

**FAIRFAX ALCOHOL SAFETY ACTION PROJECT
SECOND YEAR EVALUATION SUMMARY**

**A Report Prepared by the Virginia Highway and Transportation
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INTRODUCTION

The Fairfax Alcohol Safety Action Project (ASAP) was begun in January 1972 as one of thirty-five federally funded demonstration projects designed to implement and evaluate a comprehensive community alcohol countermeasures program. The Fairfax ASAP was approved for three years and funded with \$2.1 million in an attempt to confront and ameliorate the community's drunk driving problem.

A principal goal of the Fairfax ASAP was to effect a reduction in the number of alcohol-related fatalities, injuries, and property damage crashes. The goal was approached through a systems-oriented program providing countermeasures of increased and extensive enforcement of driving while intoxicated (DWI) offenses, a special judicial countermeasure consisting of a probation and review process, programs of rehabilitation and treatment for arrested DWI's, and extensive public information and education.

Results of the project after the first year of operations were quite encouraging. Data indicated a statistically significant reduction in injury crashes in 1972, based on a linear regression model using 1962-1971 data. Fatal crashes and fatalities declined but not significantly, but overall societal costs of motor vehicle crashes declined and estimated cost savings indicated a 3 to 1 ratio of project benefits to costs.

PURPOSE

The purpose of this report is to summarize as succinctly as possible the results of the project evaluation after two years. For the most part, the narrative for this summary has been taken verbatim from the Summary, Findings, and Conclusions sections of key analytic studies submitted to the NHTSA on or before May 30, 1974.

This report attempts to consolidate important findings in all areas of evaluation to provide insight and perspective on the Fairfax ASAP as of June 1974.

EVALUATION SUMMARIES

Analysis of Ultimate Performance Measures to Determine Total Project Impact

by

Wayne S. Ferguson and Thomas J. Smith

Data indicate a change in trend in injury crashes in the Fairfax ASAP

area in both years of project operations, 1972, and 1973. The change shows fewer personal injury crashes in Fairfax in 1972 and 1973 than would be predicted by linear regression analysis and the change is statistically significant at the 95% level. While no significant change in trend was found in the control community, it was observed that injury crashes declined there in 1973 for the first time in the eleven years for which data were available. It is, therefore, possible that the decline in Fairfax was attributable to a national trend rather than to the ASAP. Data on registrations, population, and vehicle miles of travel did not indicate a reason for any change in trend. The effects of the energy shortage on traffic volume and speeds were not considered since only the month of December 1973 could have been greatly affected.

Alcohol-related fatalities do not show evidence of a significant change during the 1972-73 period. The mean blood alcohol content (BAC) of 0.148% for alcohol-related fatalities was the lowest of the five year period reviewed but was not a significant reduction.

An analysis of trends in the BAC's of fatally injured drivers indicated the following:

- (1) The only conclusion that can be supported is that the numbers are so small and the data so variable that any attempts to ascribe any benefits to the ASAP are meaningless at the Fairfax project level.
- (2) The average number of fatally injured drivers with positive BAC's was higher for the first two years of ASAP operation than it was for the baseline period (15.5 compared to 13.7).
- (3) The highly variable nature of the data makes possible two entirely different interpretations:
 - (a) The ASAP intervened in the alarming increase in alcohol-related fatalities, or
 - (b) the data are merely an example of the statistical phenomenon known as regression to the mean.

The average BAC level of non-crash arrested drivers declined from 0.19% in 1972 to 0.17% in 1973. While this decline might be attributed to a reduction in the "pool" of intoxicated drivers, it should be noted that the presumptive level of drunk driving was lowered from 0.15% to 0.10% on July 1, 1972. Therefore the average BAC was only 0.04% higher in 1972 than the presumptive level while the average BAC was 0.07% higher in 1973. It appears that the danger from drunken drivers has been slightly reduced while a change in laws enlarged the pool of potential DWI offenders without affecting the number of arrests made.

An analysis of BAC distributions in Quarter 8 versus Quarter 1 confirmed that a statistically significant change had occurred. BAC levels were significantly lower in Quarter 8 than in Quarter 1.

A benefit/cost analysis of the Fairfax ASAP indicated that the project may be returning benefits over costs at a ratio of 6 to 1. Estimated cost savings after two years of operations appear to be approximately \$10 million. During a comparable period in Henrico County, the control site, no cost savings were evidenced.

While these data are encouraging, caution should be expressed over two confounding factors. The year 1971 was an extraordinary year in Fairfax for fatal crashes. Hence the trend line for 1972, '73 and '74 was influenced by the large '71 number. Reductions in fatal crashes and fatalities in 1972 and 1973 must be influenced by regression to the mean. Similarly, 1972 and 1973 showed significant reductions in injury crashes in Fairfax which contribute greatly to estimated cost savings. While these may be due to ASAP operations, a reduction (not statistically significant) was also noted in Henrico in 1973. It is possible, therefore, that declines in injury crashes may be attributable to national crash phase countermeasure programs.

Intermediate Analysis of Ultimate Performance Measures
(Based on 1972 Data Only)

by

Center for the Environment and Man

Crash data obtained from the Virginia State Police were analyzed for the 1968-1972 period and trend comparisons made both within the study area, Fairfax County, and between it and the control site, Henrico County. Five-year trends were compared using total crashes, crashes by severity category, crashes by vehicle involvement, crashes by time of day and day of week, and crashes by alcohol involvement as reported by the police. Pedestrian involvements were excluded throughout.

Although the ASAP countermeasures have been in operation since January 1972, only one year of crash data was available in time for this comparison.* Therefore, conclusions at this time should be considered only tentative.

An analysis of 1973 crash data is planned for mid-1974.

Emphasis was placed on observed departures from pre-ASAP trends for the various parameters considered, particularly when compared to similar trends within the control site.

The most consistent finding so far has been that the number of alcohol-related* (A/R) non-fatal injury crashes in 1972 has decreased in the study area but remained stable in Henrico County. Simultaneously, the number of injury crashes not involving alcohol has generally increased in both counties. The 1972 change is noticeable in both single and multi-vehicle injury crashes.

To determine if the 1972 reduction in A/R injury crashes could be attributed to changes occurring during the presumed high periods of drinking and driving, comparisons** were made on the basis of time of day and weekend vs. weekday involvements with the following results.

- . Single vehicle injury crashes during the 8 p. m. - 4 a. m. period decreased by 6% in 1972 (compared to the 4-year pre-ASAP period) while similar crashes during the remaining hours increased in the study area; in the control site, however, these crashes increased in both hourly groups.
- . Single vehicle injury crashes involving alcohol during the 8 p. m. - 4 a. m. period in 1972 decreased 19% in Fairfax County.
- . Multi-vehicle injury crashes during the high drinking and driving hours (8 p. m. - 4 a. m.) increased slightly in 1972 compared to pre-ASAP trends and also increased during the presumed low drinking and driving hours in Fairfax County. However, multi-vehicle injury crashes involving alcohol during the 8 p. m. - 4 a. m. period in 1972 decreased 4% in Fairfax County.
- . Trends in weekend vs. weekday crashes are unclear; however, the data suggest a 5% reduction in single vehicle crashes on weekends.

* As reported by the police.

** In this study, all references to pre-ASAP vs. ASAP comparisons imply the use of 4-year average pre-ASAP data (1968-1971) and actual ASAP period (1972) values.

Furthermore, the data indicate that single vehicle injury crashes involving alcohol on weekends decreased 12% in 1972 and 18% during the remaining weekdays (Mon. - Thurs.).

- . Trends in fatal crashes are inconsistent. For example:
 - time of day effects (i. e., a 1972 reduction in fatal crashes during high drinking and driving hours (8 p. m. - 4 a. m.)) cannot be suggested for fatal crashes; however
 - weekend effects (i. e., a 1972 reduction in fatal crashes on weekends) can be suggested only for multi-vehicle fatal crashes. Thus, had ASAP operations been effective for fatal crashes, one would have expected a consistent reduction in either crash types or time periods (or both).
- . The data suggest that 1971 was a particularly high year for alcohol involvement in fatal (and some injury) crashes; therefore, caution should be observed in using the year by itself for comparisons.

ASAP Patrol Activity

by

Center for the Environment and Man

DWI arrest data were analyzed for ASAP and regular patrol duty for 1972 and 1973, the first two ASAP program operating years. In addition, DWI offender profile comparisons were made based on two samples as well as the first roadside survey.

The results indicate that:

- . Total DWI arrests by ASAP patrols did not change substantially from 1972 to 1973 even though the officers were on patrol duty one additional month in 1973.
- . ASAP patrols shifted 1973 DWI enforcement activities towards the (M-4 a. m.) early morning hours (the relative decrease in DWI arrests during the 8 p. m. - M hours was nearly equal to the relative increase in the M-4 a. m. period in 1973).

- Regular patrols are making an increasing share of all DWI arrests; from 1972 to 1973 these arrests increased 37%. The largest increase occurred during the M-4 a. m. period (47%); during the 8 p. m. - M hours arrests increased 23%. On a daily basis, substantial increases were found for all days except Monday. The largest increases were on Thursdays (118%) and Sundays (67%). Tuesdays and Wednesdays each accounted for increases of about 45%.
- Average ASAP patrol man-hours per DWI arrest increased in 1973 from 20 to 27 hours, up 35%. Average patrol costs per DWI arrest increased from \$130 to \$189, up 45%.
- ASAP patrol efficiency in making a DWI arrest was lower in 1973 than in 1972; in 1972 ASAP patrol units spent about 61 hours per day for 3 DWI arrests, whereas in 1973 about 80 hours per day were expended on ASAP DWI patrol for about the same number of DWI arrests.

Profile data on DWI offenders confirmed that the majority were male, under 45 (nearly half under 35); had incurred one or more traffic offenses in the three year period preceding the DWI arrest; had virtually no significant prior (three-year) record of alcohol-related offenses yet were predominantly found with high BAC's (> .15%), although 1973 data pointed towards lower BAC ranges.

Finally, the impact of ASAP operations on the crash trends points towards a reduction in injury crashes involving alcohol (in 1972), particularly during high drinking and driving hours. This change was noticeable only in Fairfax County and not in the control area, Henrico County.

Impact of ASAP on the Traffic Safety System

by

Center for the Environment and Man

The analysis of the judicial system in Fairfax was made to: (1) present comparative information on the disposition of alcohol-related arrests by the courts in Fairfax County for the 1972-1973 ASAP period and prior years; (2) "profile" the disposition groups; and (3) examine the magnitude of time delays encountered in the judicial countermeasure activities in processing the DWI offender.

Data available for analysis included Appendix H — Table 10 — "Judicial Operations" data and a sample of 195 client information forms completed by the Fairfax ASAP Project Office staff. Although National Highway Traffic Safety Administration (NHTSA) evaluators requested that the sample be randomly drawn from the total DWI defendant populations in the 1972 and 1973 ASAP operating years as well as from those arrested prior to 1972, this criterion could not be met. A comparison of the disposition groups' "profiles" in the current sample with those of an earlier sample of DWI offenders indicated no significant difference on such characteristics as sex, age, BAC, and prior traffic record; however, the two groups differed noticeably on "prior alcohol related arrest record." To determine if the court dispositions of the sample of 195 offenders differed from those of the total offenders arrested in 1972 and 1973, a comparison with Table 10 data was made. In general, the 1973 sample compared more favorably with total 1973 dispositions than with the 1972 group. However, both 1972 and 1973 samples overrepresented all those defendants for whom the DWI charge was either nolleed or dismissed and underrepresented DWI acquittals. These differences are enough to warrant caution in drawing conclusions from the sample results.

An examination of the penalties initially and ultimately imposed on the DWI offenders during 1972 and 1973 indicated that:

- 1972 DWI offenders received higher initial sentences which for the most part were all or partially suspended — the typical fine paid was \$50 plus court costs;
- In 1973 DWI offenders received initial sentences which more closely reflected (on the average) the final sentence, particularly in terms of fines — \$50 and \$100 fines appeared typical, although the emphasis was on the higher fine.

In 1973, the average elapsed time between arrest and initial court appearance was 37% lower than in 1972, based on the offender samples. Much of the reduced delay can undoubtedly be attributed to the more frequent offender screening periods. Defendant processing time (i. e., elapsed time between DWI arrest and final disposition) was 7% lower in 1973 compared with 1972 even though the average length of the treatment programs apparently increased.

The influence of the judicial system on other countermeasure areas is difficult to assess. Qualitatively, the greatest noticeable influence has probably been on the enforcement countermeasure activities, for example, in supporting the continued high DWI arrest rate by the police.

Drinker Diagnosis and Referral

by

Robert F. Jordan, Jr.

Among the 35 community based ASAP programs funded by the National Highway Traffic Safety Administration, the Probation Office and Mental Health units of the Fairfax ASAP are the only ones that use group interview techniques to diagnose and classify drunken drivers. Also unique to the Fairfax ASAP is a case management strategy whereby defendants are frequently referred to a series of separate treatment programs. These programs are intended to provide exposure to a number of rehabilitative approaches. However, in developing administrative policy, a limitation upon the number (now often three) of treatment modalities assigned an individual should be dependent upon a trade-off of two considerations; likely incremental program benefits versus economic and psychological costs to the client of multiple rehabilitative courses having fees from \$30 to \$60 each.

Because of the costs of the detailed and intensive diagnostic procedures in Fairfax and the need to develop a less sophisticated and lower cost procedure for use in the mini-ASAP's in other communities in Virginia, it was concluded that preliminary classification based upon the BAC at the time of arrest, previous traffic records, and problem drinking symptoms should be used for all defendants. Those defendants who couldn't be classified on the basis of their records could then be scheduled for group interviews. A model which interrelates the number of problem drinking characteristics, BAC at time of arrest, and previous traffic violations was developed in this report to supplement diagnostic decisions made in Fairfax by serving as a quick cross-check on all diagnostic decisions.

Significant findings and conclusions of the study are as follows:

- (1) An experimental model simulating ASAP diagnostic decisions was developed which interrelates three key elements: number of drinking characteristic variables, BAC level at the time of arrest, and prior traffic violations. This model is consistent with the Office of Alcohol Countermeasures (OAC) criteria for three drinking categories and possibly could be used to replace, or at least supplement, the current costly diagnostic procedures.

- (2) A check of drinking classification and subsequent referral to treatment indicated that there is no clear-cut procedure for matching the results of the diagnosis to the eventual referral. Of a random sample of 75 ASAP defendants controlled for drinker category it was found that 20 were referred to treatment modalities inappropriate with their diagnosis.
- (3) Since July 1973, Fairfax ASAP management policy has been to staff all defendants to a Driver Improvement School. Yet the data in the Probation Office files indicate that 36 of the 75 sampled defendants had not been so staffed. Because of this policy, multiple treatment, including many referrals to as many as three treatment programs, is now a common practice. From the two basic treatment programs established at the start of ASAP operations in 1972, there are now at least 19 major combinations of treatment which must be reported on Appendix H tables.
- (4) Quarterly data indicate great disparities in the diagnoses of defendants into the three drinking categories. The percentage of problem drinkers ranged from a low of 12% in quarter 4 to a high of 54% in quarter 7. Non-problem drinkers ranged from a low of 14% in quarter 8 to a high of 55% in quarter 1. The category of drinkers who were not classified ranged from a low of 7% in quarter 1 to a high of 37% in quarter 4. While it is possible that the characteristics of the defendants exhibited differences over time, it is much more likely that policy and procedural changes in the Probation Office accounted for these fluctuations.
- (5) Much data sought from ASAP probation folders for analysis of the time necessary for entry into rehabilitation were found to be invalid for use in this study. A large number of administrative procedures are prerequisite for scheduling treatment. Hence, some doubt is cast upon the accuracy of the file records, which indicate that more than one-third of the sampled cases entered treatment within two days.
- (6) The average cost per defendant diagnosis, referral, and probation was calculated to be approximately \$82. Defendant diagnosis and referral alone was estimated to be in excess of \$60 per defendant. In view of these high costs and wide fluctuations in diagnostic decisions over time, it was concluded that alternatives to this costly, yet erratic procedure should be sought.

Rehabilitation and Treatment

by

Cheryl W. Lynn

In the context of the methodological and data related limitations noted in the subject study, the following findings are reported:

- (1) While both simple and True Annual Rates (TAR's) of recidivism were calculated for each drinker classification and for each modality, it was noted that TAR's gave the most accurate description of recidivism, since they were weighted by exposure time. During 1973, the following results are noted:
 - Among social drinkers, the Driver Improvement School (DIS) had the highest TAR of 1.94%, followed by the Fairfax Alcohol Community Education (FACE) program, the Fairfax Falls Church Mental Health Center (FFCMHC), and the DIS/FACE combination, each experiencing no recidivism. These differences were not significant.
 - Among problem drinkers, the Community Alcohol Center Clinic (CACC)/FFCMHC treatment combination experienced the highest TAR of 16.33%, followed by the FACE with 13.11%, the CACC with 11.69%, the CACC/FACE combination with 9.64%, the CACC/FACE/FFCMHC combination with 4.39%, the group not attending scheduled treatment with 3.08% and the DIS/FACE combination experiencing no recidivism. The differences between the three highest rates and that of the DIS/FACE were significant. The others were not.
 - Among pre-problem drinkers, the FFCMHC had the highest rate of 24.24%, followed by the FACE program with 9.4%, the FACE/FFCMHC combination with 3.42%, the DIS/FFCMHC combination with 3.33%, the DIS/FACE combination with 1.29% and the group not attending scheduled treatment experiencing no recidivism. The difference between the highest and lowest recidivism groups was significant while other differences were not.

While methodological considerations prohibit the drawing of definite conclusions concerning these modalities, TAR's offer indications of relative modality effectiveness. Several interesting anomalies appear in these data. First, recidivism was quite rare in the group not attending scheduled treatment (n = 103). Often rates were lower than other modalities actually offering treatment. Secondly, double and triple staffing does not always result in lower rates for recidivism.

- (2) Based on available data, there was no correlation between the average amount of time between initial arrest and entry into treatment for defendants attending a modality and recidivism rates for that modality. This finding was based on a relatively small number of cases in which the date of entry into treatment appeared in ASAP files. Thus, it cannot be considered conclusive.
- (3) Most statistical differences between recidivists and non-recidivists on demographic variables were not alcohol related but rather arrest related. Differences existed on those variables which would increase subjects' "visibility" in terms of enforcement and thus increase the probability of a subsequent arrest. The variables include prior non-alcohol related driving record, residence in the ASAP area (exposure), and social class as it relates to risk taking behavior.

The modal or typical recidivists and non-recidivists were white males with a high school education, living in the ASAP area. They had incurred no prior DWI charges, no reckless driving charges, no license revocations and no criminal arrests. Their BAC's at the time of their arrest ranged from .15% to .25%. These recidivists and non-recidivists differed within each drinker classification on such variables as age, marital status, income, number of previous traffic violations, and accidents and MAST test score. These modal descriptions characterize the typical recidivists and non-recidivist, but do not describe the entire population. Significant differences mentioned above apply to all defendants.

Driver Improvement Schools

by

Cheryl W. Lynn

While all forms of Driver Improvement School (DIS), with the exception of the Weekend DIS, are effective in imparting knowledge among participants and increasing test scores, some sub-modalities appear to be realizing greater success than others. Some of these differences appear to be due to differential staffing (i. e. the consistent staffing of defendants with similar educational or alcohol related characteristics to a particular sub-modality) and some appear in spite of these tendencies. Since differential staffing, especially in relation to the Northern Virginia Community College DIS (NVCC-DIS) and the Fairfax County High School DIS (FCHS-DIS), is not actual policy and is somewhat changeable across time, it is not documented here. The FCHS-DIS program seemed to be experiencing better results during the 4-month testing period than did the NVCC program. Regular classes were by far superior in imparting knowledge than were the weekend classes (WDIS), which seemed to have a confusing effect upon defendants who began the course knowing more than those attending regular DIS and then experienced a decrease in test scores. This finding, however, is based on a very small number of WDIS test scores received from weekend instructors.

Double staffing was examined in relation to the ten-week, didactically based FACE program. Since the goal of this program is to impart knowledge, it is reasonable to expect that initial scores for defendants with this previous training should be higher than those for defendants with no prior training. Defendants staffed to the FACE/DIS combination not only began the class knowing more about the effects of alcohol (as measured by the new test) but also knew more at course termination, although the amount learned (pretest/post-test difference scores) was not significantly different from that of single staffed defendants. The addition of the eight-week discussion group to the didactic portion of the FACE program did not significantly change knowledge development, since no significant differences occurred between the pretest, posttest or difference scores for defendants attending the FACE programs with and without discussion groups. This would seem intuitively correct, since the new discussion sessions are aimed more at attitudinal change than knowledge change.

Findings concerning double staffed defendants serve to support the validity of the instrument for the DIS program. Findings concerning recidivists do not support this, since there were no significant differences between scores for recidivists and non-recidivists. There are three possible explanations for this. The relationship between knowledge, attitude, and behavior is somewhat tenuous.

It is possible that increased knowledge of the effects of alcohol does not influence attitude toward drinking, or change drinking/driving behavior. It is also possible that this test does not measure those knowledges which discriminate between recidivists and non-recidivists, although evidence derived from comparisons involving double staffing implies that it does discriminate by drinker type. Finally, it is possible that these contradictory results are due to sampling deficiencies, since scores were received for only a small number of recidivist defendants.

Trends in Drinking-Driving Patterns at Night

by

Thomas J. Smith

The purpose of the nighttime roadside surveys of randomly selected drivers is to provide a secondary measure of the Fairfax ASAP's effectiveness in reducing the incidence of driving while under the influence of alcohol. The question must be asked, "Is there any quantifiable evidence that the Fairfax ASAP is succeeding in accomplishing its objective of reducing the incidence of drunken driving?" The information gathered from the survey falls into the two general categories of drinking knowledge and drinking behavior as it relates to driving. There is clear evidence in both areas which tend to substantiate the claim that ASAP is successful in accomplishing its goals.

Drinking Knowledge

Over the course of the three roadside surveys, there was a statistically significant improvement in general knowledge regarding the definition of "blood alcohol concentration." In a more specific area, there was a significant improvement among ASAP residents in knowledge of the presumptive limit in Virginia, while there was no improvement for nonresident motorists. These two findings tend to support the hypothesis that the driving public in Fairfax is now more informed regarding the laws dealing with drunken driving in Virginia. The lack of significant improvement among nonresidents in identifying the presumptive limit also tends to support the hypothesis that the improvement was isolated to the Fairfax area and was not merely part of a general long-term trend.

Drinking Behavior

There was a statistically significant reduction in the percentages of drivers who had a positive reading on their breath tests on the third survey. This certainly can be considered commendable, but it is really not the target of the ASAP concept — the drunken driver. In terms of drunken driving, there was a reduction from 4.2% of all drivers to 3.0%. However, this reduction

fell just short of the limit for statistical significance.

Among the total sample of drunken drivers, there were some areas in which the reductions were significant. There was a significant reduction in drunken driving in the third time period (12:40 a. m. to 3:00 a. m.) from 12.4% on the baseline survey to 6.3% on the third. Among drunken drivers, there was a significant reduction among male drivers coupled with a slight increase in drunken driving among females. In terms of race, there was a reduction in drunken driving from 11.0% to 3.8% among black drivers. This reduction was substantial, but it fell just short of being statistically significant. Finally, it was determined that the percentage of drunken drivers decreased significantly among beer drinkers from 7.3% to 4.2%, while there was very little change among drivers who preferred wine or liquor.

Thus, in conclusion, it appears that the Fairfax Alcohol Safety Action Project has had a measurable impact on both the public knowledge and the drinking-driving behavior of several of its target populations, including the late-night male beer-drinkers.

Trends in Public Information and awareness of ASAP and the
Drinking-Driving Problem

by

Thomas J. Smith

There were statistically significant improvements in many of the areas covered by the public information campaign of the Fairfax Alcohol Safety Action Project:

- (1) The percentage of respondents who had heard of a campaign to reduce alcohol related deaths increased from 47.2% to 62.2%.
- (2) The percentage who could recall that ASAP was the sponsoring agency increased from 3.0% to 13.0%.
- (3) The percentage who could give a substantially correct definition of blood alcohol concentration increased from 87.4% to 93.1%.
- (4) The percentage who could select the presumptive level increased from 11.6% to 20.2% on the household survey and increased from 19.0% to 25.9% on the roadside survey.

- (5) The percentage who correctly named problem drinkers as causing more fatal alcohol related accidents than social drinkers increased from 38.6% to 48.9%.
- (6) The percentage who said they drove "hardly ever or never" after having something to drink increased from 75.2% to 83.0%.
- (7) The perceived risks of committing a moving traffic violation, being involved in an automobile accident, and being involved in a serious or fatal automobile accident all increased.

On the other hand, in the areas of general alcohol information, there has not been much change since the baseline survey. Some of the misconceptions which did not change are the following:

- (1) About half of the respondents thought using a mixer with liquor would enable a person to drink more liquor without getting drunk.
- (2) About half didn't know that a small person will get drunk faster than a large person on the same number of drinks.
- (3) About one-fourth still thought that a person who has had one drink should not be allowed to drive an automobile.
- (4) More than half thought that if a person sticks to the same kind of drink, he is less likely to get drunk than if he mixes several kinds of drinks such as beer and whiskey.
- (5) More than 60% thought that strong black coffee is helpful in sobering up a person before he drives.

The respondents were asked to rate the effectiveness of eight proposed countermeasures in reducing the drinking driving problem. Ironically, a large-scale public information and education campaign fell from fifth to seventh in the relative ratings. Support for special alcohol education courses did increase significantly, but it still ranked only fourth. By far the best liked method was having more severe penalties for convicted drunken drivers, so it appears that ASAP has more work to do in informing the public as to the severity of current sanctions as well as gaining support for a rehabilitative approach rather than a punitive one.