $\left\|\begin{array}{l} \text { No } \\ \text { concerns } \end{array}\right\|$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | $\begin{array}{r} 224 \\ 25.66 \end{array}$ | 222 25.43 | 151 17.30 | 185 21.19 | 10.42 | 873 |
| 1996 | 257 26.41 | 250 25.69 | 160 16.44 | 219 22.51 | 87 8.94 | 973 |
| Total | 481 | 472 | 311 | 404 | 178 | 1846 |
| Frequency | Missing | $=86$ |  |  |  |  |

32. How much harm do you think you are doing to your body with 5 or more drinks in a row?

| Frequency <br> Row Pct | No harm | 2 | 13 | 14 | $\left\lvert\, \begin{aligned} & \text { Much } \\ & \text { harm }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 42 4.78 | 63 7.17 | 187 21.27 | 208 23.66 | 379 43.12 | 879 |
| 1996 | 58 5.98 | 81 8.35 | 213 21.96 | 204 21.03 | 414 42.68 | 970 |
| Total | 100 | 144 | 400 | 412 | 793 | 1849 |
| Frequency | Missing | 83 |  |  |  |  |

35. If you were to drink alcohol, what punishment would you most want to avoid?

| Frequency <br> Row Pct | Jail | $\left\lvert\, \begin{aligned} & \text { Comm. } \\ & \text { service }\end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Loss of } \\ & \text { license }\end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Notify } \\ & \text { parents }\end{aligned}\right.$ | Fines | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | $\begin{array}{r} 340 \\ 38.42 \end{array}$ | 28 3.16 | 205 23.16 | 245 27.68 | 67 7.57 | 885 |
| 1996 | 373 37.83 | 38 3.85 | 233 23.63 | 278 28.19 | 64 6.49 | 986 |
| Total | 713 | 66 | 438 | 523 | 131 | 1871 |
| Frequency | Missing | $=61$ |  |  |  |  |

43. At what age should a person be permitted to drink alcoholic beverages legally?

| Frequency Row Pct | 17 | 118 | 119 | 120 | $\mid 21$ | \| $>21$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 79 8.78 | 268 29.78 | 42 4.67 | 27 3.00 | 349 38.78 | 135 15.00 | 900 |
| 1996 | 116 11.47 | 266 26.31 | 60 5.93 | 43 4.25 | 385 38.08 | 141 13.95 | 1011 |
| Total | 195 | 534 | 102 | 70 | 734 | 276 | 1911 |

47. What is your attitude toward the use of alcohol most influenced by?

| Frequency Row Pct | $\left\lvert\, \begin{aligned} & \text { TV/ } \\ & \text { movies } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Peer } \\ & \text { group } \end{aligned}\right.$ | Family | $\left\lvert\, \begin{aligned} & \text { Exper- } \\ & \text { ience } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Adver- } \\ & \text { tising }\end{aligned}\right.$ | Music | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 85 9.88 | 372 43.26 | 93 10.81 | 192 22.33 | 109 12.67 | 1.05 | 860 |
| 1996 | 93 9.79 | 379 39.89 | 97 10.21 | 226 23.79 | 130 13.68 | 25 2.63 | 950 |
| Total | 178 | 751 | 190 | 418 | 239 | 34 | 1810 |
| Frequency | Missing | $=122$ |  |  |  |  |  |

## Drinking and Driving

Questionnaire items $15,17,30$, and 48 addressed attitudes and perceptions regarding drinking and driving. Students reported that they most likely would listen to warnings about drinking alcohol and driving (Question 15) from people who had been in a crash ( 48 and 56\%), parents ( 20 and 24\%), and friends/peers (18 and 21\%). In both survey years, over a third of the students (about 39 and $40 \%$ ) said they would be "not at all comfortable" riding with a driver who has had 3 beers in the last hour (Question 17). When asked if before turning 21, they would be involved in a crash as a driver after drinking (Question 30 ), 9 and $10 \%$ said yes each year. If arrested for drunk driving (Question 48), in both years the greatest proportions of students thought that their friends would be upset at them but still remain friends, or say nothing.
15. I would most likely listen to warnings about drinking alcohol and driving from:

| Frequency <br> Row Pct | Friends <br> or peers | Parents | Police <br> officers | People <br> in crash |
| :--- | ---: | ---: | ---: | ---: | Total

17. How comfortable are you riding with a driver who has had 3 beers in the last hour?

| Frequency <br> Row Pct | Not at all | 2 | 3 | 14 | Very | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 354 39.25 | 175 19.40 | 185 20.51 | 103 11.42 | 85 9.42 | 902 |
| 1996 | 400 39.53 | 209 20.65 | 216 21.34 | 103 10.18 | 84 8.30 | 1012 |
| Total | 754 | 384 | 401 | 206 | 169 | 1914 |
| Frequency | Missing | 18 |  |  |  |  |

30. Do you think that before you turn 21 you will be involved in a crash as a driver after you have been drinking?

31. If you were arrested for drunk driving, your friends probably would:

| Frequency <br> Row Pct | Congra- <br> tulate | Not be <br> friends | Say <br> nothing | Upset/be <br> friends |
| :--- | ---: | ---: | ---: | ---: | Total

Frequency Missing $=50$

## Enforcement

Questionnaire items 36,37 , and 38 reflect students' perceptions about enforcement of alcohol laws in their county. Only 9 and $12 \%$ felt that a person under age 21 would "always" be arrested for possessing alcohol in public. Only about $3 \%$ felt that parties where guests under age 21 are drinking alcohol are "always" broken up by police. Only about 6 and $8 \%$ felt that a person under age 21 who drinks and drives is "always" arrested.
36. When a person under age 21 in your county has alcoholic beverages in his or her possession in public, how often do you think that person is arrested for a "minor in possession" offense?

| Frequency <br> Row Pct | Never | \| 2 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 90 10.06 | 245 27.37 | 333 37.21 | 145 16.20 | 82 9.16 | 895 |
| 1996 | 91 9.08 | 273 27.25 | 353 35.23 | 162 16.17 | 123 12.28 | 1002 |
| Total | 181 | 518 | 686 | 307 | 205 | 1897 |
| Frequency | Missing | $=35$ |  |  |  |  |

37. When there are parties in your county where guests under age 21 are drinking alcoholic beverages, how often are these parties broken up by police?

| Frequency <br> Row Pct | Never | 12 | 13 | 14 | \| Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 147 16.57 | 353 39.80 | 263 29.65 | 97 10.94 | 27 3.04 | 887 |
| 1996 | 159 16.22 | 382 38.98 | 311 31.73 | 99 10.10 | 29 2.96 | 980 |
| Total | 306 | 735 | 574 | 196 | 56 | 1867 |
| Frequency | Missing | $=65$ |  |  |  |  |

38. When a person under age 21 in your county has been drinking alcoholic beverages then drives, how often is he or she arrested for a drinking and driving offense?

| Frequency <br> Row Pct | Never | 12 | 13 | \| 4 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 82 9.23 | 300 33.78 | 296 33.33 | 157 17.68 | 53 5.97 | 888 |
| 1996 | 81 8.17 | 325 32.80 | 330 33.30 | 180 18.16 | 75 7.57 | 991 |
| Total | 163 | 625 | 626 | 337 | 128 | 1879 |

## Morality

Questionnaire items 49-52 dealt with how wrong students felt various alcohol-related behaviors to be. In each case and each year, the largest percentages of students chose "wrong" rather than other response options graded toward "acceptable." Students felt it is wrong to drive under the influence (61.3 and 65.1\%), to be a minor in possession of alcohol (42.0 and 45.0\%), to be a minor and attempt to purchase alcohol (39.4 and 44.8\%), and to provide alcohol to minors (56.3 and 57.5\%).
49. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Driving under the influence:

| Frequency <br> Row Pct | Wrong | 2 | 3 | 4 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 552 61.27 | 157 17.43 | 125 13.87 | 27 3.00 | 40 4.44 | 901 |
| 1996 | 660 65.09 | 160 15.78 | 118 11.64 | 38 3.75 | 38 3.75 | 1014 |
| Total | 1212 | 317 | 243 | 65 | 78 | 1915 |
| Frequency | Missing | 17 |  |  |  |  |

50. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Minor in possession of alcohol:

| Frequency Row Pct | Wrong | 2 | 3 | 4 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 380 42.04 | 187 20.69 | 182 20.13 | 68 7.52 | 87 9.62 | 904 |
| 1996 | 456 44.97 | 192 18.93 | 192 18.93 | 85 8.38 | 89 8.78 | 1014 |
| Total | 836 | 379 | 374 | 153 | 176 | 1918 |
| Frequency | Missing | 14 |  |  |  |  |

51. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Minor attempting to purchase alcohol:

| Frequency <br> Row Pct | Wrong | 2 | 13 | 14 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 356 39.38 | 191 21.13 | 185 20.46 | 78 8.63 | 94 10.40 | 904 |
| 1996 | 454 44.77 | 182 17.95 | 195 19.23 | 83 8.19 | 100 9.86 | 1014 |
| Total | 810 | 373 | 380 | 161 | 194 | 1918 |
| Frequency | Missing | 14 |  |  |  |  |

52. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Providing alcohol to minors:

| Frequency <br> Row Pct | Wrong | 12 | 13 | 14 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 508 56.26 | 117 12.96 | 136 15.06 | 56 6.20 | 86 9.52 | 903 |
| 1996 | 583 57.50 | 128 12.62 | 141 13.91 | 69 6.80 | 93 9.17 | 1014 |
| Total | 1091 | 245 | 277 | 125 | 179 | 1917 |
| Frequency | Missing | $=15$ |  |  |  |  |

## Behavior

Five behavioral areas were addressed in the questionnaire. They included parents' behavior, and students' drinking alcohol, obtaining alcohol, riding with a drinking driver, and drinking and driving.

## Parents

Questionnaire items 8, 9, 10, 11, 18, and 29 covered various aspects of parents' behavior as perceived by the students. In 1994, less than two-thirds of the students surveyed (64.18) reported that their parents had talked to them regarding their attitudes about drinking, and in 1996, even fewer students (59.5\%) reported that parents had talked to them (Question 8). In both years, about 61 and $62 \%$ of students reported that their parents had talked to them about teenage drinking in general (Question 9). In 1994, 67.3\% of the students, and in 1996, 68.4\% reported that their parents drank alcohol (Question 10). Among those who answered the question regarding the frequency of a parent's intoxication, about 28 and $29 \%$ reported intoxication "never" occurring (Question 11), with the higher frequencies of intoxication somewhat less in 1996. If caught drinking by parents, most students (about 60 and 61\%) felt that they would be punished severely (Question 18). In an item that obliquely asks about parents' monitoring of teens' alcohol behavior (Question 29), a surprising 35 and $36 \%$ of the students reported that they can "always" hide their drinking from their parents, while 29 and $30 \%$ can "never" hide their drinking from their parents.
8. Have your parents talked to you regarding your attitudes about drinking?

| Frequency <br> Row Pct | Yes | No | Total |
| :--- | ---: | ---: | ---: |
| 1994 | 572 | 321 | 893 |
|  | 64.05 | 35.95 |  |
| 1996 | 594 | 404 | 998 |
|  | 59.52 | 40.48 |  |
| Total | 1166 | 725 | 1891 |
| Frequency Missing $=41$ |  |  |  |

9. Have your parents talked to you about teenage drinking in general?

| Frequency <br> Row Pct | Yes | No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 564 62.18 | 343 37.82 | 907 |
| 1996 | 621 61.06 | 396 38.94 | 1017 |
| Total | 1185 | 739 | 1924 |

10. Do your parents (or guardian) drink alcohol?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 607 67.29 | 295 32.71 | 902 |
| 1996 | 694 68.37 | 321 31.63 | 1015 |
| Total | 1301 | 616 | 1917 |
| Frequency | Missing | $=15$ |  |

11. If yes, think about your parent or guardian that drinks most often. How often do they become intoxicated?

| Frequency <br> Row Pct | Never | $\left\lvert\, \begin{aligned} & \text { Once } \\ & \text { year } \end{aligned}\right.$ | Once month | Once week | Once day | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 181 28.68 | 127 20.13 | 150 23.77 | 133 21.08 | 40 6.34 | 631 |
| 1996 | 198 27.89 | 194 27.32 | 156 21.97 | 133 18.73 | 29 4.08 | 710 |
| Total | 379 | 321 | 306 | 266 | 69 | 1341 |

Frequency Missing = 591
18. If my parents (or guardian) catch me drinking, they will:

| Frequency <br> Row Pct | Do nothing | \|lo very | $\left\lvert\, \begin{aligned} & \text { Punish } \\ & \text { lightly } \end{aligned}\right.$ | $\left\|\begin{array}{l} \text { Punish } \\ \text { severely } \end{array}\right\|$ | Get help\| | Not know | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 50 5.61 | 54 6.06 | 144 16.16 | 540 60.61 | 38 4.26 | 65 7.30 | 891 |
| 1996 | 40 4.02 | 56 5.63 | 150 15.09 | 600 60.36 | 68 6.84 | 80 8.05 | 994 |
| Total | 90 | 110 | 294 | 1140 | 106 | 145 | 1885 |

Frequency Missing $=47$
29. On a scale of 1 to 5 , how often can you hide your drinking from your parents?

| Frequency <br> Row Pct | Never | \| 2 | \| 3 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 220 28.91 | 53 6.96 | 78 10.25 | 140 18.40 | 270 35.48 | 761 |
| 1996 | 240 30.38 | 45 5.70 | 86 10.89 | 135 17.09 | 284 35.95 | 790 |
| Total | 460 | 98 | 164 | 275 | 554 | 1551 |
| Frequency | Missing | $=381$ |  |  |  |  |

## Drinking Alcohol

Students' own drinking behavior was characterized by responses to items 20, $27,28,31,33$, and 34 . Less than half the students overall (45.9\% in 1994, and $41.7 \%$ in 1996) said they drank alcohol. Of those who drank, the largest percentages reported drinking $1-3$ drinks/day (but no response choice was offered for less than one drink a day, for instance one drink a week or month), and drinking less than once a week. In response to the item inquiring about number of times students drank 5 or more drinks in a row in the last month, most students (72.7 and $75.2 \%$ ) said none; however, about $17 \%$ said 1 - 5 times, with smaller percentages in the higher frequency categories. Most students who drank reported beer as their usual alcoholic beverage, and weekends as their usual drinking time. Somewhat higher numbers of nondrinkers were evident in responses to the questions in 1996 compared to 1994, possibly reflecting the greater numbers of younger students.
20. Do you drink alcoholic beverages?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 415 45.91 | 489 54.09 | 904 |
| 1996 | 426 41.72 | 595 58.28 | 1021 |
| Total | 841 | 1084 | 1925 |
| Frequency | Missing |  |  |

27. When you drink, how many drinks do you have in a day?

| Frequency <br> Row Pct | 1-3 | 4-6 | 7-10 | >10 | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 137 15.34 | 101 11.31 | 90 10.08 | 104 11.65 | 461 51.62 | 893 |
| 1996 | 151 15.13 | 118 11.82 | 82 8.22 | 75 7.52 | 572 57.31 | 998 |
| Total | 288 | 219 | 172 | 179 | 1033 | 1891 |

28. How many times a week do you drink?

| Frequency <br> Row Pct | <1 | 1 | 2 | 13-5 | $1>5$ | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 223 24.94 | 74 8.28 | 73 8.17 | 26 2.91 | 31 3.47 | 467 52.24 | 894 |
| 1996 | 274 27.43 | 59 5.91 | 54 5.41 | 20 2.00 | 20 2.00 | 572 57.26 | 999 |
| Total | 497 | 133 | 127 | 46 | 51 | 1039 | 1893 |
| Frequency | Missing | 39 |  |  |  |  |  |

31. How many times in the last month did you have 5 or more drinks in a row?

| Frequency <br> Row Pct | 0 | 1-5 | \|6-10 | \|11-15 | \| $>15$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 645 72.72 | 153 17.25 | 42 4.74 | 10 1.13 | 37 4.17 | 887 |
| 1996 | 732 75.23 | 169 17.37 | 35 3.60 | 17 1.75 | 20 2.06 | 973 |
| Total | 1377 | 322 | 77 | 27 | 57 | 1860 |

33. What alcoholic beverage do you usually drink?

| Frequency Row Pct | Beer | Liquor | Wine | Wine cooler | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 226 25.77 | 113 12.88 | 23 2.62 | 69 7.87 | 446 50.86 | 877 |
| 1996 | 189 19.21 | 137 13.92 | 29 2.95 | 72 7.32 | 557 56.61 | 984 |
| Total | 415 | 250 | 52 | 141 | 1003 | 1861 |

34. When do you normally drink?
$\left.\begin{array}{l|r|r|r|r|r}\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array} & \begin{array}{l}\text { Weekday } \\ \text { mornings }\end{array} & \begin{array}{l}\text { Weekday } \\ \text { days }\end{array} & \begin{array}{l}\text { Weekday } \\ \text { evenings }\end{array} & \text { Weekends } & \begin{array}{l}\text { Non- } \\ \text { drinker }\end{array} \\ \hline 1994 & 6 & 7 & \text { Total } \\ \hdashline & 0.68 & 0.79 & 2.14 & 43.92 & 52.48\end{array}\right) 888$

Frequency Missing $=39$

## Obtaining Alcohol

Questionnaire items 21-26 asked students about their behavior related to obtaining alcohol. There are a fair number of missing responses on some of these items, perhaps from students who were younger or had no experience with obtaining alcohol. Of those who responded to Question 21 , many students ( 30.8 and $33.0 \%$ ) felt that it was easy for them to obtain alcohol. In 1994, the majority of students (60.9\%) had not attempted to obtain alcohol in the last month (Question 22), and that percentage increased to 67.0 among the students surveyed in 1996. About 27 and $30 \%$ of the students obtained alcohol 1 - 5 times in the last month, with smaller percentages reporting higher numbers of successful attempts (Question 23). For those who responded regarding how they obtain alcohol, the most frequently reported source was through an adult's buying (Question 24), although the percentage was lower in 1996 than 1994 . A false ID card showing age 21 or over was possessed by about $3 \%$ of the students (Question 25). For those who responded regarding where they obtain alcohol, it usually came from a party store or grocery store, with those percentages lower in 1996 than in 1994, while the percentage citing home as a source was higher (Question 26).
21. On a scale of 1 to 5 how easy is it for you to obtain alcohol?

| Frequency <br> Row Pct | Easy | 2 | 3 | 4 | $\left\lvert\, \begin{aligned} & \text { Diffi- } \\ & \text { cult }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | $\begin{array}{r} 285 \\ 33.02 \end{array}$ | 190 22.02 | 152 17.61 | 90 10.43 | 146 16.92 | 863 |
| 1996 | 284 30.84 | 223 24.21 | 206 22.37 | 74 8.03 | 134 14.55 | 921 |
| Total | 569 | 413 | 358 | 164 | 280 | 1784 |
| Frequency | Missing | 148 |  |  |  |  |

22. How many times in the last month have you attempted to obtain alcohol?

| Frequency <br> Row Pct | 0 | \|1-5 | \|6-10 | \| $>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 548 60.89 | 221 24.56 | 59 6.56 | 72 8.00 | 900 |
| 1996 | 667 67.04 | 241 24.22 | 45 4.52 | 42 4.22 | 995 |
| Total | 1215 | 462 | 104 | 114 | 1895 |
| Frequency | Missing | 37 |  |  |  |

23. How many times were you able to obtain alcohol in the last month?

| Frequency Row Pct | 0 | \|1-5 | \|6-10 | \| $>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 506 56.79 | 243 27.27 | 70 7.86 | 72 8.08 | 891 |
| 1996 | 566 59.02 | 289 30.14 | 49 5.11 | 55 5.74 | 959 |
| Total | 1072 | 532 | 119 | 127 | 1850 |
| Frequency | Missing | $=82$ |  |  |  |

24. How do you normally obtain alcohol?

| Frequency <br> Row Pct | Parent | \| Underage | Stranger | Self | $\left\lvert\, \begin{aligned} & \text { Older } \\ & \text { sibling } \end{aligned}\right.$ | Adult | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 18 2.11 | 64 7.51 | 31 3.64 | 23 2.70 | 25 2.93 | 252 29.58 | 439 51.53 | 852 |
| 1996 | 28 2.91 | 80 8.32 | 18 1.87 | 21 2.19 | 38 3.95 | 226 23.52 | 550 57.23 | 961 |
| Total | 46 | 144 | 49 | 44 | 63 | 478 | 989 | 1813 |

Frequency Missing $=119$
25. Do you have a false I.D. card that shows you to be 21 or over?

| Frequency <br> Row Pct | Yes | No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 29 3.19 | 879 96.81 | 908 |
| 1996 | 28 2.76 | 986 97.24 | 1014 |
| Total | 57 | 1865 | 1922 |

26. Where do you normally obtain your alcohol?

| Frequency <br> Row Pct | Party store | Bar | $\left\lvert\, \begin{aligned} & \text { Grocery } \\ & \text { store }\end{aligned}\right.$ | Home | $\left\|\begin{array}{l} \text { School } \\ \text { property } \end{array}\right\|$ | Nondrinker | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 131 15.34 | 16 1.87 | 133 15.57 | 64 7.49 | 6 0.70 | 400 46.84 | 104 12.18 | 854 |
| 1996 | 119 12.46 | 5 0.52 | 112 11.73 | 107 11.20 | 9 0.94 | 490 51.31 | 113 11.83 | 955 |
| Total | 250 | 21 | 245 | 171 | 15 | 890 | 217 | 1809 |
| Frequency | Missing | 123 |  |  |  |  |  |  |

## Riding with Drinking Driver

Questionnaire items $12-14$ asked students about their experiences riding with a drunk or drinking driver. About half the students (51.3 in 1994 and 54.6\% in 1996) reported never having this experience (Question 12), while 18.8 and $19.9 \%$ reported doing so in the last year, 13.7 and $14.7 \%$ in the last month, and for the last week there were $16.2 \%$ in 1994 and $10.8 \%$ in 1996. Among those who answered regarding riding with a drunk or drinking driver in the last month (Question 13), most ( 75.6 and $78.6 \%$ ) reported this to have happened 1 - 3 times, and most often ( 80.4 and $81.8 \%$ ) with a driver under age 21 (Question 14).
12. How recently have you driven with a drunk or drinking driver? In the past:

13. How many times in the last month have you ridden with a drunk or drinking driver?

14. How many of these times was the driver under 21 ?

| Frequency <br> Row Pct | 1-3 | 14-6 | 17-10 | $1>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 311 80.36 | 28 7.24 | 18 4.65 | 30 7.75 | 387 |
| 1996 | 274 81.79 | 22 6.57 | 16 4.78 | 23 6.87 | 335 |
| Total | 585 | 50 | 34 | 53 | 722 |
| Frequency | Missing | $=1210$ |  |  |  |

Questionnaire items 6, 7, 40, and 41 address, indirectly, drinking and driving or operating recreational vehicles. In 1994, $15.1 \%$ of students reported having been stopped by police with alcohol in the vehicle, and in 1996, 10.2 reported that experience (Question 6). For many of these students (38.5\% in 1994 and 53.9\% in 1996), the alcohol was not found; about 20 and $21 \%$ were let go; and in 1994, $26.2 \%$ were ticketed or arrested, with that percentage at 12.8 in 1996 (Question 7). Among the approximately two-thirds who used recreational vehicles (Question 40), the highest percentage used more than one vehicle, followed by snowmobiles, ATV/dirt bikes, and boat/jet skis. Most students ( 80.3 to $85.0 \%$ ) reported never drinking alcohol when using these vehicles.
6. While not in the company of an adult or your parent, have you ever been stopped by the police when there was alcohol in the vehicle?

| Frequency <br> Row Pct$\|$ Yes | \|No | Total |  |
| :--- | ---: | ---: | ---: |
| 1994 | 135 | 757 | 892 |
|  | 15.13 | 84.87 |  |
| 1996 | 101 | 890 | 991 |
|  | 10.19 | 89.81 |  |
| Total | 236 | 1647 | 1883 |
| Frequency Missing $=49$ |  |  |  |

7. If yes, were you: ticketed/arrested alcohol offense, let go, alcohol not found, alcohol poured out, never happened?

| Frequency <br> Row Pct | Ticket/ arrest | Let go | Not found | $\left\lvert\, \begin{aligned} & \text { Poured } \\ & \text { out }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 34 26.15 | 26 20.00 | 50 38.46 | 20 15.38 | 130 |
| 1996 | 13 12.75 | 21 20.59 | 55 53.92 | 13 12.75 | 102 |
| Total | 47 | 47 | 105 | 33 | 232 |
| Frequency | Missing | 1700 |  |  |  |

40. Which of the following recreational vehicles do you use most often?

| Frequency Row Pct | Boats/ <br> jet ski | Snowmobiles | $\left\|\begin{array}{c} \text { ATV/dirt } \\ \text { bikes } \end{array}\right\|$ | Combination | $\left\lvert\, \begin{aligned} & \text { Do not } \\ & \text { use } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 81 9.11 | 132 14.85 | 129 14.51 | 250 28.12 | 297 33.41 | 889 |
| 1996 | 79 7.96 | 244 24.57 | 119 11.98 | 235 23.67 | 316 31.82 | 993 |
| Total | 160 | 376 | 248 | 485 | 613 | 1882 |

41. How often do you drink alcohol when using recreational vehicles?

| Frequency <br> Row Pct | Never | 12 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 515 80.34 | 50 7.80 | 33 5.15 | 18 2.81 | 25 3.90 | 641 |
| 1996 | 616 84.97 | 54 7.45 | 26 3.59 | 9 1.24 | 20 2.76 | 725 |
| Total | 1131 | 104 | 59 | 27 | 45 | 1366 |
| Frequency | Missing | $=566$ |  |  |  |  |

## WASHTENAW COUNTY

## Demographics

Two demographic variables were included in the questionnaire, school grade and sex. The 701 students who completed the survey in Washtenaw County in 1994 and gave their grade included 230 ninth graders, 176 tenth graders, 159 eleventh graders, and 136 twelfth graders. In 1996, 560 students completed the survey and gave their grade: there were fewer students in all grades. In both years, less than half the students were male (49.1\% and 44.2\%). The results for these questionnaire items (Questions 1 and 2) are reported in the tables just below.

1. What grade are you in?

| Frequency <br> Row Pct | 9 | 10 | 11 | 12 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | $\begin{array}{r} 230 \\ 32.81 \end{array}$ | 176 25.11 | 159 22.68 | 136 19.40 | 701 |
| 1996 | 158 28.21 | 159 28.39 | 129 23.04 | 114 20.36 | 560 |
| Total | 388 | 335 | 288 | 250 | 1261 |

Frequency Missing $=6$
2. Sex

| Frequency <br> Row Pct | Female |  |  |
| :--- | ---: | ---: | ---: |
| 1994 | 356 | Male | Total |
|  | 50.86 | 49.14 | 700 |
| 1996 | 309 | 245 | 554 |
|  | 55.78 | 44.22 |  |
| Total | 665 | 589 | 1254 |
| Frequency Missing $=13$ |  |  |  |

## Knowledge

Two areas of knowledge content were included in the questionnaire, the effects of alcohol consumption, and Michigan laws about alcohol.

## Alcohol Effects

Questionnaire items 3, 4, and 16 covered the effects of alcohol. Students' responses regarding the number of drinks it takes to become intoxicated in a one-hour time period (Question 3) resulted in the full range of response choices (1 to 7), with the greatest proportion of students in both years selecting 2 to 3 drinks, and 4 to 5 drinks. Students' responses regarding the blood alcohol level at which a person's ability to drive becomes significantly impaired (Question 4) also resulted in the full range of response choices (.03 to .10), with the greatest proportion selecting . 05 ( 32.4 and $33.4 \%$ both years). Regarding which drink has more alcohol (Question 16), less than half the students (about 37\%) gave the correct answer (all equal) both years. A mixed drink was the most common incorrect response (49.2 and $50.6 \%$ both years).
3. How many drinks over a one hour time period do you think it takes to become intoxicated?

| Frequency <br> Row Pct |  | 2-3 | \|4-5 | 16-7 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 79 11.63 | 304 44.77 | 212 31.22 | 84 12.37 | 679 |
| 1996 | 60 11.24 | 227 42.51 | 186 34.83 | 11.42 | 534 |
| Total | 139 | 531 | 398 | 145 | 1213 |
| Frequency | issing | 54 |  |  |  |

4. At what blood alcohol level does a normal person's ability to drive become significantly impaired?

5. Which has more alcohol?

| Frequency <br> Row Pct | $\left\lvert\, \begin{aligned} & 1 \text { can } \\ & \text { beer } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 1 \text { glass } \\ & \text { wine } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 1 \text { mixed } \\ & \text { drink } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { All } \\ & \text { equal } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 49 7.17 | 45 6.59 | 336 49.19 | 253 37.04 | 683 |
| 1996 | 37 6.88 | 30 5.58 | 272 50.56 | 199 36.99 | 538 |
| Total | 86 | 75 | 608 | 452 | 1221 |

## Alcohol Laws

Questionnaire items 5, 39, 44, 45, and 46 covered Michigan laws regarding alcohol impairment, purchase, and possession. The correct blood alcohol level for legal impairment for students' driving in 1994 (Question 5) was .08, a level selected by only $8.1 \%$ of the students. However, $28.4 \%$ selected .02 (now correct for persons under 21, but not in 1994), and $30.1 \%$ selected . 10 , the level at which a person is legally drunk. In 1996, $32.8 \%$ of the students were correct in selecting . 02, although $20.1 \%$ selected .04 and $20.5 \%$ selected .10 . Nonetheless, students in 1996 believed lower blood alcohol levels to represent legal impairment than did students in 1994. The majority of students (72.1\% in 1994 and somewhat more, $76.9 \%$ in 1996) were correct in responding that it is against the law for a person under age 21 to attempt to purchase alcohol (Question 39). A smaller majority ( $60.4 \%$ in 1994, improved to 67.18 in 1996) were correct in responding that the primary reason Michigan raised the drinking age to 21 was traffic safety (Question 44). The majority of students ( $84.8 \%$ in 1994, but fewer $80.5 \%$ in 1996) knew that a person less than age 21 convicted of Operating Under the Influence of Liquor can be jailed (Question 45). Less than two-thirds of the students (64.8\% in 1994 and $62.8 \%$ in 1996 knew that a person under age 21 convicted of possession of an alcoholic beverage can be jailed for that offense (Question 46).
5. At what blood alcohol level are you legally impaired for driving?

| Frequency <br> Row Pct | . 02 | 1.04 | 1.06 | 1.08 | \| 110 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 192 28.36 | 121 17.87 | 105 15.51 | 55 8.12 | 204 30.13 | 677 |
| 1996 | 170 32.82 | 104 20.08 | 91 17.57 | 47 9.07 | 106 20.46 | 518 |
| Total | 362 | 225 | 196 | 102 | 310 | 1195 |
| Frequency | Missing | $=72$ |  |  |  |  |

39. In Michigan, is it against the law for a person under the age of 21 to attempt to purchase alcohol?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 491 72.10 | 190 27.90 | 681 |
| 1996 | 413 76.91 | 124 23.09 | 537 |
| Total | 904 | 314 | 1218 |
| Frequency | Missing | $=49$ |  |

44. What is the primary reason that Michigan raised the drinking age to 21 ?

| Frequency <br> Row Pct | Mat thews Act | Moral issues | $\left\lvert\, \begin{aligned} & \text { Traffic } \\ & \text { safety } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Teen } \\ & \text { pregncy. } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 154 22.92 | 87 12.95 | 406 60.42 | 25 3.72 | 672 |
| 1996 | 81 16.04 | 51 10.10 | 339 67.13 | 34 6.73 | 505 |
| Total | 235 | 138 | 745 | 59 | 1177 |

Frequency Missing $=90$
45. Can a person less than age 21 convicted of Operating Under the Influence of Liquor be jailed for that offense?
$\left.\begin{array}{l|r|r|r}\text { Frequency } & & \\ \text { Row Pct } & \text { Yes } & \text { No } & \text { Total } \\ \hdashline 1994 & 578 & 104 & 682 \\ & & 84.75 & 15.25\end{array}\right)$
46. Can a person less than age 21 convicted of possession of an alcoholic beverage be jailed for that offense?

| Frequency |  |  |  |
| :--- | ---: | ---: | ---: |
| Row Pct | Yes | No | Total |
| 1994 | 439 | 238 | 677 |
|  | 64.84 | 35.16 |  |
| 1996 | 333 | 197 | 530 |
|  | 62.83 | 37.17 |  |
| Total | 772 | 435 | 1207 |
| Frequency Missing $=60$ |  |  |  |

## Attitudes / Perceptions

Four areas of attitudes/perceptions were included in the questionnaire. They covered attitudes and perceptions regarding drinking, drinking and driving, enforcement, and morality.

## Drinking

Questionnaire items 19, 32, 35, 43, and 47 covered attitudes and perceptions regarding alcohol use. When asked for their most important concern regarding alcohol use (Question 19), the largest percentages of students in both years responded "health concerns" and "being caught by police" (about $24-27 \%$ for each response). Perceptions of harm done "to your body with 5 or more drinks in a row" (Question 32) were generally high with few students responding "no harm" ( $8.8 \%$ in 1994 and $7.8 \%$ in 1996). The punishment the greatest proportion of students wanted to avoid for drinking alcohol (Question 35) was jail (about 42 and 45\%), followed by "loss of license" (about 24 and 25\%), and "parents contacted by police" (about 22 and $23 \%$ ). Attitudes regarding the age at which a person should legally be permitted to drink alcohol (Question 43) ranged across the 17 to over 21 year-old choices, with the greatest proportions of students selecting and age 18 ( 30.9 and $32.5 \%$ in both years) and age 21 (28.5 and $29.5 \%$ in both years). Students reported in both years that their attitudes toward alcohol use were most influenced (Question 47) by their peer group ( 36.5 and $40.0 \%$ ) and their life experience ( 27.2 and 29.8\%).
19. In regard to alcohol use, which of the following is your most important concern?

| Frequency Row Pct | Parents catch | Police catch | $\left\lvert\, \begin{aligned} & \text { Be alc- } \\ & \text { oholic } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Health } \\ & \text { concerns }\end{aligned}\right.$ | $\left\|\begin{array}{l} \text { No } \\ \text { concerns } \end{array}\right\|$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 119 17.98 | 162 24.47 | 126 19.03 | 166 25.08 | 89 13.44 | 662 |
| 1996 | 106 20.15 | 127 24.14 | 86 16.35 | 141 26.81 | 66 12.55 | 526 |
| Total | 225 | 289 | 212 | 307 | 155 | 1188 |
| Frequency | Missing | $=79$ |  |  |  |  |

32. How much harm do you think you are doing to your body with 5 or more drinks in a row?

| Frequency <br> Row Pct | No harm | 2 | 3 | 4 | $\left\lvert\, \begin{aligned} & \text { Much } \\ & \text { harm }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 60 8.81 | 57 8.37 | 133 19.53 | 144 21.15 | 287 42.14 | 681 |
| 1996 | 41 7.82 | 41 7.82 | 127 24.24 | 106 20.23 | 209 39.89 | 524 |
| Total | 101 | 98 | 260 | 250 | 496 | 1205 |
| Frequency | Missing | 62 |  |  |  |  |

35. If you were to drink alcohol, what punishment would you most want to avoid?

| Frequency Row Pct | Jail | Comm. service | Loss of <br> license | Notify parents | Fines | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 286 45.11 | 21 3.31 | 149 23.50 | 140 22.08 | 38 5.99 | 634 |
| 1996 | 214 42.38 | 22 4.36 | 124 24.55 | 116 22.97 | 29 5.74 | 505 |
| Total | 500 | 43 | 273 | 256 | 67 | 1139 |
| Frequency | Missing | $=128$ |  |  |  |  |

43. At what age should a person be permitted to drink alcoholic beverages legally?

| Frequency <br> Row Pct | 17 | 118 | 119 | 120 | $\mid 21$ | $1>21$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 103 15.19 | 220 32.45 | 37 5.46 | 26 3.83 | 200 29.50 | 92 13.57 | 678 |
| 1996 | 78 14.44 | 167 30.93 | 32 5.93 | 20 3.70 | 154 28.52 | 89 16.48 | 540 |
| Total | 181 | 387 | 69 | 46 | 354 | 181 | 1218 |

Frequency Missing $=49$
47. What is your attitude toward the use of alcohol most influenced by?

| Frequency <br> Row Pct | $\begin{aligned} & \text { TV/ } \\ & \text { movies } \end{aligned}$ | $\text { \| } \begin{aligned} & \text { Peer } \\ & \text { group } \end{aligned}$ | Family | $\left\lvert\, \begin{aligned} & \text { Exper- } \\ & \text { ience } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Adver- } \\ & \text { tising } \end{aligned}\right.$ | Music | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 39 6.21 | 229 36.46 | 76 12.10 | 187 29.78 | 75 11.94 | 22 3.50 | 628 |
| 1996 | 49 9.94 | 197 39.96 | 55 11.16 | 134 27.18 | 44 8.92 | 14 2.84 | 493 |
| Total | 88 | 426 | 131 | 321 | 119 | 36 | 1121 |
| Frequency | Missing | 146 |  |  |  |  |  |

## Drinking and Driving

Questionnaire items 15, 17, 30, and 48 addressed attitudes and perceptions regarding drinking and driving. Students reported that they most likely would listen to warnings about drinking alcohol and driving (Question 15) from people who had been in a crash ( 49.6 and $52.3 \%$ ), parents ( $23.3 \%$ down to $19.2 \%$ in 1996), and friends/peers (20.5 and 23.0\%). In both survey years, just under half the students ( 44.0 and $49.4 \%$ ) said they would be "not at all comfortable" riding with a driver who has had 3 beers in the last hour (Question 17). When asked if before turning 21, they would be involved in a crash as a driver after drinking (Question 30), about $9 \%$ said "yes" each year. If arrested for drunk driving (Question 48), in both years the greatest proportion of students thought that their friends would be upset at them but still remain friends, or say nothing.
15. I would most likely listen to warnings about drinking alcohol and driving from:
$\left.\begin{array}{l|r|r|r|r}\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array} & \begin{array}{l}\text { Friends } \\ \text { or peers }\end{array} & \text { Parents } & \begin{array}{l}\text { Police } \\ \text { officers }\end{array} & \begin{array}{l}\text { People } \\ \text { in crash }\end{array} \\ \hline 1994 & 20.45 & 23.33 & 6.67 & 49.55\end{array}\right)$ Total
17. How comfortable are you riding with a driver who has had 3 beers in the last hour?

| Frequency <br> Row Pct | Not at all | 2 | 3 | 4 | \|Very | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 302 43.96 | 126 18.34 | 140 20.38 | 63 9.17 | 56 8.15 | 687 |
| 1996 | 272 49.36 | 101 18.33 | 96 17.42 | 37 6.72 | 45 8.17 | 551 |
| Total | 574 | 227 | 236 | 100 | 101 | 1238 |
| Frequency | Missing | 29 |  |  |  |  |

30. Do you think that before you turn 21 you will be involved in a crash as a driver after you have been drinking?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 62 9.10 | 619 90.90 | 681 |
| 1996 | 50 9.31 | 487 90.69 | 537 |
| Total | 112 | 1106 | 1218 |
| Frequency | Missing | 49 |  |

48. If you were arrested for drunk driving, your friends probably would:

$\left.$| Frequency <br> Row Pct | Congra- <br> tulate | Not be <br> friends | Say <br> nothing |
| :--- | :--- | :--- | :--- | | Upset/be |
| :--- |
| friends | \right\rvert\, $r$ Total

## Enforcement

Questionnaire items 36,37 , and 38 reflect students' perceptions about enforcement of alcohol laws in their county. Only about $9 \%$ felt that a person under age 21 would "always" be arrested for possessing alcohol in public (Question 36). Only about 6 and $9 \%$ felt that parties where guests under age 21 are drinking alcohol are "always" broken up by police, while the percentage who thought parties were "never" broken up declined from 30.6 in 1994 to $24.6 \%$ in 1996 (Question 37). Only about 7 and 8\% felt that a person under age 21 who drinks and drives is "always" arrested (Question 38).
36. When a person under age 21 in your county has alcoholic beverages in his or her possession in public, how often do you think that person is arrested for a "minor in possession" offense?

| Frequency <br> Row Pct | Never | 12 | 13 | 4 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 132 19.21 | 195 28.38 | 206 29.99 | 89 12.95 | 65 9.46 | 687 |
| 1996 | 81 15.11 | 157 29.29 | 186 34.70 | 65 12.13 | 47 8.77 | 536 |
| Total | 213 | 352 | 392 | 154 | 112 | 1223 |

37. When there are parties in your county where guests under age 21 are drinking alcoholic beverages, how often are these parties broken up by police?

| Frequency <br> Row Pct | Never | 2 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 205 30.60 | 200 29.85 | 136 20.30 | 71 10.60 | 58 8.66 | 670 |
| 1996 | 129 24.62 | 157 29.96 | 142 27.10 | 62 11.83 | 34 6.49 | 524 |
| Total | 334 | 357 | 278 | 133 | 92 | 1194 |

38. When a person under age 21 in your county has been drinking alcoholic beverages then drives, how often is he or she arrested for a drinking and driving offense?

| Frequency <br> Row Pct | Never | \| 2 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 111 16.42 | 211 31.21 | 218 32.25 | 87 12.87 | 49 7.25 | 676 |
| 1996 | 76 14.53 | 167 31.93 | 171 32.70 | 68 13.00 | 41 7.84 | 523 |
| Total | 187 | 378 | 389 | 155 | 90 | 1199 |
| Frequency | Missing | $=68$ |  |  |  |  |

## Morality

Questionnaire items 49 - 52 dealt with how wrong students felt various alcohol-related behaviors to be. For each question, the largest proportions of students chose "wrong" rather than other response options graded toward "acceptable," yet the percentage was not always a majority of the students. Students felt it is wrong to drive under the influence (58.3 and 61.5\%), to be a minor in possession of alcohol (33.9 and 34.9\%), to be a minor and attempt to purchase alcohol (31.7 and 33.3\%), and to provide alcohol to minors (43.7 and 48.7\%).
49. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Driving under the influence:

| Frequency <br> Row Pct | Wrong | 2 | 3 | 4 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 398 58.27 | 101 14.79 | 121 17.72 | 26 3.81 | 37 5.42 | 683 |
| 1996 | 334 61.51 | 88 16.21 | 75 13.81 | 19 3.50 | 27 4.97 | 543 |
| Total | 732 | 189 | 196 | 45 | 64 | 1226 |
| Frequency | Missing | $=41$ |  |  |  |  |

50. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Minor in possession of alcohol:

| Frequency <br> Row Pct | Wrong | 2 | 13 | 14 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 231 33.87 | 120 17.60 | 163 23.90 | 85 12.46 | 83 12.17 | 682 |
| 1996 | 189 34.94 | 94 17.38 | 125 23.11 | 66 12.20 | 67 12.38 | 541 |
| Total | 420 | 214 | 288 | 151 | 150 | 1223 |
| Frequency | Missing | $=44$ |  |  |  |  |

51. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Minor attempting to purchase alcohol:

| Frequency Row Pct | Wrong | 2 | 13 | \| 4 | $\left\lvert\, \begin{aligned} & \text { Accept- } \\ & \text { able }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 217 31.68 | 98 14.31 | 160 23.36 | 105 15.33 | 105 15.33 | 685 |
| 1996 | 181 33.33 | 93 17.13 | 137 25.23 | 57 10.50 | 75 13.81 | 543 |
| Total | 398 | 191 | 297 | 162 | 180 | 1228 |
| Frequency | Missing | 39 |  |  |  |  |

52. Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality. Providing alcohol to minors:

| Frequency <br> Row Pct | Wrong | 2 | 3 | 4 | $\begin{aligned} & \text { Accept- } \\ & \text { able } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 299 43.65 | 113 16.50 | 125 18.25 | 63 9.20 | 85 12.41 | 685 |
| 1996 | 265 48.71 | 73 13.42 | 89 16.36 | 46 8.46 | 71 13.05 | 544 |
| Total | 564 | 186 | 214 | 109 | 156 | 1229 |

Frequency Missing $=38$

## Behavior

Five behavioral areas were addressed in the questionnaire. They included parents' behavior, and students' drinking alcohol, obtaining alcohol, riding with a drinking driver, and drinking and driving.

## Parents

Questionnaire items 8, 9, 10, 11, 18, and 29 covered various aspects of parents' behavior as perceived by the students. Less than two-thirds of the students surveyed ( 57.6 and $61.0 \%$ ) reported that their parents had talked to them regarding their attitudes about drinking (Question 8). In both years, about 61 and $66 \%$ of students reported that their parents had talked to them about teenage drinking in general (Question 9). In both years, 53.9 and $55.7 \%$ of the students reported that their parents drank alcohol (Question 10). Among those who answered the question regarding the frequency of a parent's intoxication, about 29 and $31 \%$ reported intoxication "never" occurring (Question 11). If caught drinking by parents, less than half the students (about 45 and $48 \%$ ) felt that they would be punished severely (Question 18). In an item that obliquely asks about parents' monitoring of teens' alcohol behavior (Question 29), a surprising 38 and $39 \%$ of the students reported that they can "always" hide their drinking from their parents, while 28 and 318 can "never" hide their drinking from their parents.
8. Have your parents talked to you regarding your attitudes about drinking?
$\left.\begin{array}{l|r|r|r}\left.\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array} \right\rvert\, \text { Yes } & \text { |No } & \text { Total } \\ \hdashline 1994 & 395 & 291 & 686 \\ & & 57.58 & 42.42\end{array}\right)$
9. Have your parents talked to you about teenage drinking in general?

10. Do your parents (or guardian) drink alcohol?

| $\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array}$ | Yes | \|No | Total |
| :--- | ---: | ---: | ---: |
| 1994 | 371 | 317 | 688 |
|  |  | 53.92 | 46.08 |$)$

11. If yes, think about your parent or guardian that drinks most often. How often do they become intoxicated?

| Frequency <br> Row Pct | Never | Once year | Once month | Once week | Once day | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 129 31.16 | 94 22.71 | 81 19.57 | 60 14.49 | 50 12.08 | 414 |
| 1996 | 93 28.53 | 75 23.01 | 71 21.78 | 50 15.34 | 37 11.35 | 326 |
| Total | 222 | 169 | 152 | 110 | 87 | 740 |

18. If my parents (or guardian) catch me drinking, they will:

| Frequency <br> Row Pct | Do nothing | $\left\lvert\, \begin{aligned} & \text { Do very } \\ & \text { little } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Punish } \\ & \text { lightly } \end{aligned}\right.$ | $\left\|\begin{array}{l} \text { Punish } \\ \text { severely } \end{array}\right\|$ | $\mid$ Get help $\mid$ | Not know | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 56 8.40 | 67 10.04 | 127 19.04 | 301 45.13 | 58 8.70 | 58 8.70 | 667 |
| 1996 | 36 6.67 | 51 9.44 | 98 18.15 | 260 48.15 | 43 7.96 | 52 9.63 | 540 |
| Total | 92 | 118 | 225 | 561 | 101 | 110 | 1207 |
| Frequency | Missing | $=60$ |  |  |  |  |  |

29. On a scale of 1 to 5, how often can you hide your drinking from your parents?

| Frequency Row Pct | Never | 12 | 13 | \| 4 | \| Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 198 31.08 | 36 5.65 | 66 10.36 | 91 14.29 | 246 38.62 | 637 |
| 1996 | 130 27.60 | 22 4.67 | 60 12.74 | 81 17.20 | 178 37.79 | 471 |
| Total | 328 | 58 | 126 | 172 | 424 | 1108 |

Frequency Missing $=159$

## Drinking Alcohol

Students' own drinking behavior was characterized by responses to items 20 , 27, 28, 31, 33, and 34. About half the students overall said they drank alcohol. Of those who drank, the largest percentages reported drinking $1-3$ drinks/day (but no response choice was offered for less than one drink a day, for instance one drink a week or month), and drinking less than once a week. In response to Question 31 inquiring about number of times students drank 5 or more drinks in a row in the last month, most students ( 71.1 and $73.6 \%$ ) said none; however, about $18 \%$ said $1-5$ times, with smaller percentages in the higher frequency categories. Most students who drank reported liquor as their usual alcoholic beverage with beer a close second, and weekends as their usual drinking time.
20. Do you drink alcoholic beverages?

| Frequency Row Pct | Yes | No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 356 51.45 | 336 48.55 | 692 |
| 1996 | 278 50.55 | 272 49.45 | 550 |
| Total | 634 | 608 | 1242 |
| Frequency | Missing | $=25$ |  |

27. When you drink, how many drinks do you have in a day?


Frequency Missing $=43$
28. How many times a week do you drink?

| Frequency <br> Row Pct | <1 | 11 | 12 | \|3-5 | $1>5$ | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 184 26.86 | 67 9.78 | 76 11.09 | 33 4.82 | 26 3.80 | 299 43.65 | 685 |
| 1996 | 166 30.63 | 36 6.64 | 51 9.41 | 29 5.35 | 20 3.69 | 240 44.28 | 542 |
| Total | 350 | 103 | 127 | 62 | 46 | 539 | 1227 |
| Frequency | Missing | $=40$ |  |  |  |  |  |

31. How many times in the last month did you have 5 or more drinks in a row?

| Frequency <br> Row Pct | 0 | \|1-5 | \| 6-10 | \|11-15 | $\mid>15$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 508 73.62 | 129 18.70 | 27 3.91 | 6 0.87 | 20 2.90 | 690 |
| 1996 | 387 71.14 | 100 18.38 | 19 3.49 | 13 2.39 | 25 4.60 | 544 |
| Total | 895 | 229 | 46 | 19 | 45 | 1234 |

Frequency Missing = 33
33. What alcoholic beverage do you usually drink?

| Frequency Row Pct | Beer | Liquor | Wine | $\left\lvert\, \begin{aligned} & \text { Wine } \\ & \text { cooler } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker } \end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 114 18.21 | 129 20.61 | 13 2.08 | 75 11.98 | 295 47.12 | 626 |
| 1996 | 88 17.50 | 108 21.47 | 23 4.57 | 52 10.34 | 232 46.12 | 503 |
| Total | 202 | 237 | 36 | 127 | 527 | 1129 |
| Frequency | Missing | $=138$ |  |  |  |  |

34. When do you normally drink?
$\left.\begin{array}{l|l|l|l|l|l}\begin{array}{l}\text { Frequency } \\ \text { Row Pct }\end{array} & \begin{array}{l}\text { Weekday } \\ \text { mornings }\end{array} & \begin{array}{l}\text { Weekday } \\ \text { days }\end{array} & \begin{array}{l}\text { Weekday } \\ \text { evenings }\end{array} & \text { Weekends } & \begin{array}{l}\text { Non- } \\ \text { drinker }\end{array} \\ \hline 1994 & 1.36 & 1.36 & 3.31 & 47.89 & 46.08\end{array}\right)$ Total

Frequency Missing $=72$

## Obtaining Alcohol

Questionnaire items 21-26 asked students about their behavior related to obtaining alcohol. Nearly half the responding students (about 46\%) felt that it was easy for them to obtain alcohol (Question 21). Slightly over half the students ( 57 and 58\%) had not attempted to obtain alcohol in the last month (Question 22), but many students had. About $31 \%$ of the students obtained alcohol 1 - 5 times in the last month, 8 and $9 \% 6$ to 10 times, and 11 and 13\% reported more than ten successful attempts (Question 23). For those who responded regarding how they obtain alcohol, the most frequently reported source was through an adult's buying (Question 24), followed by that of an underage friend. A false ID card showing age 21 or over was possessed by about 6 and $9 \%$ of the students (Question 25). For those who responded about where they obtain alcohol, it usually came from a party store (Question 26).
21. On a scale of 1 to 5 how easy is it for you to obtain alcohol?

| Frequency <br> Row Pct | Easy | 2 | 13 | 4 | $\left\lvert\, \begin{aligned} & \text { Diffi- } \\ & \text { cult }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 308 45.70 | 142 21.07 | 97 14.39 | 52 7.72 | 75 11.13 | 674 |
| 1996 | 250 46.47 | 96 17.84 | 95 17.66 | 39 7.25 | 58 10.78 | 538 |
| Total | 558 | 238 | 192 | 91 | 133 | 1212 |
| Frequency | Missing | $=55$ |  |  |  |  |

22. How many times in the last month have you attempted to obtain alcohol?

| Frequency Row Pct |  | 1-5 | 6-10 | \| >10 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 390 56.69 | 192 27.91 | 56 8.14 | 50 7.27 | 688 |
| 1996 | 324 58.48 | 145 26.17 | 38 6.86 | 47 8.48 | 554 |
| Total | 714 | 337 | 94 | 97 | 1242 |

Frequency Missing $=25$
23. How many times were you able to obtain alcohol in the last month?
$\left.\begin{array}{l|r|r|r|r|r}\text { Frequency } & & & \\ \text { Row Pct } & 0 & 1-5 & 6-10 & 1>10 & \text { Total } \\ \hdashline 1994 & 338 & 210 & 57 & 75 & 680 \\ & & 49.71 & 30.88 & 8.38 & 11.03\end{array}\right)$
24. How do you normally obtain alcohol?

| Frequency <br> Row Pct | Parent | Underage friend | Stranger | Self | $\left\lvert\, \begin{aligned} & \text { Older } \\ & \text { sibling } \end{aligned}\right.$ | Adult | $\left\lvert\, \begin{aligned} & \text { Non- } \\ & \text { drinker }\end{aligned}\right.$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 26 4.08 | 95 14.89 | 53 8.31 | 51 7.99 | 32 5.02 | 124 19.44 | 257 40.28 | 638 |
| 1996 | 24 4.74 | 92 18.18 | 25 4.94 | 33 6.52 | 22 4.35 | 95 18.77 | 215 42.49 | 506 |
| Total | 50 | 187 | 78 | 84 | 54 | 219 | 472 | 1144 |

Frequency Missing $=123$
25. Do you have a false I.D. card that shows you to be 21 or over?

| Frequency <br> Row Pct | Yes | \| No | | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 42 6.05 | 652 93.95 | 694 |
| 1996 | 50 8.99 | 506 91.01 | 556 |
| Total | 92 | 1158 | 1250 |

26. Where do you normally obtain your alcohol?


## Riding with Drinking Driver

Questionnaire items 12 - 14 asked students about their experiences riding with a drunk or drinking driver. About half the students (49.1 and 53.3\%) reported never having this experience (Question 12), while about 16 and $17 \%$ reported doing so in the last year, 15 and $17 \%$ in the last month, and 15 and $18 \%$ in the last week. Among those who answered regarding riding with a drunk or drinking driver in the last month (Question 13), most (67.1 and 70.2\%) reported this to have happened 1 - 3 times, and most often ( 70.4 and $70.6 \%$ ) with a driver under age 21 (Question 14)
12. How recently have you driven with a drunk or drinking driver? In the past:

| Frequency <br> Row Pct. | Year | Month | \| Week | \| Never | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 111 16.06 | 116 16.79 | 125 18.09 | 339 49.06 | 691 |
| 1996 | 92 16.73 | 84 15.27 | 81 14.73 | 293 53.27 | 550 |
| Total | 203 | 200 | 206 | 632 | 1241 |

13. How many times in the last month have you ridden with a drunk or drinking driver?

| Frequency <br> Row Pct | 1-3 | \|4-6 | \|7-10 | \| $>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 252 70.19 | 51 14.21 | 15 4.18 | 11.42 | 359 |
| 1996 | 163 67.08 | 32 13.17 | 17 7.00 | 31 12.76 | 243 |
| Total | 415 | 83 | 32 | 72 | 602 |
| Frequency | Missing | $=665$ |  |  |  |

14. How many of these times was the driver under 21 ?

| Frequency <br> Row Pct | 1-3 | \|4-6 | \|7-10 | \| $>10$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 228 70.37 | 35 10.80 | 17 5.25 | 44 13.58 | 324 |
| 1996 | 163 70.56 | 25 10.82 | 16 6.93 | 27 11.69 | 231 |
| Total | 391 | 60 | 33 | 71 | 555 |
| Frequency | Missing | $=712$ |  |  |  |

## Drinking and Driving

Questionnaire items 6, 7, 40, and 41 address, indirectly, drinking and driving or operating recreational vehicles. In both years, about 18 and $19 \%$ of students reported having been stopped by police with alcohol in the vehicle (Question 6). For many of the students ( 45 and $46 \%$ ), the alcohol was not found; about $23 \%$ were let go (Question 7); $21.2 \%$ (1994) and $14.6 \%$ (1996) said the alcohol was poured out; $10.2 \%$ and $17.5 \%$ reported being ticketed or arrested. More than two-thirds reported not using recreational vehicles (Question 40). Among those who do, 74 and $75 \%$ reported never drinking alcohol when using the recreational vehicles.
6. While not in the company of an adult or your parent, have you ever been stopped by the police when there was alcohol in the vehicle?

| Frequency <br> Row Pct | Yes | \| No | Total |
| :---: | :---: | :---: | :---: |
| 1994 | 122 17.84 | 562 82.16 | 684 |
| 1996 | 103 18.90 | 442 81.10 | 545 |
| Total | 225 | 1004 | 1229 |
| Frequency | Missing | $=38$ |  |

7. If yes, were you: ticketed/arrested alcohol offense, let go, alcohol not found, alcohol poured out, never happened?

| Frequency <br> Row Pct | Ticket/ arrest | Let go | $\left\lvert\, \begin{aligned} & \text { Not } \\ & \text { found }\end{aligned}\right.$ | Poured out | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 12 10.17 | 27 22.88 | 54 45.76 | 25 21.19 | 118 |
| 1996 | 18 17.48 | 24 23.30 | 46 44.66 | 15 14.56 | 103 |
| Total | 30 | 51 | 100 | 40 | 221 |
| Frequency | Missing | $=1046$ |  |  |  |

40. Which of the following recreational vehicles do you use most often?

| Frequency Row Pct | Boats/ <br> jet ski | Snowmobiles | $\left\|\begin{array}{c} \text { ATV/dirt } \\ \text { bikes } \end{array}\right\|$ | Combination | $\begin{aligned} & \text { Do not } \\ & \text { use } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 59 8.85 | 11 1.65 | 51 7.65 | 71 10.64 | 475 71.21 | 667 |
| 1996 | 58 11.18 | 14 2.70 | 39 7.51 | 59 11.37 | 349 67.24 | 519 |
| Total | 117 | 25 | 90 | 130 | 824 | 1186 |

41. How often do you drink alcohol when using recreational vehicles?

| Frequency <br> Row Pct | Never | 12 | 13 | 14 | \|Always | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 221 74.92 | 29 9.83 | 24 8.14 | 3.05 | 12 4.07 | 295 |
| 1996 | 190 73.93 | 25 9.73 | 19 7.39 | 8 3.11 | 15 5.84 | 257 |
| Total | 411 | 54 | 43 | 17 | 27 | 552 |

## SELECTED MEASURES BY GRADE GROUPINGS

The focus of this section is the presentation of survey results on selected measures that the youth impaired-driving prevention programs may have targeted explicitly or implicitly. However, because of the wide-ranging nature of the programs, their timing, and the timing of the survey distribution in the schools, precise statements regarding cause and effect are impossible to make. All differences or lack thereof noted in this section should be considered carefully before attributing them solely to the programs. On the other hand, exploration of the results of the surveys with an eye toward understanding how the programs may have had an impact on a limited set of issues may prove instructive in future program planning.

We have chosen to focus on analyses of the selected survey items listed below that involve reported behaviors and attitudes most likely to have been impacted by the significant law enforcement activities related to the communities' programs. Results are presented for the three counties for which data were collected in both 1994 and 1996 (i.e., Gladwin, Marquette, and Washtenaw).

High school students (grades 9-12) were selected as the focus of this section for two principal reasons. First, there were insufficient data on pre-high schoolers (grades 7-8) to complete meaningful analyses. Second, based on previous research, one would expect there to be significant differences in attitudes, knowledge, and behavior related to alcohol among younger students compared to older students. One would expect that older students have had greater experience with alcohol, and, therefore, that program effects might be more readily noticed among older rather than younger students. Therefore, for each county separately, results are presented on the selected measures for three groups of students (i.e., all high school grades 9-12, grades 9-10, and grades 11-12).

Differing from the general survey results described earlier, analyses of the frequency of drinking to intoxication, attempts to get alcohol, and success at getting alcohol were only conducted on those students who reported they did drink alcoholic beverages (item 20). This was done to focus attention on the responses of only those who had earlier reported they were "drinkers." In addition, rather than reporting the frequencies of responses to items asking respondents to rate their perceptions of enforcement and ease of obtaining alcohol, we report the arithmetic average or mean response for the group, which makes comparisons between years possible. The selected measures are listed below.

| Item Description | Item Number and Wording |
| :--- | :--- |
| General drinking | 20. Do you drink alcoholic beverages? |
| Drinking to intoxication | 31. How many times in the last month did you have 5 <br> or more drinks in a row? |
| Attempt to obtain alcohol | $22 . \quad$ How many times in the last month have you <br> attempted to obtain alcohol? |
| Success at obtaining <br> alcohol | $23 . \quad$ How many times were you able to obtain alcohol <br> in the last month? |
| Ease of obtaining alcohol | 21. On a scale of 1 to 5 how easy is it for you to <br> obtain alcohol? |
| Own fake ID | $25 . \quad$ Do you have a false ID card that shows you to <br> be 21 or over? |
| Recency of riding with <br> drinking driver | $12 . \quad$ How recently have you ridden with a drunk or <br> drinking driver? |
| Frequency of riding with <br> drinking driver | 13. How many times in the last month have you <br> ridden with a drunk or drinking driver? |


| Threat of MIP arrest | 36. When a person under age 21 in your county has <br> alcoholic beverages in his or her possession in <br> public, how often do you think that person is <br> arrested for a "minor in possession" offense? |
| :--- | :--- |
| Threat of underage DUI |  |
| arrest |  |$\quad$| $38 . \quad$When a person under age 21 in your county has <br> been drinking alcoholic beverages then drives, how <br> often is he or she arrested for a drinking and <br> driving offense? |
| :--- |
| Threat of party breakup |
| 37. When there are parties in your county where <br> guests under age 21 are drinking alcoholic <br> beverages, how often are these parties broken up by <br> police? |

## Gladwin County

## General Drinking

The proportion of students who reported drinking declined overall for grades 9-12. The decline for grades 11-12 appears to be larger than that for grades 9-10.
20. Do you drink alcoholic
beverages?

|  |  | Yes | No |
| :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $60.0 \%$ | $40.0 \%$ |
|  | 1996 | $55.1 \%$ | $44.9 \%$ |
|  | 1994 | $54.4 \%$ | $45.6 \%$ |
|  | 1996 | $51.7 \%$ | $48.3 \%$ |
|  |  |  |  |
| Grades 11-12 | 1994 | $67.8 \%$ | $32.2 \%$ |
|  | 1996 | $60.7 \%$ | $39.3 \%$ |

## Drinking to Intoxication

The proportion of students who reported refraining from binge drinking in the last month increased among both grade groups. There was also a general downward shift in the proportions of students reporting larger numbers of drinking episodes.
36. How many times in the last month did you have 5 or more drinks in a row? (Of those who reported drinking)

|  |  | Zero | $1-5$ | $6-10$ | $11-15$ | $>15$ |
| :---: | :--- | :--- | :--- | :--- | ---: | :---: |
| Grades 9-12 | 1994 | $40.3 \%$ | $36.3 \%$ | $10.6 \%$ | $3.8 \%$ | $9.0 \%$ |
|  | 1996 | $45.2 \%$ | $37.6 \%$ | $7.9 \%$ | $2.8 \%$ | $6.5 \%$ |


| Grades 9-10 | 1994 | $42.1 \%$ | $35.7 \%$ | $10.2 \%$ | $3.8 \%$ | $8.3 \%$ |
| :---: | ---: | ---: | ---: | ---: | ---: | :--- |
|  | 1996 | $48.4 \%$ | $37.0 \%$ | $6.7 \%$ | $2.0 \%$ | $5.9 \%$ |


| Grades $11-12$ | 1994 | $38.3 \%$ | $37.0 \%$ | $11.1 \%$ | $3.8 \%$ | $9.8 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1996 | $40.7 \%$ | $38.4 \%$ | $9.6 \%$ | $4.0 \%$ | $7.3 \%$ |

## Attempt to Obtain Alcohol

The proportion of students who reported not trying to get alcohol in the last month increased overall, but this was due to the increase among students in grades 9-10. There was also a general downward shift in the proportions of students reporting larger numbers of attempts to get alcohol.
22. How many times in the last month have you attempted to obtain alcohol? (Of those who reported drinking)

|  |  | Zero | $1-5$ | $6-10$ | $>10$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | $22.2 \%$ | $47.7 \%$ | $14.2 \%$ | $16.0 \%$ |  |
|  | 1996 | $24.1 \%$ | $55.2 \%$ | $10.8 \%$ | $9.9 \%$ |  |
|  | 1994 | $18.9 \%$ | $51.3 \%$ | $13.2 \%$ | $16.6 \%$ |  |
|  | 1996 | $23.8 \%$ | $56.2 \%$ | $10.2 \%$ | $9.8 \%$ |  |
|  |  |  |  |  |  |  |
| Grades 11-12 | 1994 | $25.8 \%$ | $43.6 \%$ | $15.2 \%$ | $15.2 \%$ |  |
|  | 1996 | $24.6 \%$ | $53.6 \%$ | $11.7 \%$ | $10.1 \%$ |  |

## Success at Obtaining Alcohol

The proportion of students who reported being able to get alcohol in the last month decreased among both grade groups. There was also a general downward shift in the proportions of students reporting larger numbers of successes getting alcohol.
23. How many times were you able to obtain alcohol in the last month? (Of those who reported drinking)

|  |  | Zero | $1-5$ | $6-10$ | $>10$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | $18.2 \%$ | $52.8 \%$ | $14.8 \%$ | $14.2 \%$ |  |
|  | 1996 | $21.1 \%$ | $55.0 \%$ | $13.2 \%$ | $10.7 \%$ |  |
|  | 1994 | $16.6 \%$ | $56.6 \%$ | $12.4 \%$ | $14.3 \%$ |  |
|  | 1996 | 20.18 | $56.7 \%$ | $12.2 \%$ | $11.0 \%$ |  |
|  |  |  |  |  |  |  |
| Grades 11-12 | 1994 | $20.0 \%$ | $48.5 \%$ | $17.4 \%$ | $14.0 \%$ |  |
|  | 1996 | $22.6 \%$ | $52.5 \%$ | $14.7 \%$ | $10.2 \%$ |  |

## Ease of Obtaining Alcohol

There was no change in perceived ease in getting alcohol. Older students found alcohol easier to obtain than did younger students.
21. On a scale of 1 (easy) to
5 (difficult) how easy is it to
obtain alcohol?

|  | Mean |  |
| :--- | :--- | ---: |
| Grades $9-12$ | 1994 | 2.31 |
|  | 1996 | 2.33 |
|  | 1994 | 2.49 |
|  | 1996 | 2.52 |
|  |  |  |
| Grades $11-12$ | 1994 | 2.02 |
|  | 1996 | 2.06 |

## Own Fake ID

There was little change in the proportion of students reporting owning false identification in either grade group.

|  |  | Yes | No |
| :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $6.2 \%$ | $93.8 \%$ |
|  | 1996 | $5.4 \%$ | $94.6 \%$ |
|  |  |  |  |
| Grades 9-10 | 1994 | $6.1 \%$ | $93.8 \%$ |
|  | 1996 | $4.8 \%$ | $95.2 \%$ |
|  |  |  |  |
| Grades 11-12 | 1994 | $6.3 \%$ | 93.78 |
|  | 1996 | 6.5\% | 93.5\% |

## Recency of Riding with Drinking Driver

The proportion of students reporting never riding with a drinking driver increased overall. This change appears to have been larger for students in grades 11-12 than for those in grades 9-10.
12. How recently have you ridden with a drunk or drinking driver? In the past:

|  |  | Year | Month | Week | Never |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $23.6 \%$ | $19.0 \%$ | $21.2 \%$ | $36.3 \%$ |  |
|  | 1996 | $20.9 \%$ | $18.1 \%$ | $19.0 \%$ | $41.9 \%$ |  |
|  | 1994 | $22.9 \%$ | $18.3 \%$ | $18.3 \%$ | $40.4 \%$ |  |
|  | 1996 | $20.4 \%$ | $19.4 \%$ | $17.0 \%$ | $43.1 \%$ |  |
|  |  |  |  |  |  |  |  |
|  | 1994 | $24.6 \%$ | $19.9 \%$ | $25.1 \%$ | $30.4 \%$ |  |
|  | 1996 | $21.7 \%$ | $16.0 \%$ | $22.3 \%$ | $40.0 \%$ |  |

## Frequency of Riding with Drinking Driver

There was a general downward shift in the proportions of students reporting larger numbers of occasions of riding with a driver who had been drinking. This was the case among both grade groups.
13. How many times in the last month have you ridden with a drunk or drinking driver? (Of those who reported doing so)

|  |  | $1-3$ | $4-6$ | $7-10$ | $>10$ |  |
| :---: | :---: | :---: | :---: | :---: | :--- | :---: |
| Grades 9-12 | 1994 | $68.2 \%$ | $12.7 \%$ | $6.2 \%$ | $12.9 \%$ |  |
|  | 1996 | $74.0 \%$ | $11.3 \%$ | $3.9 \%$ | $10.8 \%$ |  |
|  | 1994 | $70.3 \%$ | $11.6 \%$ | $5.3 \%$ | $12.8 \%$ |  |
|  | 1996 | $74.5 \%$ | $11.0 \%$ | $3.5 \%$ | $11.0 \%$ |  |
|  |  |  |  |  |  |  |  |
|  | 1994 | $65.6 \%$ | $14.0 \%$ | $7.2 \%$ | $13.1 \%$ |  |
|  | 1996 | $73.1 \%$ | $11.9 \%$ | $4.4 \%$ | $10.6 \%$ |  |

## Threat of MIP Arrest

There was little change in either group in perceived threat of arrest for "minor in possession."


## Threat of Underage DUI Arrest

The perceived threat of being arrested for DUI increased among students in grades 11-12.
38. When a person under age 21 in your county has been drinking alcoholic beverages then drives, how often is he or she arrested for a drinking and driving offense?
$1=$ never -- 5=always

|  |  | Mean |  |
| :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | 2.52 |  |
|  | 1996 | 2.61 |  |
|  |  |  |  |  |
| Grades 9-10 | 1994 | 2.62 |  |
|  | 1996 | 2.63 |  |
|  |  |  |  |
| Grades 11-12 | 1994 | 2.38 |  |
|  | 1996 | 2.56 |  |

The perceived threat of having a drinking party broken up by police increased among students in grades 9-10.
37. When there are parties in your county where guests under age 21 are drinking alcoholic beverages, how often are these parties broken up by police?
$1=$ never -- 5=always

|  |  | Mean |  |
| :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | 2.29 |  |
|  | 1996 | 2.46 |  |
|  |  |  |  |
| Grades 9-10 | 1994 | 2.24 |  |
|  | 1996 | 2.52 |  |
|  | 1994 | 2.38 |  |
|  | 1996 | 2.38 |  |

## Marquette County

## General Drinking

The proportion of students who reported drinking declined for both grade groups.
20. Do you drink alcoholic
beverages?

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $53.7 \%$ | $46.3 \%$ |
|  | 1996 | $48.1 \%$ | $51.9 \%$ |
|  | 1994 | $49.4 \%$ | $50.6 \%$ |
|  | 1996 | $44.3 \%$ | $55.7 \%$ |
|  |  | No |  |
| Grades 11-12 | 1994 | $59.7 \%$ | $40.3 \%$ |
|  | 1996 | $53.6 \%$ | $46.4 \%$ |

## Drinking to Intoxication

The proportion of students reporting refraining from binge drinking in the last month changed little for both grade groups. Older students reported binge drinking more often than do younger students.
31. How many times in the last month did you have 5 or more drinks in a row? (Of those who reported drinking)

|  |  | Zero | $1-5$ | $6-10$ | $11-15$ | $>15$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $39.3 \%$ | $41.0 \%$ | $11.3 \%$ | $2.6 \%$ | $5.8 \%$ |
|  | 1996 | $40.5 \%$ | $40.1 \%$ | $9.8 \%$ | $4.0 \%$ | $4.7 \%$ |


| Grades 9-10 | 1994 | $41.8 \%$ | $40.0 \%$ | $11.5 \%$ | $3.0 \%$ | $3.6 \%$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1996 | $43.2 \%$ | 40.18 | $8.0 \%$ | $4.3 \%$ | $4.3 \%$ |


| Grades $11-12$ | 1994 | $36.5 \%$ | 42.18 | 11.08 | 2.18 | $8.3 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- |
|  | 1996 | $37.3 \%$ | $41.8 \%$ | 11.9 | $3.7 \%$ | $5.2 \%$ |

## Attempt to Obtain Alcohol

The proportion of students who reported not trying to get alcohol in the last month changed little among both grade groups. However, in both grade groups there was a general downward shift in the proportions of students reporting larger numbers of attempts to get alcohol.
22. How many times in the last month have you attempted to obtain alcohol? (Of those who reported drinking)

|  |  | Zero | $1-5$ | $6-10$ | $>10$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $23.2 \%$ | $46.1 \%$ | $17.1 \%$ | $13.6 \%$ |
|  | 1996 | $24.8 \%$ | $53.7 \%$ | $10.9 \%$ | 10.5 |
|  | 1994 | $21.2 \%$ | $49.7 \%$ | $15.8 \%$ | $13.3 \%$ |
|  | 1996 | $22.4 \%$ | $57.1 \%$ | $11.8 \%$ | $8.7 \%$ |
|  | 1994 | $25.5 \%$ | $42.1 \%$ | $18.6 \%$ | $13.8 \%$ |
|  | 1996 | $27.8 \%$ | $49.6 \%$ | $9.8 \%$ | $12.8 \%$ |

## Success at Obtaining Alcohol

The proportion of students who reported being able to get alcohol in the last month increased among students in the 9-10 grade group and decreased among students in the 11-12 grade group.
23. How many times were you able to obtain alcohol
in the last month? (Of those who reported
drinking)

|  |  | zero | $1-5$ | $6-10$ | $>10$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Grades 9-12 | 1994 | $21.0 \%$ | $50.7 \%$ | $17.7 \%$ | $10.6 \%$ |
|  | 1996 | $20.2 \%$ | $57.5 \%$ | $9.9 \%$ | $12.3 \%$ |
|  | 1994 | $22.4 \%$ | $52.1 \%$ | $17.0 \%$ | $8.5 \%$ |
|  | 1996 | $17.4 \%$ | $60.2 \%$ | $11.2 \%$ | $11.2 \%$ |
| Grades $11-12$ | 1994 | $19.3 \%$ | $49.0 \%$ | $18.6 \%$ | $13.1 \%$ |
|  | 1996 | $23.7 \%$ | $54.2 \%$ | $8.4 \%$ | $13.7 \%$ |

## Ease of Obtaining Alcohol

There was little change in perceived ease of getting alcohol. Older students found obtaining alcohol to be easier than younger students.
21. On a scale of 1 (easy) to 5
(difficult) how easy is it to
obtain alcohol?

|  | Mean |  |
| :--- | :--- | :--- |
| Grades $9-12$ | 1994 | 2.37 |
|  | 1996 | 2.35 |
|  | 1994 | 2.57 |
|  | 1996 | 2.49 |
| Grades 11-12 | 1994 | 1996 |

## Own Fake ID

There was little change in the proportion of students reporting owning false identification.
25. Do you have a false ID card
that shows you to be 21 or over?

|  | Yes | No |  |
| :--- | :--- | :--- | :--- |
| Grades 9-12 | 1994 | $2.4 \%$ | $97.6 \%$ |
|  | 1996 | $3.4 \%$ | $96.6 \%$ |
|  | 1994 | $2.7 \%$ | $97.3 \%$ |
|  | 1996 | $3.8 \%$ | $96.2 \%$ |
|  |  |  |  |
| Grades $11-12$ | 1994 | $2.1 \%$ | 97.98 |
|  | 1996 | $2.8 \%$ | $97.2 \%$ |

## Recency of Riding with Drinking Driver

The proportion of students reporting never riding with a drinking driver increased overall. This change appears to have been larger for students in grades 9-10 than for those in grades 11-12.
12. How recently have you ridden with a drunk or drinking driver? In the past:

|  |  | Year | Month | Week | Never |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $19.8 \%$ | $17.5 \%$ | $20.3 \%$ | $42.5 \%$ |  |  |  |  |  |  |
|  | 1996 | $20.3 \%$ | $17.2 \%$ | $11.9 \%$ | $50.6 \%$ |  |  |  |  |  |  |
|  | 1994 | $18.1 \%$ | $19.0 \%$ | $18.7 \%$ | $44.1 \%$ |  |  |  |  |  |  |
|  | 1996 | $19.2 \%$ | $17.0 \%$ | $9.9 \%$ | $53.8 \%$ |  |  |  |  |  |  |
| Grades 11-12 |  |  |  |  |  |  | 1994 | $22.0 \%$ | $15.3 \%$ | $22.4 \%$ | $40.2 \%$ |
|  | 1996 | $21.9 \%$ | $17.4 \%$ | $15.0 \%$ | $45.7 \%$ |  |  |  |  |  |  |

## Frequency of Riding with Drinking Driver

There was a general downward shift in the proportions of students in grades 11-12 reporting occasions of riding with a driver who had been drinking.
13. How many times in the last month have you ridden with a drunk or drinking driver? (Of those who reported doing so)

|  |  | 1-3 | 4-6 | 7-10 | >10 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $77.5 \%$ | $9.5 \%$ | 6.18 | $6.8 \%$ |
|  | 1996 | 79.98 | 9.4\% | $3.8 \%$ | $6.9 \%$ |
| Grades 9-10 | 1994 | 80.98 | $9.8 \%$ | $4.4 \%$ | 4.9\% |
|  | 1996 | 78.38 | 9.0\% | 4.28 | 8.4\% |
| Grades 11-12 | 1994 | 73.28 | $9.1 \%$ | 8.4\% | 9.18 |
|  | 1996 | $82.0 \%$ | 9.8\% | $3.3 \%$ | 4.9\% |

## Threat of MIP Arrest

There was no change in perceived threat of arrest for "minor in possession."

|  |  | Mean |
| :---: | :---: | :---: |
| Grades 9-12 | 1994 | 2.92 |
|  | 1996 | 2.97 |
| Grades 9-10 | 1994 | 2.89 |
|  | 1996 | 2.91 |
| Grades 11-12 | 1994 | 2.97 |
|  | 1996 | 3.06 |

## Threat of Underage DUI Arrest

The perceived threat of being arrested for DUI increased slightly among students in grades 9-10, but decreased slightly for those in grades 11-12.
38. When a person under age 21 in your county has been drinking alcoholic beverages then drives, how often is he or she arrested for a drinking and driving offense?
$1=$ never -- 5=always

|  |  | Mean |  |
| :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | 2.70 |  |
|  | 1996 | 2.70 |  |
|  |  |  |  |  |
| Grades 9-10 | 1994 | 2.70 |  |
|  | 1996 | 2.80 |  |
|  |  |  |  |
| Grades 11-12 | 1994 | 2.70 |  |
|  | 1996 | 2.56 |  |

## Threat of Party Breakup

The perceived threat of having a drinking party broken up by police decreased a little among students in both grade groups.

When there are parties in your county where guests under age 21 are drinking alcoholic beverages, how often are these parties broken up by police?
1=never -- 5=always

|  |  | Mean |  |
| :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | 2.50 |  |
|  | 1996 | 2.39 |  |
|  | 1994 | 2.46 |  |
|  | 1996 | 2.37 |  |
|  |  |  |  |
|  | 1994 | 2.55 |  |
|  | 1996 | 2.42 |  |

## Washtenaw County

## General Drinking

The proportion of students who reported drinking changed little for both grade groups. Older students reported more drinking than younger students.
21. Do you drink alcoholic
beverages?

|  |  | Yes | No |
| :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $51.4 \%$ | $48.6 \%$ |
|  | 1996 | $50.5 \%$ | $49.5 \%$ |
|  |  |  |  |
| Grades 9-10 | 1994 | $48.6 \%$ | $51.4 \%$ |
|  | 1996 | $47.6 \%$ | $52.4 \%$ |
|  |  |  |  |
| Grades 11-12 | 1994 | $56.3 \%$ | $44.7 \%$ |
|  | 1996 | $54.4 \%$ | $45.6 \%$ |

## Drinking to Intoxication

The proportion of students reporting binge drinking in the last month increased, particularly for students in grades 11-12.
31. How many times in the last month did you have 5 or more drinks in a row? (Of those who reported drinking)

|  |  | Zero | 1-5 | 6-10 | 11-15 | >15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | 53.78 | 34.68 | 6.5\% | 1.1\% | $5.1 \%$ |
|  | 1996 | $47.4 \%$ | 34.38 | 6.98 | 4.78 | 6.6\% |
| Grades 9-10 | 1994 | $53.4 \%$ | 35.18 | $5.8 \%$ | $1.6 \%$ | 4.2\% |
|  | 1996 | $54.2 \%$ | $32.6 \%$ | $5.6 \%$ | 4.9\% | 2.8\% |
| Grades 11-12 | 1994 | $51.8 \%$ | 33.98 | 7.48 | $0.6 \%$ | 6.2\% |
|  | 1996 | $40.0 \%$ | $36.2 \%$ | 8.5\% | 4.6\% | $10.8 \%$ |

## Attempt to Obtain Alcohol

The proportion of students who reported trying to get alcohol in the last month increased among the 11-12 grade students. Consequently, there was a general upward shift in the proportions of students reporting larger numbers of attempts to get alcohol.
22. How many times in the last month have you attempted to obtain alcohol? (Of those who reported drinking)

|  |  | Zero | $1-5$ | $6-10$ | $>10$ |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $26.1 \%$ | $46.9 \%$ | $13.9 \%$ | $13.1 \%$ |  |  |  |  |  |  |
|  | 1996 | $24.5 \%$ | $47.7 \%$ | $12.6 \%$ | $15.2 \%$ |  |  |  |  |  |  |
|  | Grades 9-10 |  |  |  |  |  |  | 1994 | $26.3 \%$ | $44.8 \%$ | $16.0 \%$ | $12.9 \%$ |
|  | 1996 | $28.8 \%$ | $54.8 \%$ | $8.2 \%$ | $8.2 \%$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1994 | $25.9 \%$ | $49.4 \%$ | $11.4 \%$ | $13.3 \%$ |  |  |  |  |  |  |
|  | 1996 | $19.9 \%$ | $39.7 \%$ | $17.6 \%$ | $22.9 \%$ |  |  |  |  |  |  |

## Success at Obtaining Alcohol

The proportion of students who reported being able to get alcohol in the last month increased among students in both grade groups. There was also a general upward shift in the proportions of students reporting larger numbers of successes getting alcohol.
23. How many times were you able to obtain alcohol in the last month? (Of those who reported drinking)

|  |  | Zero | $1-5$ | $6-10$ | $>10$ |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $23.7 \%$ | $47.1 \%$ | $13.4 \%$ | $15.7 \%$ |  |  |  |  |  |  |
|  | 1996 | $18.2 \%$ | $49.6 \%$ | $14.9 \%$ | $16.7 \%$ |  |  |  |  |  |  |
|  | Grades 9-10 |  |  |  |  |  |  | 1994 | $28.1 \%$ | $42.7 \%$ | $11.5 \%$ | $17.7 \%$ |
|  | 1996 | $24.1 \%$ | $53.1 \%$ | $10.3 \%$ | $12.4 \%$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Grades 11-12 | 1994 | $18.3 \%$ | $52.5 \%$ | $15.8 \%$ | $13.3 \%$ |  |  |  |  |  |  |
|  | 1996 | $13.0 \%$ | $45.8 \%$ | $19.9 \%$ | $21.4 \%$ |  |  |  |  |  |  |

## Ease of Obtaining Alcohol

There was no change in perceived ease in getting alcohol.
21. On a scale of 1 (easy) to 5 (difficult) how easy is it
for you to obtain alcohol?

|  |  | Mean |
| :--- | :--- | ---: |
| Grades 9-12 | 1994 | 2.17 |
|  | 1996 | 2.18 |
|  |  |  |
| Grades 9-10 | 1994 | 2.34 |
|  | 1996 | 2.35 |
|  |  |  |
| Grades 11-12 | 1994 | 1.95 |
|  | 1996 | 1.95 |

## Own Fake ID

There was an increase in both grade groups in the proportion of students reporting owning false identification.
25. Do you have a false ID card
that shows you to be 21 or over?

|  |  | Yes | No |
| :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | $6.0 \%$ | $94.0 \%$ |
|  | 1996 | $9.0 \%$ | $91.0 \%$ |
|  | 1994 | $4.7 \%$ | $95.3 \%$ |
|  | 1996 | $7.6 \%$ | $92.4 \%$ |
|  |  |  |  |
| Grades 11-12 | 1994 | $7.8 \%$ | $92.2 \%$ |
|  | 1996 | $10.8 \%$ | $89.2 \%$ |

## Recency of Riding with Drinking Driver

The proportion of students reporting never riding with a drinking driver increased for students in grades $9-10$, but remained unchanged among those in grades 11-12.
12. How recently have you ridden with a drunk or drinking driver?

|  |  | Year | Month | Week | Never |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | $16.1 \%$ | $16.8 \%$ | $18.1 \%$ | $49.1 \%$ |  |
|  | 1996 | $16.8 \%$ | $15.3 \%$ | $14.8 \%$ | $53.1 \%$ |  |
|  | 1994 | $16.4 \%$ | $13.6 \%$ | $18.9 \%$ | $51.1 \%$ |  |
|  | 1996 | $15.6 \%$ | $14.3 \%$ | $10.7 \%$ | $59.4 \%$ |  |
|  |  |  |  |  |  |  |
| Grades 11-12 | 1994 | $15.6 \%$ | $21.2 \%$ | $17.0 \%$ | $46.2 \%$ |  |
|  | 1996 | $18.3 \%$ | $16.7 \%$ | $20.0 \%$ | $45.0 \%$ |  |

## Frequency of Riding with Drinking Driver

There was a general upward shift in the proportions of students reporting more occasions of riding with a driver who had been drinking, especially among students in grades 11-12.
13. How many times in the last month have you ridden with a drunk or drinking driver? (Of those who reported doing so)

|  |  |  | $1-3$ | $4-6$ | $7-10$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grades 9-12 | 1994 | $70.2 \%$ | $14.2 \%$ | $4.2 \%$ | $11.4 \%$ |
|  | 1996 | $67.1 \%$ | $13.2 \%$ | $7.0 \%$ | $12.8 \%$ |
|  | 1994 | $69.2 \%$ | $16.7 \%$ | $4.5 \%$ | $9.6 \%$ |
|  | 1996 | $70.0 \%$ | $8.3 \%$ | $9.2 \%$ | $12.5 \%$ |
|  |  |  |  |  |  |
|  | 1994 | $71.4 \%$ | $11.2 \%$ | $3.7 \%$ | $13.7 \%$ |
|  | 1996 | $64.2 \%$ | $17.9 \%$ | $4.9 \%$ | $13.0 \%$ |

## Threat of MIP Arrest

There was little change in perceived threat of arrest for "minor in possession."


## Threat of Underage DUI Arrest

The perceived threat of being arrested for DUI increased slightly among students grades 9-10, but decreased slightly for those in grades 11-12.
38. When a person under age 21 in your county has been drinking alcoholic beverages then drives, how often is he or she arrested for drinking and driving offenses?
1=never -- 5=always

|  |  | Mean |  |
| :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | 2.63 |  |
|  | 1996 | 2.68 |  |
|  | Grades 9-10 |  |  |  |
|  | 1994 | 2.62 |  |
|  | 1996 | 2.77 |  |
| Grades 11-12 | 1994 | 2.65 |  |
|  | 1996 | 2.55 |  |

## Threat of Party Breakup

The perceived threat of having a drinking party broken up by police increased among students grades 9-10, but decreased for those in grades 11-12.
37. When there are parties in your county where guests under age 21 are drinking alcoholic beverages, how often are these parties broken up by police?
1=never -- 5=always

|  |  | Mean |  |
| :--- | :--- | :--- | :---: |
| Grades 9-12 | 1994 | 2.37 |  |
|  | 1996 | 2.46 |  |
|  | 1994 | 2.19 |  |
|  | 1996 | 2.48 |  |
|  |  |  |  |
|  | 1994 | 2.61 |  |
|  | 1996 | 2.42 |  |

## DISCUSSION

The results of the student surveys conducted in 1994 and 1996 in conjunction with four counties' programs to prevent impaired driving by youth were presented in this report. The data were presented separately by county and not compared because each county had its own individual approach to its own specific issues. Youth drinking and driving problems were embedded in the unique culture and context of each county. Furthermore, the timing of prevention activities and survey administration was not consistent across counties.

Although the original intent of administering student surveys was to evaluate the effectiveness of the counties' prevention programs, several factors rendered the evaluation design less than ideal. Various delays in activities led to the 1994 surveys being administered, at least in some counties, after considerable programming was underway. The results, therefore, cannot serve as a preprogram baseline measure. In addition, because of staffing changes in the several organizations involved in the prevention programs, the documentation of the implementation of activities and their timing was somewhat incomplete. It is impossible, therefore, to adequately sort out for all counties exactly what happened when, and what effects might be due to which programs. Nonetheless, the data collected from students can be very useful to those working within each county because they may be able to interpret their own results, knowing their own programming efforts best. Some evidence for county-specific program effectiveness may be clear to the county coordinators who know the activities and timing of their own prevention efforts.

These results can be useful as well to others who are interested in the general problem of impaired driving among youth. Alcohol use and impaired driving by youth are challenging problems nationwide and not unique to Michigan or the counties that were surveyed. While the student survey results varied somewhat among the counties, several common issues are worth highlighting as problem areas that future prevention programs might wish to target.

## KNOWLEDGE

Basic student knowledge about alcohol was disappointingly low. Many students were wrong about the number of drinks over a one-hour time period it takes to become intoxicated - about half responded four or more drinks, a dangerous amount to be sure. In addition, many students were unaware of the blood alcohol level at which a person's ability to drive becomes significantly impaired. A significant portion chose the high levels of .07 and .10 , which may represent legally impaired and drunk levels, but the students' choice demonstrates that they are unaware of the alcohol impairment that is present at lower blood alcohol levels. Finally, a disturbing half or so of the students did not know that a can of beer, a glass of wine, and a mixed drink all have equal amounts of alcohol. This lack of basic knowledge can lead to unsafe decisions and actions that could be prevented.

Students were also not particularly knowledgeable about Michigan's alcohol laws that could affect them. This was especially true regarding students' awareness in 1996 that . 02 is the blood alcohol level at which persons under age 21 are legally impaired - a large proportion of students chose higher levels of legal impairment. A substantial portion were also wrong about the fact that is against the law for a person under 21 years of age to attempt to purchase alcohol. Lack of knowledge about these and other laws affecting young people may allow them to make poor decisions that could have serious consequences and unanticipated negative effects on their lives.

## ATTITUDES

Several attitudes of the students about drinking and impaired driving, as well as their perceptions of enforcement, are also worth noting. When asked about their main concern regarding alcohol use, more than half answered "being caught," rather than health or other concerns. One would hope that most young people would be very uncomfortable riding with a driver who has had three beers in the last hour, yet that was not the case. Students also did not anticipate much disapproval from friends if they were to be arrested for drunk driving. In general, students perceived enforcement for possessing alcoholic beverages, having alcohol at their parties, and driving after drinking to be quite low.

## BEHAVIOR

Students' responses regarding interactions with their parents point out the need for more parent involvement regarding teen drinking. Less than two-thirds of the students reported that their parents had talked to them about their attitudes about drinking or about teenage drinking in general. surprising third or more of the students said they "always" can hide their drinking from their parents. Only about half the students felt that their parents would "punish me severely" if they were caught drinking. Parents' own role modeling for young people leaves much to be desired - only about a quarter of the students whose parents drink alcohol said their parents were "never" intoxicated.

The use of alcohol among young people is unacceptably high, nationally, as well as locally. Close to one-third of those surveyed reported recent binge drinking - having five or more drinks in a row at least once in the last month. Many students reported that alcohol is easy for them to obtain. In the previous month, at least a third had attempted to obtain alcohol, and about half said they had been successful obtaining alcohol, most often at party stores and grocery stores, and/or supplied by an adult.

Only about half the students said that they had "never" ridden with a drunk or drinking driver. Furthermore, a considerable percentage admitted to having been stopped by the police when there was alcohol in the vehicle, yet only a small proportion of them were ticketed or arrested.

## IMPLICATIONS FOR PREVENTION

This overview of selected findings points out that, even though much effort may have already been expended to prevent impaired driving among youth, there remains much more to be done. It is a difficult, challenging process to change attitudes and behaviors that are very much a part of contemporary youth culture. Many well-developed programs have tried and have had to settle for small, although meaningful, changes on particular measures. Knowledge is easier to change than are attitudes and behavior. Certain knowledge is necessary to guide behavior, but knowledge is not necessarily related to desirable behavioral outcomes. It is, however, somewhat satisfying that national data do show a downward trend for alcohol-related fatal crashes among teens. Young adults, however, are proving harder to reach, and Michigan is not alone in facing this challenge.

The overview of survey results highlights some of the areas in which prevention efforts can be directed. The role of parents can be enhanced with input from schools, and other community groups. Many studies have shown that parents are, and can be, an important influence on young people's behavior. Parents may need to be reassured of that, however, and shown just how they can best help their children. The role of young people themselves in prevention efforts should also be enhanced, because a large proportion of students reported that their attitudes about alcohol were most influenced by their peers. There are many students who care about the impaired driving problem and with guidance, they could help to bring about the needed changes among their peers.

We know that for prevention to be effective, young people need to hear consistent, clear messages over time coming from several different sources in their home, school, and community. The programs that deliver these messages must be ongoing and never ease up, because there are always new young people coming along. Youth need to hear these messages and see positive role models all along the course of their development, not just in one particular school grade. The prevention programs need to start early, not after students have adopted the unhealthy attitudes and behaviors. Young people's behavior should be monitored appropriately and rewarded or inhibited as needed. Enforcement activity directed toward alcohol sales, possession, and impaired driving must be maintained at a meaningful level. Programs targeted toward young people need to continually update their materials and methods, staying current in order to be acceptable, believable, and effective. A comprehensive prevention approach that is coordinated, supported, and maintained over time can be very effective. Although prevention of impaired driving is challenging, our young people are well worth the effort.

## APPENDIX A <br> TABLES OF ACTIVITIES

| Community Wide Youth Impaired Driving Program |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Goals and Objectives (FY92-93) |  |  |  |  |  |  |  |

Community Wide Youth Impaired Driving Program
Goals and Objectives (FY93-94)

| Washtenaw County | Marquette County | Lapeer County | Delta County | Gladwin County |
| :---: | :---: | :---: | :---: | :---: |
| Goal 1: Evaluate grant objectives and activities. | Goal 1: Evaluate grant objectives and activities. | Goal 1: Evaluation. | Goal 1: Evaluate the grant objectives and activities. | Goal 1: Evaluate the grant objectives and activities. |
| Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. | Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. | Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. | Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. | Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. |
| Goal 2: Maintain and expand established community coaltions. | Goal 2: Maintain and expand established community coaltions. | Goal 2: Coalition building. | Goal 2: Maintain and expand established community coaltions. | Goal 2: Maintain and expand established community coaltions. |
| Obj 1: Maintain and expand county steering committee and try to expand four community teams to six. | Obj 1: Maintain and expand county steering committee and five community teams. | Obj 1: Maintain and expand county steering committee and five community teams. | Obj 1: Maintain and expand county steering committee and five community teams. | Obj 1: Maintain and expand Gladwin County Steering Committee, Gladwin Community Team, and Beaverton Community Team. |
| Goal 3: Provide education to students in grades 9-12. | Goal 3: Provide education to students in grades 9-12. | Goal 3: Education. | Goal 3: Provide education to students in grades 9-12. | Goal 3: Provide education to students in grades 9-12. |
| Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95). | Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95). | Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95). | Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95). | Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95). |
|  | Obj 2: Provide youth alcohol/traffic education (YATE) program to all driver education classes in Marquette County schools. |  | Obj 2: Provide MIP program through Delta County Substance Abuse Agency to educate youthful offenders. | Obj 2: Increase the knowledge of parents and the community regarding impaired driving issues. |
|  | Obj 3: Increase community awareness of youth impaired driving issues through public awareness campaign. Phone surveys to assess effectiveness. |  | Obj 3: Provide county-wide teen conference for youth in grades 9-12. |  |
|  | Obj 4: Provide court referred youth/parent training (CRYPT) program to youth identified by Probate Court. |  |  |  |
|  | Obj 5: Provide Insight Group Program through Catholic Social Services (INITIATIVES) to eduate first time youthful offenders. |  |  |  |
| Goal 4: Provide training to project traffic enforcement officers. | Goal 4: Provide training to project traffic enforcement officers. | Goal 4: Training. | Goal 4: Provide training to project traffic enforcement officers. | Goal 4: Provide training to project traffic enforcement officers. |
| Obj 1: Provide standardized field sobriety testing (SFST) to project traffci enforcement officers. | Obj 1: Provide standardized field sobriety testing (SFST) to project traffci enforcement officers by end of FY 94. | Obj 1: Provide standardized field sobriety testing (SFST) to project traffci enforcement officers by the end of FY 94. | Obj 1: Provide standardized field sobriety testing (SFST) to project traffci enforcement officers. | Obj 1: Provide standardized field sobriety testing (SFST) to project traffic enforcement officers by end of FY 94. |


| Community Wide Youth Impaired Driving Program Goals and Objectives (FY93-94) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Washtenaw County | Marquette County | Lapeer County | Delta County | Gladwin County |
| Obj 2: Provide occupant protection usage and enforcement (OPUE) training to officers. | Obj 2: Provide occupant protection usage and enforcement (OPUE) training to officers. | Obj 2: Provide occupant protection usage and enforcement (OPUE) training to officers by the end of FY 94. | Obj 2: Provide occupant protection usage and enforcement (OPUE) training to officers. | Obj 2: Provide occupant protection usage and enforcement (OPUE) training to officers by end of FY 94. |
| Goal 5: Expand and maintain tactical multiagency alcohol enforcement program (uniform/plainclothes). | Goal 5: Expand and maintain tactical multiagency alcohol enforcement program (uniform/plainclothes). | Goal 5: Enforcement. | Goal 5: Establish tactical multiagency alcohol enforcement program (uniform/plainclothes). | Goal 5: Establish tactical multiagency alcohol enforcement program (uniform/plainclothes). |
| Obj 1: Expand and maintain tactical multi-agency team comprised of local and state law enforcement agencies prior to enforcement activity implementation. | Obj 1: Establish law enforcement team comprised of local and state agencies prior to enforcement activity implementation. | Obj 1: Establish law enforcement team comprised of local and state agencies prior to enforcement activity implementation. | Obj 1: Establish law enforcement team comprised of local and state agencies prior to enforcement activity implementation. | Obj 1: Continue law enforcement team comprised of local and state agencies prior to enforcement activity implementation. |
| Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator). | Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator). | Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator) | Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator). | Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator). |
| Obj 3: Implement enforcement strategy plan throughout FY 94 (team and coordinator). | Obj 3: Implement enforcement strategy plan throughout FY 94 (team and coordinator). | Obj 3: Implement enforcement strategy plan by end of FY 94 (team and coordinator). | Obj 3: Implement enforcement strategy plan by end of FY 94 (team and coordinator). | Obj 3: Implement enforcement strategy plan by end of FY 94 (team and coordinator). |
| Goal 6: Develop a cost assumption strategy plan using the "seed Money" concept. | Goal 6: Develop a program assumption strategy plan using the "seed Money" concept. | Goal 6: Cost assumption. | Goal 6: Develop a cost assumption strategy plan using the "seed Money" concept. | Goal 6: Develop a program assumption strategy plan using the "seed Money" concept. |
| Obj 1: Develop cost assumption plan by end of FY 94 to make project self sustaining. | Obj 1: Develop cost assumption plan by end of FY 94 to make project self sustaining. | Obj 1: Develop program assumption plan by end of FY 94 to make project self sustaining. | Obj 1: Develop cost assumption plan by end of FY 94 to make project self sustaining. | Obj 1: Develop program assumption plan by end of FY 94 to make project self sustaining. |
|  |  |  |  | Goal 7: Offer alcohol screening to youthful offenders age 18-20. |
|  |  |  |  | Obj 1: Refer offenders convicted of OUIL or MIP for screening services. |
|  |  |  |  | Demonstration of compliance Obj: Submit monthly reports of referrals for screening (project coordinator). |


| Community Wide Youth Impaired Driving Program Goals and Objectives (FY94-95) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Washtenaw County | Marquette County | Lapeer County | Delta County | Gladwin County |
| Goal 1: Evaluate the grant objectives and activities. | Goal 1: Evaluate the grant objectives and activities. | Goal 1: Evaluate the grant objectives and activities. | Goal 1: Evaluate the grant objectives and activities. | Goal 1: Evaluate the grant objectives and activities. |
| Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. | Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. | Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. | Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. | Obj 1: Develop evaluation plan (project coordinator) w/ approval by OHSP. |
| Goal 2: Maintain and expand established coaltions. | Goal 2: Maintain and expand established coaltions. | Goal 2: Maintain and expand established coaltions. | Goal 2: Maintain and expand established coaltions. | Goal 2: Maintain and expand established coaltions. |
| Obj 1: Maintain and expand county steering committee and community teams. | Obj 1: Maintain and expand county steering committee and community teams. | Obj 1: Maintain and expand county steering committee and community teams. | Obj 1: Maintain and expand county steering committee and five community teams. | Obj 1: Maintain and expand county steering committee and community teams. |
| Goal 3: Provide education to students in grades 9-12. | Goal 3: Provide education to students in grades 9-12. | Goal 3: Provide education to students in grades 9-12. | Goal 3: Provide education to students in grades 9-12. | Goal 3: Provide education to students in grades 9-12. |
| Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95). | Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95). | Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95). | Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95). | Obj 1: Increase knowledge of grade 9-12 students of youth impaired driving issues by $20 \%$ (end FY 95) with baseline data from AOL. |
|  | Obj 2: Provide YATE program to 17 driver education classes in Marquette County schools by end of FY 95. |  | Obj 2: Continue MIP program through Delta County Substance Abuse Agency to educate youthful offenders. | Obj 2: Increase knowledge of patents and community regarding impaired driving issues. |
|  | Obj 3: Increase community awareness of youth imapired driving issues through public awareness campaign. Phone surveys to assess effectiveness. |  | Obj 3: provide county-wide teen conference to 100 youth in grades 9 12. |  |
| Goal 4: Continue to provide training of FY 94 goal/objective not met. | Goal 4: Provide training to project traffic enforcement officers. | Goal 4: |  |  |
| Obj 1: Provide OPUE training by end of FY 95 . | Obj 1: Provide SFST training by end of 2nd quarter of FY 95. | Obj 1: Provide OPUE training by end of FY 95 . |  |  |
| Goal 5: Expand and maintain tactical multiagency alcohol enforcement program (uniform/plainciothes). | Goal 5: Expand and maintain tactical multiagency alcohol enforcement program (uniform/plainciothes). | Goal 5: Expand and maintain tactical multiagency alcohol enforcement program (uniform/piainclothes). | Goal 4: Maintain tactical multiagency alcohol enforcement program (uniform/plainclothes). | Goal 4: Maintain tactical multiagency alcohol enforcement program (uniform/plainclothes). |
| Obj 1: Expand and maintain law enforcement team comprised of local and state agencies. | Obj 1: Expand and maintain law enforcement team comprised of local and state agencies. | Obj 1: Expand and maintain law enforcement team comprised of local and state agencies. | Obj 1: Maintain law enforcement team comprised of local and state agencies. | Obj 1: Maintain law enforcement team comprised of local and state agencies. |


| Community Wide Youth Impaired Driving Program Goals and Objectives (FY94-95) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Washtenaw County | Marquette County | Lapeer County | Delta County | Gladwin County |
| Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator). | Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator). | Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator). | Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator). | Obj 2: Develop enforcement strategy plan each year (law enforcement team and project coordinator). |
| Obj 3: Implement enforcement strategy plan by end of FY 95 (team and coordinator). | Obj 3: Implement enforcement strategy plan by end of FY 95 (team and coordinator). | Obj 3: Implement enforcement strategy plan by end of FY 95 (team and coordinator). | Obj 3: Implement enforcement strategy plan by end of FY 95 (team and coordinator). | Obj 3: Implement enforcement strategy plan throughout FY 95 (team and coordinator). |
|  | Obj 4: Increase conviction rate by 5\% by end of FY 95. |  |  |  |
| Goal 6: Implement program assumption strategy plan developed in FY 94. | Goal 6: Implement program assumption strategy plan developed in FY 94. | Goal 6: Implement program assumption strategy plan developed in FY 94. | Goal 6: Programs established through grant were designed to be self sustaining--after grant, minimal funding will be required. | Goal 5: Develop the program assumption strategy plan developed in FY 94. |
| Obj 1: Implement program assumption strategy plan by end of FY 95 to make project self sustaining. | Obj 1: Implement program assumption strategy plan by end of FY 95 to make project self sustaining. | Obj 1: Implement program assumption strategy plan by end of FY 95 to make project self sustaining. | Obj 1: Increase community funding of existing programs. | Obj 1: Implement the program assumption strategy plan by end of FY 95. |
|  |  |  | Obj 2: Provide funding for project coordinator. |  |
|  |  |  |  | Goal 6: Offer alcohol screening to youthful offenders age 18-20. |
|  |  |  |  | Obj 1: Refer offenders convicted of OUIL or MIP for screening services. |

APPENDIX B SURVEY

# The University of Michigan Transportation Research Institute 

## Marking Instructions

- Use a black or blue ink pen or No. 2 pencil only.
- Fill in the circles completely.
- Make no stray marks.

This survey is being conducted by the University of Michigan Social and Behavioral Analysis Division. Please answer all questions with the most appropriate answer. If there is no appropriate answer or if you do not drink and there is no choice for non-drinkers, skip that question. This test is being distributed to students throughout the county and your individual test results are confidential.

1. What grade are you in?
7th-8th
O. 11th

- 9th
12th
10th

2. Sex

Female
OMale
3. How many drinks over a one hour time period do you think it takes to become intoxicated?
1
4-5
2-3
6-7
4. At what blood alcohol level does a normal person's ability to drive become significantly impaired?
0.03
0.07
0.05
0.10
5. At what blood alcohol level are you legally impaired for driving?
0.02
0.08
0.04
0.10
0.06
6. While not in the company of an adult or your parent, have you ever been stopped by the police when there was alcohol in the vehicle?
Yes
No (skip to 8)
7. If yes, were you:
Ticketed/arrested
Alcohol not found alcohol offense
Alcohol poured out
Let go
Never happened
8. Have your parents talked to you regarding your attitudes about drinking?
Yes
No
9. Have your parents talked to you about teenage drinking in general?
Yes
ONo
10. Do your parents (or guardian) drink alcohol?
O Yes
O No (skip to 12)
11. If yes, think about your parent or guardian that drinks most often. How often do they become intoxicated?
O Never
About once a week
About once a year
About once a day
About once a month
12. How recently have you ridden with a drunk or drinking driver? In the past:
Year
Week
( Month
Never (skip to 15)
13. How many times in the last month have you ridden with a drunk or drinking driver?
1-3
O $7-10$
4-6
More than 10
14. How many of these times was the driver under 21?
1-3
7-10
4-6
More than 10
15. I would most likely listen to warnings about drinking alcohol and driving from:
Friends/Peers
Police officers
Parents
People who have been involved in drinking and driving accidents
16. Which has more alcohol?
1 can of beer
A mixed drink
1 glass of wine
All are equal
17. How comfortable are you riding with a driver who has had 3 beers in the last hour?

| (1) (2) (3) (4) | (5) <br> Very |  |
| :--- | :--- | ---: |
| Not at all |  |  |
| comfortable |  | comfortable |

18. If my parents (or guardian) catch me drinking, they will:
Do nothing
Punish me severely
Do very little
Get me professional help
Punish me lightly
Not know what to do
19. In regard to alcohol use, which of the following is your most important concern?
Being caught by parents
O Health concerns
Being caught by police
Not concerned
Becoming an alcoholic
20. Do you drink alcoholic beverages?

Yes
O
21. On a scale of 1 to 5 how easy is it for you to obtain alcohol?
(1)
(2)
(3)
(a) (5)
22. How many times in the last month have you attempted to obtain alcohol?
06-10
1-511 or more
23. How many times were you able to obtain alcohol in the last month?
0
6-10
1-5
11 or more
24. How do you normally obtain alcohol?
Parent buys for me
An older brother or sister buys for me
Underage friend buys for me
Ol ask strangers to buyOther adult acquaintance
buys for me
for me
Non-drinker
25. Do you have a false I.D. card that shows you to be 21 or over?
Yes
No
26. Where do you normally obtain your alcohol?
Party store
School property
Bar
Non-drinker
Grocery store
Other $\qquad$
OHome
27. When you drink, how many drinks do you have in a day?
1-3
11 or more
( $4-6$
Non-drinker
7-10
28. How many times a week do you drink?
Cess than 1
3-5
01
6 or more
02
Non-drinker
29. On a scale of 1 to 5 , how often can you hide your drinking from your parents?
( $)$
Never
Always
30. Do you think that before you turn 21 you will be involved in a crash as a driver after you have been drinking?
Yes
No
31. How many times in the last month did you have 5 or more drinks in a row?
0
11-15
(1-5
16 or more
6-10
32. How much harm do you think you are doing to your body with 5 or more drinks in a row?
No
harm
Much harm
33. What alcoholic beverage do you usually drink?
Beer
Wine cooler
Liquor
Non-drinkerWine
34. When do you normally drink?Weekday mornings
WeekendsWeekday days Non-drinkerWeekday evenings
35. If you were to drink alcohol, what punishment would you most want to avoid?
Jail
Community Service
Loss of drivers license
Parents contacted by police
Fines
36. When a person under age 21 in your county has alcoholic beverages in his or her possession in public, how often do you think that person is arrested for a "minor in possession" offense?
Never
Always
37. When there are parties in your county where guests under age 21 are drinking alcoholic beverages, how often are these parties broken up by police?
Never

Always
38. When a person under age 21 in your county has been drinking alcoholic beverages then drives, how often is he or she arrested for a drinking and driving offense?

39. In Michigan, is it against the law for a person under the age of 21 to attempt to purchase alcohol?
Yes
No
40. Which of the following recreational vehicles do you use most often?
Boats/Jet Skies
Snowmobiles
ATV/Dirt bike
Combination of all
Do not use recreational vehicles (skip to 42)
41. How often do you drink alcohol when using recreational vehicles?

Never

Always
42. Is drinking alcohol while operating a recreational vehicle on private property against the law?
Yes
No
43. At what age should a person be permitted to drink alcoholic beverages legally?
(.) 17
020
O 18
$\bigcirc 21$

- 19
Older than 21

44. What is the primary reason that Michigan raised the drinking age to 21 ?
The Matthews Act of 1977
Moral issues
Traffic safety
O Increased teenage pregnancy
45. Can a person less than age 21 convicted of Operating Under the Influence of Liquor be jailed for that offense?
Yes
O
46. Can a person less than age 21 convicted of possession of an alcoholic beverage be jailed for that offense?
Yes
No
47. What is your attitude toward the use of alcohol most influenced by?
TV shows or movies
Life experience
Peer group
Advertising
Family
Music
48. If you were arrested for drunk driving, your friends probably would:

| Congratulate you | Say nothing |
| :--- | :--- |
| Stop associating with |  |
| you | Be upset at you but still |
| remain friends |  |

.

Be upset at you but still remain friends

Not considering the punishment you might receive for violating these laws, rate the following in terms of their morality.
49. Driving under the influence:
(1)
(2)
(3)
(a) (5)
Morally acceptable
50. Minor in possession of alcohol:

| (1) (2) (3) (4)(5) <br> Morally |  |  |
| :--- | :--- | ---: |
| Morally <br> wrong |  | acceptable |

51. Minor attempting to purchase alcohol:
(1) Morally wrong
(a) (5) Morally acceptable
52. Providing alcohol to minors:
(1)
(2)
(3)
(4) $\begin{array}{r}\text { Morally } \\ \text { acceptable }\end{array}$
Morally
wrong

[^0]:    ${ }^{1}$ See Streff, F. M., Molnar, L. J., Hopp, M. L., Kostyniuk, L. P. (1995). Community-Wide Youth Impaired Driving Progam: Summary of Enforcement Activity. Ann Arbor, MI: The University of Michigan Transportation Research Institute.
    ${ }^{2}$ See Molnar, L. J., Streff, F. M., Shope, J. T. (1996). Impaired Driving Programs for Youth: Guidelines for Success. Ann Arbor, MI: The University of Michigan Transportation Research Institute.

[^1]:    Frequency Missing $=73$

[^2]:    Frequency Missing = 56

[^3]:    Frequency Missing $=160$

