DRIVING UNDER THE INFLUENCE OF ALCOHOL: DETERMINING AN OPTIMUM SANCTION

by

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ABSTRACT

Numerous elements must be considered in the design of an optimal statutory scheme for the definition and enforcement of the prohibition against driving under the influence of alcohol. Psychological factors determine the extent to which the statute has deterrent effect. Administrative factors affect the ability of police officers and judicial personnel to operate within the statutory framework provided. Political factors are reflected in the community's assessment of the gravity of the offense and the level of apprehension and conviction tolerated.

The format for this study is public opinion, based on responses to a detailed questionnaire concerning various aspects of the driving under the influence (DWI) problem. Five categories of drivers were questioned:

Category (1) No moving violations within the past five years.

Category (2) At least one moving violation within the past five years, but no license revocation or suspension within the last five years.

Category (3) At least one license suspension or revocation during the past five years but no suspension or revocation for driving while under the influence of intoxicating beverages.

Category (4) At least one license suspension or revocation for driving under the influence of alcoholic beverages during the past five years.

Category (5) Judges and commonwealth's attorneys (collectively referred to as the judiciary).

In addition to the aforementioned categorization, the responses were demographically separated, based on the respondent's place of residence: country, small town, suburbs, or city.

At times, such public opinion is relevant in itself, as in determining what is politically feasible, or in ascertaining the community's assessment of the nature and gravity of the offense.

At other times, public opinion is compared with existing scientific data to reveal certain misconceptions that abound with respect to the DWI problem. Positive benefits of public education as regards the misconceptions revealed are explored.

Finally, the researchers were able to recommend several revisions in existing statutes and practices based on the information and data revealed in the course of the study.

(6) While there is only negligible support for a jail sentence for first offenders, there is heavy majority support (77.0% – 88.1%) for some form of license revocation as an appropriate sanction for the offense of driving under the influence. Nevertheless, 51.4% of the judiciary indicated that they hesitated to convict first offenders for DWI. Reasons underlying this reluctance appear to be the potential hardship of a mandatory, 12 month license revocation, and the fact that most courts desire more discretion than they presently have to apply punishment on a case-by-case basis.

A mandatory license suspension was thought appropriate by many because of the seriousness of the offense; although the current 12 month revocation period appears to be somewhat excessive when compared to their responses concerning the appropriate length of suspension.

Overall, there is majority support amongst both the public and judiciary for giving more discretion to the courts in the matter of license revocation. The favored system is one in which the court must revoke the offender's license for not less than a stated minimum period (mandatory) but not more than a stated maximum period (discretionary). An interval of not less than 6 months nor more than 12 months would appear to be a well-supported choice. There is very little support for a completely discretionary suspension.

(7) More than one-half of the judiciary indicated that they thought the present 0.15% presumptive level of intoxication was insufficient, and 68.8% felt that there was a scientific basis for lowering the presumptive level to 0.10%. By way of contrast, the public's support for lowering the presumptive level was relatively weak, although the most frequent response was "don't know". Besides a general deficiency in knowledge, the lack of support appears to be partly due to misplaced fears that the 0.10% presumptive level will increase the apprehension of social drinkers without significantly affecting the apprehension of the problem drinker/alcoholic. There is also support for the proposition that many people, including some members of the Virginia General Assembly, feel that apprehension and conviction are already at a maximum given the present severity of the penalty.

There is almost no support for lowering the presumptive BAC to the 0.08% level utilized in two states and several foreign countries, despite numerous scientific studies that would support such a reduction. The history of the movement to establish chemical testing and presumptive levels for the definition of intoxication indicates that the initial recommendation of the 0.15% level was largely a political decision, and most scientific studies since that time have tended to confirm the conclusion that the 0.15% level is far too lenient.

(8) There is a general lack of knowledge regarding the accuracy of breath testing. As a result, there exists a substantial distrust of breath analysis coupled with an aversion to breath testing because it is felt that its use would increase convictions for DWI. Nevertheless, scientific, quantitatively-accurate breath analysis equipment is available, and its use would seem to be suggested by the fact that 69.3% of the judiciary thought the present blood test inadequate.

SUMMARY OF FINDINGS AND CONCLUSIONS

(1) When asked to estimate their average weekly alcohol consumption, 51.7% of Category 1 drivers professed to be abstainers. Surprisingly, there was little difference in admitted consumption between categories 2, 3, and 4 despite marked differences in their motoring violation profiles. When admitted alcohol consumption was compared on a demographic basis, the following ascendant ranking was noted: country, small town, city, suburbs.

(2) The conviction frequency of convicted DWIs suggests a consistent pattern of traffic violations rather than an isolated instance of a DWI violation. Additionally, the accident frequency of the DWI offender is significantly greater than that of the "average" driver. Most DWI offenders were willing to admit to the fact of their conviction, perhaps indicating that driving under the influence, like many other traffic violations, has acquired something of the status of a "folk crime" with certain segments of society.

(3) With this sample of drivers, there was a greater incidence of moving violations in the urban areas, while the incidence of DWI conviction was greater in the rural areas. Coinciding with the greater conviction frequency, there was a more condemning public attitude toward DWI violations and drinking in general in the rural areas than in the urban locales. This difference in attitudes depending on the population size and density appeared throughout the study.

(4) When asked to indicate the quantities of alcohol deemed commensurate with safe driving, the vast majority gave responses that fell below any blood-alcohol concentration (BAC) which, under current law, would give rise to a presumption of "impaired" driving or driving under the influence. Depending on the category of driver, from 67.0% to 93.4% of the responses, if translated into the BAC of a 160 lb. man, fell at 0.05% or less (presumed that the accused was not under the influence of alcoholic intoxicants). From 91.3% to 100.0% fell below 0.10% (0.10% to less than 0.15%: "impaired" driving). In answer to the question of how much the average person should be legally allowed to drink in a four hour period without fear of arrest for drunken driving, most responses were more conservative than the quantities deemed commensurate with safe driving. This would suggest the attitude that the presumptive level should be set lower than the point at which driving performance is seriously affected. It would also suggest that the public has an artificially low conception of how much alcohol is represented by current presumptive levels. Additionally, it was found that, on the average, the individual does not estimate his own alcohol tolerance as markedly different from what he estimates to be the tolerance of the "average" person.

(5) There is considerable confusion over who the DWI offender is likely to be — social drinker or alcoholic/problem drinker. Apparently, characterizing the DWI as a social drinker tends to generate empathy with his plight. The erroneous conception exists with 40.3% to 51.3% of the general public that the individual who has one or two drinks at a cocktail party or on the way home from work is a likely candidate for a DWI conviction. There is however, evidence in both this study and numerous others to suggest that a sizeable proportion of convicted DWIs have psychiatric problems in that they are alcoholics or have personality maladjustments, or both.

(9) There is strong majority agreement that alcoholism is a disease and that treatment facilities for alcoholics and problem drinkers who drive should be established by the state. The public is fairly evenly divided over whether taxpayers should pay for these facilities. Realistically, the costs would probably have to be funded from the general tax base, particularly in light of the extensive socioeconomic deterioration that so often characterizes the disease and the expense of the therapy required to effect a cure.

RECOMMENDATIONS FOR REVISION OF VIRGINIA'S DRIVING UNDER THE INFLUENCE LAWS

I. Amend Va. Code Ann. § 18.1-57 to lower the presumptive level for definition of driving under the influence of alcoholic intoxicants from 0.15% to 0.10% by weight of alcohol in the blood.

II. Adopt legislation authorizing the use of scientific, quantitative breath testing, giving such analysis equal status with the blood test in terms of evidential admissibility.

III. Amend Va. Code Ann. § 18.1-59 to change the current mandatory 12 month license revocation upon a first offense conviction under § 18.1-54 to 6 months mandatory and up to 12 months in the discretion of the judge.

IV. Amend § 18.1-55.1(i), deleting that portion which reads: "The failure of an accused to permit a sample of his blood to be withdrawn for a chemical test to determine the alcoholic content thereof is not evidence and shall not be subject to comment at the trial of the case; nor shall the fact that a blood test had been offered the accused be evidence or the subject of comment."

V. Add a statutory provision specifically allowing the introduction of the certificate of the Chief Medical Examiner, where relevant, in trials of a civil nature.

VI. Establish screening and rehabilitative procedures for treatment of problem drinkers and alcoholics apprehended for driving under the influence.

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BACKGROUND

According to the National Safety Council, motor vehicle accidents are the fourth leading cause of all deaths, preceded only by heart disease, cancer, and strokes.[1] In 1970, some 54,862 deaths were attributable to nationwide motor vehicle accidents.[2] During the same time period in the state of Virginia, there were 1,066 fatal crashes in which 1,231 persons were killed.[3]

Alcohol has been demonstrated to play a major role in a substantial number of these deaths. The Department of Transportation has found that the one to four percent of drivers on the road with a blood-alcohol concentration (BAC) of 0.10% or above account for 50-55% of all single vehicle crashes in which drivers are fatally injured.[4] Perhaps more importantly, some 45% of fatally injured, at fault drivers in multiple vehicle crashes were found to possess a BAC of 0.10% or greater. Multiple vehicle crashes often result in multiple fatalities. As one medical examiner was quoted as saying: "Of greater seriousness is the realization that 44% of the innocent not at fault dead drivers were killed by drinking drivers."[5]

The Christian Science Monitor, in commenting on the concern over the American lives lost in the $9\frac{1}{2}$ years of the Vietnam conflict, stated:

> It is all the more amazing therefore that the American conscience still on the whole appears unmoved at the presence of a far, far greater killer. We are referring to the drunken driver who, during the period when 43,000 were killed in Vietnam, slew some 240,000 persons on the nation's highways.[6]

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1. National Safety Council, Accident Facts, (1971 ed.), p. 8.
2. Ibid.
3. Department of State Police, Virginia Traffic Crash Facts, (1970 ed.), p. 42.
4. Department of Transportation, 1968 Alcohol and Traffic Safety Report, p. 13.
5. Ibid.
6. "Stop the Drunk Driver," Christian Science Monitor, July 15, 1970, p. 16.

The problem is, of course, much more serious than the fatality figures alone indicate. Although of a lower incidence, alcohol is a factor in numerous nonfatal traffic accidents. The Department of Transportation estimates that blood-alcohol concentrations of 0.10% or above figure in about 6% of the run-of-the-mill crashes in which little serious injury or property damage is sustained. The incidence of alcohol usage rises as high as 25% in the more serious crashes.[7]

Obviously, deterrence of the drunken driver is a goal of nationwide importance. The continual rise in the number of deaths attributable to drunken driving suggests that current sanctions for the offense of driving under the influence of alcohol are not achieving wide scale deterrence.

Part of the difficulty in structuring an effective sanction results from the conflict between two accepted American institutions: (1) drinking, and (2) motoring. Researchers at the Rutgers Center of Alcohol Studies have stated: "In the U. S. A. as a whole, drinking is typical behavior, both abstinence and heavy drinking (especially for escape from life's problems) are atypical."[8] Additionally, it is undeniable that motoring is both a necessary and distinguishing characteristic of American civilization. It is the combination of the two that has proved dangerous. Nevertheless, many drivers have, no doubt, combined at least moderate drinking with driving at some time or another. Consequently, the law should not make the combination of drinking and driving illegal per se, but only when the level of risk exceeds an acceptable limit. Such reasoning is with full recognition that "the legal drinking limit is a far cry from the safe drinking (and driving) limit."[9]

The acceptance of a modicum of inherently risky behavior is commensurate with the tenets of a free society. As Professor Roger Cramton explains:

> A rational society will design its legal arrangements so that, insofar as convenient and possible, undesired and antisocial behavior is minimized and socially useful behavior is encouraged. If the society values the independence and dignity of its individual members, it will minimize the use of official coercion, and will tolerate a considerable free zone between prohibited and encouraged behavior, thus avoiding the situation which A. P. Herbert referred to when he stated, "Everything that is not forbidden is compulsory."[10]

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7. Department of Transportation, op. cit., p. 14.

8. Don Calahan, et al., American Drinking Practices, (Rutgers Center of Alcohol Studies, 1969) p. 199.

9. John A. Volpe, Address to the Licensed Beverages Industry, Inc., quoted in "Volpe Takes a Shot at LBI," 6 Insurance Institute for Highway Safety, 3 (no. 3, Feb. 15, 1971).

10. Roger C. Cramton, "Driver Behavior and Legal Sanctions," Driver Behavior: Cause and Effect (Washington, D. C.: Insurance Institute for Highway Safety, 1968), p. 121.

Besides delineating what acts shall constitute conduct outside the community assessment of an acceptable level of risk, the applicable statutes should be structured so as to deter prohibited conduct with a minimum of coercion and intrusion into individual dignity and privacy.

The deterrent value of a sanction is said to depend on two general factors: (1) the perceived risk of detection, apprehension, and conviction, and (2) the severity of the penalty.[11] Harsh penalties for driving under the influence, often cited as the panacea to the DWI problem, can have two opposite results. They may reduce the potential for accident producing behavior by altering a potential offender's assessment of the attractiveness of the deviant behavior in relation to the severity of the sanction. On the other hand overly severe sanctions can reduce the likelihood of apprehension and conviction by creating a reluctance in police officers, prosecuting attorneys, and judges to act when the penalty appears excessive in comparison with the gravity of the offense. The likelihood of apprehension and punishment is at least as important, if not more so, than the severity of the sentence in determining the effectiveness of the deterrent measure. If the penalty is overly severe, the reduction in arrests and convictions may more than counterbalance any advantage gained by the motorist's reassessment of the seriousness of his deviant behavior.

An additional element of substantial importance is the offender himself. Sad to say, much of the effort toward DWI prevention has been misdirected, due to the erroneous characterization of the DWI offender as but a "social drinker" (an average motorist who happened to drink too much and was unlucky enough to be caught). This has resulted in a sympathetic attitude on the part of the public. Consequently, apprehension and conviction of the DWI offender in many areas have been slack.

There is, however, a growing body of evidence to the effect that the DWI group is not composed of a normal cross section of the driving population. Rather, the group is characterized by a high incidence of alcoholics, problem drinkers, and others with psychological disorders. Consequently, many of the present sanctions for DWI may have little deterrent effect on this group because they do not affect the underlying pathological causes of the behavior. With this group, the use of alcohol is a symptom, but not the cause of the problem. Unfortunately, most efforts toward prevention of DWI recidivism consist of "processing" rather than rehabilitation.

Finally, there is the purely political aspect of the problem. "Society must determine the precise point at which a further reduction in highway accidents is no longer worth the costs involved."[12] The 1970 Virginia General Assembly, in rejecting bills which would have lowered the presumptive level for definition of intoxication to 0.10%, and which would have allowed the use of scientific, quantitative breath analysis for determination of the BAC level, indicated that apprehension and conviction were already at a maximum given the severity of the sentence. One must draft legislation which is not only goal-oriented, but politically acceptable as well.

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11. Ibid., p. 186.

12. Ibid., p. 182.

METHODOLOGY

The subject matter of this study is public opinion. The 2,548,134 licensed drivers in the state of Virginia were divided into four categories:

Category (1) No moving traffic violations within the past five years.

Category (2) At least one moving traffic violation in the past five years, but no license revocation or suspension within the last five years.

Category (3) At least one license suspension or revocation during the past five years, but no suspension or revocation for driving under the influence of intoxicating beverages.

Category (4) At least one license suspension or revocation for driving under the influence of alcoholic beverages during the past five years.

A sample size of 1,000 per category was chosen to facilitate comparisons between categories. The selection of questionnaire participants was by computer, based on a random selection technique. The total individuals in each category and the percent of that total represented by a sample of 1,000 are as follows:

Category	Total Individuals	Sample is X percent of total
1	1,901,669	0.053%
2	515,322	0.194%
3	113,612	0.880%
4	17,531	5.704%

An additional Category, Category 5, consisted of 371 judges and commonwealth's attorneys. The composition of this category was as follows:

153 judges of courts-of-record
103 judges of courts-not-of-record
89 county commonwealth's attorneys
26 city commonwealth's attorneys

For convenience, this group was collectively referred to as the "judiciary", despite the fact that the commonwealth's attorneys represented the prosecutorial side of the legal establishment. Additionally, Categories 1-4 were often referred to as the "public" or the "general public". It should be noted that these terms were used in the restricted sense of differentiating the laymen of Categories 1 - 4 from the judiciary comprising Category 5. Thus the use of the term "public" in this situation does not refer to the opinions of the driving population at large, but rather to the opinions of only the sample participants. This restrictive definition was necessitated by the fact that the sample does not represent a normal cross section of the driving population, nor was it intended to. This can be seen from the fact that 1,000 questionnaires were sent to Category 1, the characteristics of which profile 74.6% of the total number of licensed drivers in the state, while an identical number of questionnaires was sent to

Category 4 (the characteristics of which fit only 0.68% of the state's total driving population). Thus the sum total of the responses from Categories 1 - 4 is weighted toward the opinions of those motorists with the poorer driving records. Nevertheless, there are situations in which a trend is represented amongst all four categories. Under these circumstances, the researchers thought it fair to infer that the trend was indicative of the opinions of the population at large. While the distinctions drawn here may be difficult to comprehend in the abstract, the researchers feel that the reader will have little difficulty, in practice, in differentiating between when the term "public" is being used in the aforementioned restrictive sense, and when it is being used to refer to the driving population at large.

The questionnaires were color coded and enclosed with a cover letter and a return address envelope. (See Appendices A and B for copies of the questionnaire and cover letters.)

Category	Color
1	Blue
2	Green
3	Pink
4	White
5	Yellow

In this manner, it was possible to tell into which category the returned questionnaires fell.

Some 431 of the questionnaires sent to the general public (Categories 1 - 4) were returned unopened for various reasons, chiefly incorrect addresses. A greater proportion of the returned questionnaires were from the selectees having the poor driving records. Once the sample size was corrected for the questionnaires that were returned unopened, the following rates of response were noted*:

Category	No. of Questionnaires Returned	Percent Returned
1	238	26.3%
2	307	33.2%
3	216	24.7%
4	152	17.6%
Overall general public	913	25.6%
5	176	47.4%

*Only usable questionnaires were counted.

Responses were then statistically accumulated so that comparisons could be made between categories to determine if there was any relation between a participant's driving record and his attitude toward various aspects of the driving under the influence problem. A further comparison was made on the basis of the participant's residence (county, small town, suburbs, or city) to determine if the demographic variables of residential size and population density had any effect on attitudes.

The resulting data are presented prior to the discussion of each segment of the questionnaire. Statistical analysis was kept at a minimum since it was thought that the intended audience would neither understand nor find particularly relevant the more elaborate forms of statistical analyses. This would be particularly true with respect to those portions of the study where public opinion is not particularly relevant in itself, but serves as a springboard for discussion of other scientific studies.

Data are presented in the following manner:

Response / Category	Agree	Disagree	Don't Know
1	x y		
2			
3			
4			
5			

x = the number in Category 1 responding affirmatively to the proposition contained in the question

y = the percent of the Category 1 sample responding affirmatively to the question

Finally, from the data revealed by the study, as well as other information available to the researchers, recommendations were made regarding revision of existing DWI laws and procedures.

1e. What is your AVERAGE consumption of alcoholic beverages per week (in bottles of beer or mixed drinks)?

Quantity / Category	24 (1)	12 to 24 (2)	2 to 12 (3)	0 to 2 (4)	Non Drinker (5)
1	3 1.3%	13 5.5%	38 16.0%	61 25.6%	123 51.7%
2	10 3.3%	25 8.1%	71 23.1%	108 35.2%	93 30.3%
3	4 1.9%	19 8.8%	57 26.4%	69 31.9%	67 31.0%
4	6 4.0%	17 11.3%	39 26.0%	36 24.0%	52 34.7%
5	3 1.7%	37 21.0%	56 31.8%	47 26.7%	33 18.0%
Country	5 2.5%	9 4.4%	31 15.3%	58 28.6%	100 49.3%
Small Town	1 0.8%	8 6.3%	30 23.6%	32 25.2%	56 44.1%
Suburbs	8 3.0%	25 9.4%	79 29.6%	89 33.3%	66 24.7%
City	8 2.6%	32 10.2%	65 20.8%	95 30.4%	113 36.1%

Question 1(e) asks individuals to estimate their average weekly alcohol consumption. Category 1, whose members have the best driving records, also contains the highest percent of professed abstainers (51.7%). This would suggest that there is an inverse relationship between drinking and the frequency of driving violations. Of course, it is well established that drinking impairs driving performance. However, little study has been devoted to the relation between the individual's driving record and total abstention.

The data also reveal that there is little difference between categories 2, 3, and 4 as to admitted consumption. The number of convicted DWIs who admit to falling in the higher consumption categories is only slightly greater, whereas one might initially expect a considerable difference. One might question the veracity of the responses; however, the willingness of this category to admit to a conviction for DWI in Question 2 (c) tends to establish credibility. One would think that there would be greater social stigma attaching to a conviction for DWI than to merely taking an occasional drink, with the consequence of greater reluctance to answer truthfully in 2 (c) than here. However, the verifiable 2(c) responses are largely truthful, which also suggests that DWI may have acquired something of the status of a "folk crime".

Even if the quantities of alcohol indicated are accurate estimates of weekly consumption, there are several factors which limit the utility of the responses to this question:

(1) There is perhaps some bias introduced by the structuring of the question as a consequence of the reluctance on the part of an individual to place himself in the higher consumption classes. In reality, being in one of these classes does not make one an alcoholic or problem drinker. Consequently, the overall consumption indicated may be low in every category.

(2) An admittedly greater defect is that while the responses may reveal average consumption, they say nothing about individual drinking patterns. To illustrate, the individual who consumes 12 drinks over an entire week may represent little or no safety hazard, while the person having 6 or 8 at one sitting may be a true menace.

(3) Finally, the data say nothing about the individual's reaction to the alcohol consumed. Unsafe driving due to alcohol consumption is the result of numerous physiological and psychological factors; this question explores none of those factors. Furthermore, the question does not reveal the individual's post-consumption conduct, i.e., whether after drinking the individual attempts to operate a motor vehicle, thus constituting a driving hazard.

What the data do suggest is that excessive drinking per se does not necessarily produce a DWI problem, but rather, the problem is a compound of numerous interrelated factors.

The demographic breakdown indicates the following ranking in terms of admitted consumption, ranging from low to high:

(1) country
(2) small town
(3) city
(4) suburbs

The effect of demographic differences on attitudes will be further developed in later discussion.

2a. Have you ever been CONVICTED of a moving traffic violation; for example, speeding, running a red light, reckless driving, failure to yield right-of-way, etc. ?

Response / Category	YES	NO
1	54 22.7%	184 77.3%
2	248 81.0%	58 19.0%
3	170 78.7%	46 21.6%
4	89 61.4%	56 38.6%
5	76 43.2%	100 56.8%
Country	111 55.0%	91 45.0%
Small Town	72 58.1%	52 41.9%
Suburbs	174 65.7%	91 34.3%
City	204 65.2%	109 34.8%

2b. Have you ever been CHARGED with driving under the influence of alcohol?

Response / Category	YES	NO
1	0 0	238 100.0%
2	10 3.3%	296 96.7%
3	12 5.6%	204 94.4%
4	133 89.3%	16 10.7%
5	0 0	176 100.0%
Country	55 27.2%	147 72.8%
Small Town	28 22.4%	97 77.6%
Suburbs	22 8.2%	245 91.8%
City	50 15.9%	264 84.1%

2c. Have you ever been CONVICTED of driving under the influence of alcohol?

Response / Category	YES	NO
1	0 0	238 100.0%
2	7 2.3%	299 97.7%
3	8 3.7%	208 96.3%
4	127 88.2%	17 11.8%
5	0 0	176 100.0%
Country	52 26.1%	147 73.9%
Small Town	25 20.2%	99 79.8%
Suburbs	19 7.1%	247 92.8%
City	46 14.6%	268 85.4%

2d. Have you ever been CONVICTED of the offense of IMPAIRED DRIVING?

Response / Category	YES	NO
1	0 0	238 100.0%
2	1 0.3%	305 99.7%
3	3 1.4%	213 98.6%
4	13 9.1%	130 90.9%
5	0 0	176 100.0%
Country	4 2.0%	194 23.6%
Small Town	4 3.2%	122 96.8%
Suburbs	2 0.8%	263 99.2%
City	7 2.2%	306 97.8%

2e. Have you ever been asked/told by the police to have a blood sample taken to determine your blood alcohol content?

Response / Category	YES	NO
1	0 0	238 100.0%
2	6 2.0%	300 98.0%
3	8 3.7%	208 96.3%
4	112 74.7%	38 25.3%
5	0 0	176 100.0%
Country	48 23.6%	155 76.4%
Small Town	21 16.8%	104 83.2%
Suburbs	21 7.9%	246 92.1%
City	36 11.5%	278 88.5%

2f. Have you ever refused to have a blood sample taken after being asked/told to do so by the police?

Response / Category	YES	NO
1	0 0	238 100.0%
2	1 0.3%	304 99.7%
3	1 0.5%	215 99.5%
4	23 15.2%	128 84.8%
5	0 0	175 100.0%
Country	8 3.9%	195 96.1%
Small Town	10 7.9%	116 92.1%
Suburbs	1 0.4%	265 99.6%
City	6 1.9%	308 98.1%

2g. Have you ever been CONVICTED of the offense of unreasonably refusing to have a blood sample taken?

Response / Category	YES	NO
1	0 0	238 100.0%
2	1 0.3%	304 99.7%
3	0 0	216 100.0%
4	9 6.0%	140 94.0%
5	0 0	175 100.0%
Country	4 2.0%	199 98.0%
Small Town	3 2.4%	122 97.6%
Suburbs	0 0	266 100.0%
City	3 1.0%	310 99.0%

Question 2 was designed to verify the accuracy the Virginia Division of Motor Vehicles' (DMV) files, upon which the categorization of questionnaire participants was based. Additionally, the question was designed to determine the extent to which the questionnaire participants would admit to previous violations.

In 2 (a), persons in Category 1 should have responded 100% "no" to the question of whether they had ever been convicted of a moving traffic violation, as this was the basis of the computer selection of this category. The 22.7% discrepancy could have arisen from three possible sources:

(1) Omissions in DMV files, whereby violations were not recorded;

(2) violations were more than five years old, as the computer search was on the basis of only the preceding five years; or

(3) violations occurred between the date of the record search and the date the questionnaire was mailed.

Category 2 should have responded 100% "yes" to question 2 (a). While the discrepancy could have been due to record errors, it is more likely that it is due either to a reluctance to reveal such information, or the offender has forgotten the violation.

No particular response from Category 4 (convicted DWIs) was expected, yet 61.4% answered this question in the affirmative. Several studies have suggested that DWI offenders are more frequently involved in all traffic violations and accidents than the average of the general driving population. For example, a report on motorists arrested for driving under the influence in the Fairfax County, Virginia area stated:

> The data are compatible with the hypothesis that an offender will be rearrested for DWI within one year after such an arrest with 8% probability. This probability, however, is correlated to the past annual average of alcohol events. The data are also agreeable with the hypothesis that an offender arrested for DWI will be arrested within a year for another traffic violation with 14% probability, and be in a traffic accident with 8% probability. This latter probability is correlated with the annual average of traffic accidents in the past.
>
> The data suggest that DWI offenders are more frequently involved in traffic violations and accidents than all male drivers in Fairfax County. The available information is, however, insufficient to make a quantitative suggestion.[13]

Another investigation[14] found that the study group of 50 alcoholic drivers had approximately twice as many accidents and violations as the nonalcoholic control group.

Data supplied by the DMV tend to confirm the conclusion that the convicted DWI is likely to have a poorer driving record, even excepting the DWI charge, than his counterparts who have never been convicted of driving under the influence.

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13. Center for the Environment and Man, Inc., Pilot Study of DWI Offender Characteristics (1970), p. 32.

14. Melvin L. Selzer, et al., "Automobile Accidents as an Expression of Psychology in an Alcoholic Population," 28 Quarterly Journal of Studies on Alcohol (1967), p. 507.

The following data detail the conviction frequency per driver of the various categories of drivers:

	Category 1	Category 2	Category 3	Category 4
Reckless Driving				
Mean	0.012	0.163	0.520	0.507
Standard Deviation	0.11	0.43	0.85	0.85
Speeding				
Mean	0.039	0.806	1.340	0.442
Standard Deviation	0.23	0.81	1.53	0.85
Driving Under the Influence of Drugs				
Mean	0.000	0.000	0.000	0.001
Standard Deviation	0.00	0.00	0.00	0.03
All other Convictions				
Mean	0.065	0.741	0.371	0.955
Standard Deviation	0.28	0.89	2.02	1.57

Note that only Category 3 shows a conviction frequency greater than that of Category 4. It is to be remembered that Category 3 consists of those who have lost their license for some reason other than DWI, so there is a bias toward speeding, reckless driving, etc., with this category. The only basis for assignment to Category 4, however, is a conviction for DWI within the previous five years. Additionally, the DMV files show that the accident frequency of Category 4 is greater than that of the average driver.

Accident Frequency

	Category 1	Category 2	Category 3	Category 4
Mean	0.206	0.598	1.279	0.761
Standard Deviation*	0.51	0.81	1.18	0.98

*Note the rather high standard deviations associated with both the accident and conviction frequencies. Due to the noncontinuous nature of a discrete distribution, the standard deviation can be expected to be rather large in relation to a mean between 0 and 1.

Consequently, the experience in Virginia appears to conform to what has been observed nationwide, i.e., the drunken driver shows a consistent pattern of traffic violations rather than an isolated instance of a DWI violation.

The demographic breakdown shows a higher percent of moving violations in the urban areas (suburbs and city) than in the rural localities (country and small town). This finding is perhaps explained by the fact that the urban areas, being more congested, place more controls on driving behavior, and thus there is a greater potential for the occurrence of a violation.

Questions 2 (b) and (c) are concerned with the extent to which DWIs will admit their charge and conviction. The responses indicate a fairly high rate of admission. This may be due to the fact that traffic offenses, even the more serious ones, often acquire the status of "folk crimes". Thus there is little social stigma attached to admitting such an offense. The convicted DWI is often viewed as but an ordinary citizen who happened to overindulge and was unfortunate enough to be caught. More will be said about this misconception later.

The demographic breakdown reveals the interesting fact that there appears to be a significantly greater concentration of DWIs in comparison with population in the rural areas than in the urban areas. This was not predicted, since it is generally thought that there are proportionally more drinkers in the large cities than in smaller communities[15] and consequently more DWI violations.

However, it is to be noted that enforcement of DWI laws is not necessarily related to alcohol consumption patterns in the community. Additionally, there are wide variations between community drinking patterns, and the individual generally conforms to the drinking customs of his community.

The greater enforcement of DWI laws in the rural areas is consistent with the more condemning attitude toward violation of DWI laws and drinking in general taken by these localities, a phenomenon which appears throughout the study. The cause-effect relationship is unclear: whether the greater moral stigma attaching to DWI results in more stringent enforcement, or whether the attitude is the result of the enforcement. The two are probably inextricably intertwined, and any effort to more precisely delineate the relationship is likely to be futile.

Question 2 (d) is concerned with the offense of "impaired driving", a lesser-included offense of driving under the influence, and carrying less severe penalties.

Note that 9.1% of Category 4 individuals indicated a conviction under this offense. This response may account for most of the remainder of those members of Category 4 who did not answer in the affirmative in 2 (c). Once again, the country-small town group indicated a higher overall conviction frequency than did the urban areas, which suggests that the lower conviction rate in the urban areas is not entirely the consequence of plea-bargaining.

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15. Calahan, op. cit., p. 39.

Questions 2 (e), (f), and (g) are concerned with submission to a blood test, constituting corroborative chemical test evidence. 2 (e) indicates that approximately three-fourths of the convicted DWIs were asked to submit to a blood test. Of the 112 who were asked, 23, or about one-fifth, refused. See Question 2 (f). Of the 23 individuals who refused, only 9 were convicted of the offense of "unreasonable refusal" to submit to a blood test. The 14 who were not convicted might have been exonerated for the following reasons:

(1) The refusal was "reasonable";

(2) they subsequently pleaded guilty to driving under the influence despite the lack of chemical test evidence; or

(3) the charge was dropped as a result of plea-bargaining.

There is also the fourth possibility that the charge was dropped because of a reluctance to impose further burdens on the DWI.

3a. If you personally were going to drink, what is the largest amount you could drink in a four hour period without affecting your driving?

Bottles of Beer (12 oz. bottle)

(1) None at all
(2) 1 bottle
(3) 2 bottles
(4) 3 bottles
(5) 4 bottles
(6) 5 bottles
(7) 6 bottles
(8) 7 bottles
(9) 8 or more bottles

Quantity / Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	96 44.0%	30 13.8%	30 13.8%	23 10.6%	25 11.5%	3 1.4%	8 3.7%	2 0.9%	1 0.5%
2	64 22.1%	36 12.4%	44 15.2%	36 12.4%	43 14.8%	17 5.9%	31 10.7%	6 2.1%	13 4.5%
3	45 21.8%	15 7.3%	30 14.6%	27 13.1%	36 17.5%	9 4.4%	29 14.1%	4 1.9%	11 5.3%
4	28 20.1%	12 8.6%	20 14.4%	9 6.5%	24 17.3%	10 7.2%	23 16.5%	1 0.7%	12 8.6%
5	17 11.6%	14 9.5%	35 23.8%	32 21.8%	32 21.8%	5 3.4%	9 6.1%	1 0.7%	2 1.4%
Country	74 38.7%	24 12.6%	30 15.7%	13 6.8%	20 10.5%	7 3.7%	13 6.8%		10 5.2%
Small Town	33.0%	11.3%	11.3%	6.1%	13.9%	4.3%	11.3%	3.5%	5.2%
Suburbs	18.5%	10.6%	18.5%	15.0%	17.3%	5.5%	11.4%	0.4%	2.8%
City	25.0%	9.9%	11.6%	12.7%	16.4%	4.5%	12.3%	2.7%	4.8%

3b. Drinks of Whiskey ($1\frac{1}{2}$ oz. — 80 proof)

(1) None at all
(2) 1 drink
(3) 2 drinks
(4) 3 drinks
(5) 4 drinks
(6) 5 drinks
(7) 6 drinks
(8) 7 drinks
(9) 8 or more drinks

Quantity / Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	102 45.7%	34 15.2%	37 16.6%	21 9.4%	23 10.3%	2 0.9%	3 1.3%		1 0.4%
2	73 25.1%	38 13.1%	57 19.6%	54 18.6%	39 13.4%	11 3.8%	12 4.1%	2 0.7%	5 1.7%
3	52 24.6%	30 14.2%	39 18.5%	30 14.2%	41 19.4%	4 1.9%	10 4.7%	1 0.5%	4 1.9%
4	41 29.5%	20 14.4%	21 15.1%	19 13.7%	20 14.4%	9 6.5%	7 5.0%	1 0.7%	1 0.7%
5	21 12.7%	19 11.5%	36 21.8%	45 27.3%	30 18.2%	7 4.2%	4 2.4%	2 1.2%	1 0.6%
Country	80 41.9%	27 14.1%	36 18.8%	20 10.5%	15 7.9%	6 3.1%	5 2.6%		2 1.0%
Small Town	48 42.1%	12 10.5%	11 9.6%	13 11.4%	16 14.0%	6 5.3%	4 3.5%	1 0.9%	3 2.6%
Suburbs	55 21.2%	44 16.9%	51 19.6%	45 17.3%	51 19.6%	3 1.2%	9 3.5%		2 0.8%
City	85 28.5%	38 12.8%	56 18.8%	46 15.4%	41 13.8%	11 3.7%	14 4.7%	3 1.0%	4 1.3%

4a. What is the largest amount the average person can drink in a four hour period without affecting his driving?

Bottles of Beer (12 oz. bottle)

(1) None at all
(2) 1 bottle
(3) 2 bottles
(4) 3 bottles
(5) 4 bottles
(6) 5 bottles
(7) 6 bottles
(8) 7 bottles
(9) 8 or more bottles

Quantity / Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	58 27.9%	29 13.9%	36 17.3%	33 15.9%	19 9.1%	14 6.7%	16 7.7%	3 1.4%	
2	47 17.1%	21 7.6%	40 14.5%	51 18.5%	59 21.5%	14 5.1%	24 8.7%	6 2.2%	13 4.7%
3	31 15.2%	12 5.9%	29 14.2%	26 12.7%	46 22.5%	15 7.4%	31 15.2%	5 2.5%	9 4.4%
4	22 16.4%	15 11.2%	20 14.9%	12 9.0%	23 17.2%	10 7.5%	22 16.4%	1 0.7%	9 6.7%
5	12 8.5%	10 7.0%	33 23.2%	38 26.8%	37 26.1%	6 4.2%	6 4.2%		
Country	59 32.2%	18 9.8%	29 15.8%	21 11.5%	24 13.1%	11 6.0%	13 7.1%		8 4.4%
Small Town	24 21.4%	9 8.0%	16 14.3%	16 14.3%	23 20.5%	6 5.4%	10 8.9%	3 2.7%	5 4.5%
Suburbs	19 7.7%	26 10.5%	45 18.2%	46 18.6%	55 22.3%	15 6.1%	29 11.7%	7 2.8%	5 2.0%
City	55 19.8%	24 8.6%	35 12.6%	39 14.0%	45 16.2%	21 7.6%	41 14.7%	5 1.8%	13 4.7%

4b. Drinks of Whiskey ($1\frac{1}{2}$ oz. — 80 proof)

(1) None at all
(2) 1 drink
(3) 2 drinks
(4) 3 drinks
(5) 4 drinks
(6) 5 drinks
(7) 6 drinks
(8) 7 drinks
(9) 8 or more drinks

Quantity / Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	65 31.0%	34 16.2%	48 22.9%	25 11.9%	24 11.4%	8 3.8%	6 2.9%		
2	57 20.4%	34 12.1%	63 22.5%	49 17.5%	48 17.1%	14 5.0%	8 2.9%	2 0.7%	5 1.8%
3	39 18.8%	27 13.0%	33 15.9%	44 21.3%	36 17.4%	10 4.8%	14 6.8%	3 1.4%	1 0.5%
4	28 21.5%	19 14.6%	28 21.5%	21 16.2%	18 13.8%	5 3.8%	7 5.4%		4 3.1%
5	14 9.3%	17 11.3%	36 24.0%	48 32.0%	26 17.3%	5 3.3%	4 2.7%		
Country	67 36.2%	26 14.1%	37 20.0%	25 13.5%	13 7.0%	8 4.3%	7 3.8%		2 1.1%
Small Town	31 27.7%	13 11.6%	28 25.0%	14 12.5%	15 13.4%	5 4.5%	2 1.8%	1 0.9%	3 2.7%
Suburbs	25 10.1%	40 16.2%	53 21.5%	60 24.3%	44 17.8%	11 4.5%	12 4.9%	2 0.8%	
City	66 23.4%	34 12.1%	54 19.1%	40 14.2%	54 19.1%	13 4.6%	14 5.0%	2 0.7%	5 1.8%

5a. What is the largest amount the average person should legally be allowed to drink in a four hour period without fear of arrest for drunken driving?

Bottles of Beer (12 oz. bottles)

(1) None at all
(2) 1 bottle
(3) 2 bottles
(4) 3 bottles
(5) 4 bottles
(6) 5 bottles
(7) 6 bottles
(8) 7 bottles
(9) 8 or more bottles

Quantity / Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	72 34.8%	33 15.9%	35 16.9%	20 9.7%	25 12.1%	8 3.9%	10 4.8%	3 1.4%	1 0.5%
2	49 17.5%	30 10.7%	46 16.4%	49 17.5%	56 20.0%	13 4.6%	25 8.9%	6 2.1%	6 2.1%
3	31 15.4%	26 10.0%	27 13.4%	46 19.9%	38 18.9%	10 5.0%	26 12.9%	3 1.5%	6 3.0%
4	32 23.7%	14 10.4%	21 15.6%	10 7.4%	23 17.0%	8 5.9%	18 13.3%	1 0.7%	8 5.9%
5	20 14.3%	10 7.1%	35 25.0%	36 25.7%	27 19.3%	8 5.7%	2 1.4%	1 0.7%	1 0.7%
Country	64 34.4%	20 10.8%	35 18.8%	20 10.8%	18 9.7%	7 3.8%	14 7.5%	3 1.6%	5 2.7%
Small Town	33 29.5%	14 12.5%	17 15.2%	11 9.8%	16 14.3%	4 3.6%	13 11.6%	1 0.9%	3 2.7%
Suburbs	22 9.2%	31 13.0%	39 16.4%	49 20.6%	53 22.3%	11 4.6%	26 10.9%	3 1.3%	4 1.7%
City	64 22.4%	32 11.2%	38 13.3%	39 13.6%	55 19.2%	17 5.9%	26 9.1%	6 2.1%	9 3.1%

5b. Drinks of Whiskey ($1\frac{1}{2}$ oz. - 80 proof)

(1) None at all
(2) 1 drink
(3) 2 drinks
(4) 3 drinks
(5) 4 drinks
(6) 5 drinks
(7) 6 drinks
(8) 7 drinks
(9) 8 or more **drinks**

Quantity / Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	75 36.1%	39 18.8%	40 19.2%	25 12.0%	19 9.1%	7 3.4%	2 1.0%		1 0.5%
2	60 21.0%	34 11.9%	69 24.1%	53 18.5%	45 15.7%	9 3.1%	10 3.5%	3 1.0%	3 1.0%
3	43 21.5%	25 12.5%	42 21.0%	43 21.5%	29 14.5%	9 4.5%	6 3.0%	2 10.0%	1 0.5%
4	36 27.9%	18 14.0%	22 17.1%	22 17.1%	16 12.4%	4 3.1%	8 6.2%		3 2.3%
5	21 14.1%	18 12.1%	40 26.8%	42 28.2%	20 13.4%	3 2.0%	4 2.7%	1 0.7%	
Country	72 39.1%	29 15.8%	35 19.0%	20 10.9%	14 7.6%	7 3.8%	3 1.6%	1 0.5%	3 1.6%
Small Town	38 33.9%	14 12.5%	25 22.3%	15 13.4%	14 11.6%	5 4.5%	1 0.9%		1 0.9%
Suburbs	28 11.7%	37 15.4%	56 23.3%	54 22.5%	43 17.9%	9 3.8%	11 4.6%		2 0.8%
City	76 26.6%	36 12.6%	56 19.6%	54 18.9%	39 13.6%	8 2.8%	11 3.8%	4 1.4%	2 0.7%

Questions 3, 4, and 5 relate absolute quantities of alcohol consumed to presumptive levels. It is recognized that there may be some doubt to this approach, owing to the difficulty of estimating one's own alcohol tolerance. However, when the differences between the BAC levels indicated by the responses and actual levels are great, comment would seem permissible.

The responses were charted, translated into the BAC level of a 160 lb. man, and then compared with current presumptive levels. The percent of responses falling within the various presumptions was then accumulated, and the results are shown in Appendix C.

From these data, several conclusions emerge:

(1) Most importantly, there appears to be a tremendous gap between how much the individuals in the sample thought they could drink without it affecting their driving or without fear of arrest and how much the law allowed them to drink. For example, in Question 3 (a), 67.0% of the Category 4 drivers indicated quantities that translated into BAC levels of 0.05% or less. This was the most nearly accurate estimation. In one case (Category 1), 93.4% of the responses were less than a BAC of 0.05%. According to current law, persons with a BAC less than 0.05% are presumed sober.

When one considers the 0.10% presumptive level, the results are even more dramatic. A minimum of 91.3% (Question 4 (b), Category 3) fell at or below this level. More often, this figure was between 95-100%. The BAC level of 0.10% corresponds to a presumption of "impaired" driving. Consequently, the vast majority of responses fell below any level which, under current law, would give rise to a presumption of impaired driving or driving under the influence. This suggests that the public has little idea of how much actual alcohol the current presumptive levels represent.

(2) A comparison of Question 3 to Question 4 indicates that, at least in terms of the effect of alcohol on driving performance, the individual does not consider his own tolerance to be very much different from that of the "average person" of Question 4. There were, of course, some discrepancies. For example, Category 1, with its larger proportion of abstainers, tended to view its tolerance as less than that of the average person. On the other hand, Category 4 (convicted DWIs) estimated its tolerance as greater than that of the average drinker. Neither gap was significantly great, however, and overall the differences appeared to even out.

(3) There was some initial question about the use of the phrase "affecting your driving" in Questions 3 and 4. Did the participants take this to mean only slightly affecting, or affecting so seriously that the person should not drive? The ambiguity is resolved in Question 5, where it is clear that the respondents are being asked to choose a quantity of alcohol such that motorists who drink more than that amount are subject to arrest for DWI. The similarity of responses between Questions 3 and 4 and Question 5 indicates that the more serious meaning of "affecting your driving" was adopted by those responding to the former questions. If anything, the responses to Question 5 are slightly more conservative than those to 3 and 4, which indicates a basic feeling that the presumptive level should be set lower than the point at which driving performance is seriously affected.

Indicate whether you agree or disagree with the following statements.

6a. A person's ability to drive is affected by one drink (1 hour before driving).

Response / Category	Agree	Disagree	Don't Know
1	94 39.5%	101 42.4%	43 18.1%
2	92 30.1%	166 54.2%	48 15.7%
3	52 24.1%	128 59.3%	36 16.7%
4	39 25.7%	90 59.2%	23 15.1%
5	53 30.1%	106 60.2%	16 9.1%
Country	69 34.0%	89 43.8%	45 22.2%
Small Town	50 39.4%	59 46.5%	18 14.2%
Suburbs	73 27.2%	157 58.6%	38 14.2%
City	85 27.2%	179 57.2%	49 15.7%

6b. There is no reason why you shouldn't drink as much as you like and still be able to drive.

Response / Category	Agree	Disagree	Don't Know
1	9 3.8%	220 92.4%	9 3.8%
2	9 2.9%	292 95.4%	5 1.6%
3	19 8.8%	193 89.4%	4 1.9%
4	11 7.2%	133 87.5%	8 5.3%
5	8 4.5%	164 93.2%	5 2.8%
Country	8 3.9%	190 93.6%	5 2.5%
Small Town	6 4.7%	115 90.6%	6 4.7%
Suburbs	14 5.2%	252 94.0%	2 0.7%
City	19 6.1%	281 89.8%	13 4.2%

6c. People who drink to excess and drive should be disqualified from driving.

Response / Category	Agree	Disagree	Don't Know
1	205 88.1%	17 7.1%	16 6.7%
2	264 86.3%	23 7.5%	19 6.2%
3	174 80.6%	21 9.7%	21 9.7%
4	117 77.0%	21 13.8%	14 9.2%
5	151 85.8%	17 9.7%	8 4.5%
Country	169 83.3%	20 9.9%	14 6.9%
Small Town	104 81.9%	8 6.3%	15 11.8%
Suburbs	226 84.3%	28 10.4%	26 5.2%
City	261 83.4%	26 8.3%	26 8.3%

6d. Even the experts disagree about effects of alcohol on driving.

Response / Category	Agree	Disagree	Don't Know
1	75 31.5%	73 30.7%	90 37.8%
2	108 35.3%	80 26.1%	118 38.6%
3	71 32.9%	66 30.6%	79 36.6%
4	67 44.1%	31 20.4%	54 35.5%
5	65 36.9%	85 48.3%	26 14.8%
Country	76 37.4%	53 26.1%	74 36.5%
Small Town	48 37.8%	40 31.5%	39 30.7%
Suburbs	93 34.7%	86 32.1%	89 33.2%
City	104 33.2%	70 22.4%	138 44.4%

6e. Some people drive better after 1 or 2 drinks.

Response / Category	Agree	Disagree	Don't Know
1	10 4.2%	205 86.1%	23 9.7%
2	44 14.4%	221 72.2%	41 13.4%
3	32 14.8%	158 73.1%	26 12.0%
4	33 21.7%	91 59.9%	28 18.4%
5	12 6.8%	152 86.4%	12 6.8%
Country	29 14.3%	152 74.9%	22 10.8%
Small Town	17 13.4%	85 66.9%	25 19.7%
Suburbs	23 8.6%	210 78.4%	35 13.1%
City	50 16.0%	227 72.5%	36 11.5%

6f. People who drink and drive should be sent to prison for First Offense.

Response / Category	Agree	Disagree	Don't Know
1	32 13.4%	162 68.1%	44 18.5%
2	26 8.5%	253 82.7%	27 8.8%
3	27 12.5%	173 80.1%	16 7.4%
4	13 8.6%	127 83.6%	12 7.9%
5	21 11.9%	145 82.4%	10 5.7%
Country	29 14.3%	147 72.4%	27 13.3%
Small Town	17 13.4%	97 76.4%	13 10.2%
Suburbs	28 10.4%	215 80.2%	25 9.3%
City	24 7.7%	255 81.5%	34 10.9%

6g. Far too much fuss is made about the dangers of drinking and driving.

Response / Category	Agree	Disagree	Don't Know
1	7 2.9%	211 88.7%	20 8.4%
2	18 5.9%	271 88.6%	17 5.6%
3	9 4.2%	200 92.6%	7 3.2%
4	30 19.0%	111 73.0%	11 7.2%
5	3 1.7%	167 94.9%	6 3.4%
Country	25 12.3%	164 80.7%	14 6.9%
Small Town	9 7.1%	111 87.4%	7 5.5%
Suburbs	13 4.9%	241 89.9%	14 5.2%
City	16 5.1%	277 88.5%	20 6.4%

6h. People who drink before driving are reducing their ability as drivers.

Response / Category	Agree	Disagree	Don't Know
1	211 88.7%	7 2.9%	20 8.4%
2	254 83.0%	22 7.2%	30 9.8%
3	181 82.3%	18 8.3%	17 7.9%
4	123 80.9%	15 9.9%	14 9.2%
5	153 86.9%	12 6.8%	11 6.3%
Country	170 83.7%	18 8.9%	15 7.4%
Small Town	105 82.7%	8 6.3%	14 11.0%
Suburbs	227 84.4%	16 6.0%	25 9.3%
City	266 85.0%	20 6.4%	27 8.6%

The propositions in Question 6 are concerned with general public attitudes toward drinking and driving. In Question 6 (a), there was more disagreement than agreement in every category with the proposition that a person's ability to drive is affected by one drink. Additionally, while disagreement still prevailed in the demographic breakdown, the rural areas attached greater seriousness to driving even after one drink than did the urban areas.

Again, one has the initial question of what "affected" means. However, in accordance with the responses to questions 3, 4, and 5, one must assume that "affected" connotes adversely affected.

The disagreement with this proposition is in substantial accord with scientific data. While the threshold of impairment of coordination and reaction time was found to be as low as 0.02% in one study,[15] most studies have not found significant impairment at quite so low a level. It appears that at such levels, an increased feeling of comfort and enjoyment may actually increase the level of performance for certain individuals. "Depending upon the complexity of the task and the familiarity with it, low doses of alcohol may increase performance of certain learned skills such as typing. The number of errors, however, greatly increases."[16]

The greater degree of relaxation attained appears to counterbalance the errors introduced by the ingestion of small quantities of alcohol. According to Borkenstein[17], ingestion of alcohol up to a BAC of 0.04% (about 2 beers for a 160 lb. male) is consistent with highway traffic safety.

Note, however, that even Borkenstein's figures apply only to relatively experienced drivers. For the young and inexperienced driver, for whom driving is not yet a learned skill, even small amounts of alcohol can be extremely hazardous. There is no systematic relationship between blood-alcohol levels and accident experience which holds for all age classes, but the effect of alcohol, particularly in large doses, is more pronounced on the younger driver.[18]

Question 6 (b) is illustrative of the fact that no matter how extreme an approach one takes (such as stating that there is no reason why you shouldn't drink as much as you like and still be able to drive), someone will agree. Some of the responses can possibly be attributed to a misreading of the question or perhaps to a reaction to government sponsored questionnaires. However, one must conjecture that at least a portion of the responses represent actual opinion. The researchers did find surprising the 4.5% of the judiciary who responded in the affirmative.

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15. F. Bschor, "Observations Concerning Functioned Principle in the Decrease of Pyschomotor Performance During Phases of Acute Alcohol Intoxication," 41 Dtsch Z Ges Gerichtl Med (1952), p. 273.

16. Committee on Medicolegal Problems, American Medical Association, Alcohol and the Impaired Driver (Chicago, Illinois 1968), p. 28.

17. Robert F. Borkenstein, et al., The Role of the Drinking Driver in Traffic Accidents, (Department of Police Administration, Indiana University, 1964), p. 167.

18. Ibid., p. 152.

The replies to 6 (c) indicate that the public's conception of the seriousness of the offense is sufficiently strong to warrant a license suspension. This assumption has never been seriously disputed. The question remains, however, as to what period of time is appropriate for a license suspension.

The output from Question 6 (d) suggests that the public has been subject to conflicting opinions as to the effects of alcohol on driving. The conflict of opinions has, in turn, led to a certain amount of confusion as manifested by the large number who responded "don't know" to the proposition. This conflict is partly due to the fact that the field of traffic safety is a newly-developing one. Additionally, decisions often must reflect a number of intangibles and immeasurables. Nevertheless, the relationship between alcohol and traffic safety is relatively well-documented, and it is time that decisions having such an impact on the public as traffic law be based on scientific data rather than "gut reaction" or personal prejudice.

The reactions to 6 (e) are predictably negative; however, the issue is not so clearly defined as assumed. Two $1\frac{1}{2}$ oz. drinks result in a BAC of about 0.04% for a male of average weight. Borkenstien found that a mature experienced driver with a BAC of 0.04% was no more likely to have an accident than a completely sober driver. In fact, subjects with blood-alcohol levels of 0.03% were, according to the study, statistically one-third less likely to cause an accident than a driver whose BAC was 0.00%.

However, as the level of intoxication rises above 0.04%, the relative probability of accident involvement begins to climb sharply. At 0.06% the relative probability of accident occurrence is about twice that for a completely sober driver. Drivers with BACs of 0.10% are overrepresented by a factor of x7 in the accident-involved group, and the probability climbs almost vertically thereafter. The findings are illustrated by the now famous graph generated by the Borkenstein group. See Figure 1.

The replies to 6 (f) show little public support (8.6% - 13.4%) for imposition of a jail sentence for first offense convictions of DWI. Furthermore, the judiciary appears to share roughly the same opinion as the public. The demographic breakdown illustrates the same reluctance to jail first offenders; however the rural areas illustrate the by-now familiar, tougher-minded attitude toward the DWI offender than do the urban areas.

Va. Code Ann. § 18.1-58 authorizes confinement for 1 - 6 months at the discretion of the jury or the court trying the case without a jury. However, in line with the results of the opinion survey, the sanction appears to be little used for first offenders. If imposed at all, the bulk of the sentence is generally suspended.

It would seem that the sanction would be more strictly invoked, since the conduct in question involves such a substantial risk of harm to life and property. However, because traffic violations in general are widespread, the tendency is to view all traffic violations as minor unless injury results. This should not be so, since it is the violation itself which is wrongful, and the fortuitous consequence of accident occurrence is immaterial. Nevertheless, it is the public's concept of the offense which often controls.

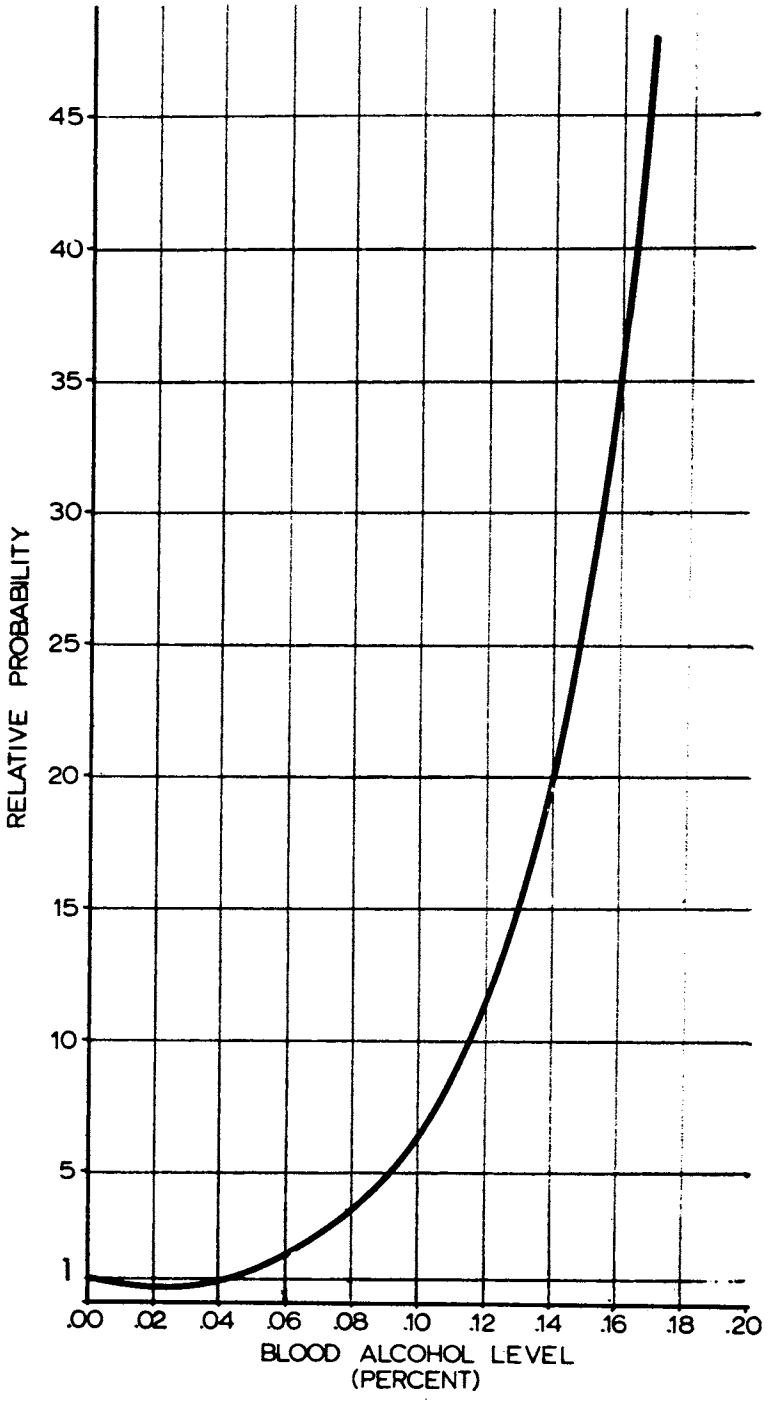

Figure 1. Relative probability of causing an accident. (From Borkenstein, op. cit., p. 166.)

The reactions to Question 6 (g) indicate that the vast majority (73.0% - 94.9%) do not think that too much fuss is made about the dangers of drinking and driving; one might speculate that the opposite is true -- that not enough is being done in the field. The major exception was Category 4, of which a substantial minority (19.7%) agreed that the dangers of drinking and driving were overemphasized. This sizeable dissent from the majority view might be explained in two ways: (a) Category 4 consists of convicted DWIs who, having been "through the mill", are perhaps disgruntled with the experience and seize upon this opportunity to express their dissatisfaction, or (b) since they do not view themselves as representing a danger, they naturally tend to view the DWI problem as overrated.

The greater percentage of agreement among the country-small town group, seemingly in conflict with earlier expressed views, is explained by the greater concentration of convicted DWIs in these areas. (See Question 2 (c).)

Finally, in 6 (h) the majority of motorists demonstrate that they recognize the danger inherent in combining drinking and driving. Surprising is the small group that disagreed with the proposition or those who stated that they didn't know. One would have suspected that this basic proposition would have been universally accepted by now.

Indicate whether you agree or disagree with the following statements about individuals arrested for a first time violation of driving under the influence of alcohol in the Commonwealth of Virginia.

7a. Many of them are alcoholics or problem drinkers.

Response / Category	Agree	Disagree	Don't Know
1	79 33.2%	66 27.7%	93 39.1%
2	99 32.4%	124 40.5%	83 27.1%
3	79 36.6%	89 41.2%	48 22.2%
4	65 42.8%	55 36.2%	32 21.1%
5	97 55.1%	59 33.5%	20 11.4%
Country	87 42.9%	68 33.5%	48 23.6%
Small Town	42 33.1%	46 36.2%	39 30.7%
Suburbs	77 28.7%	106 39.6%	85 31.7%
City	115 36.7%	114 36.4%	84 26.8%

7b. They are usually heavy social drinkers.

Response / Category	Agree	Disagree	Don't Know
1	114 47.9%	33 13.9%	91 38.2%
2	148 48.4%	58 19.0%	100 32.7%
3	108 50.0%	52 24.1%	56 25.9%
4	68 44.7%	42 27.6%	42 27.6%
5	108 61.4%	40 22.7%	28 15.9%
Country	93 45.8%	53 26.1%	57 28.1%
Small Town	64 50.4%	22 17.3%	41 32.3%
Suburbs	127 47.4%	43 16.0%	98 36.6%
City	154 49.2%	67 21.4%	92 29.4%

682 Many of them have definite psychiatric disorders (suicidal tendencies, criminal records, over-aggressive personality, etc.)

Response / Category	Agree	Disagree	Don't Know
1	35 14.7%	83 34.9%	120 50.4%
2	50 16.3%	121 39.5%	135 44.1%
3	48 22.2%	88 40.7%	80 37.0%
4	40 26.3%	44 36.2%	57 37.5%
5	42 23.9%	84 47.7%	50 28.4%
Country	47 23.2%	73 36.0%	83 40.9%
Small Town	33 26.0%	47 37.0%	47 27.0%
Suburbs	33 12.3%	103 38.4%	132 49.3%
City	59 18.8%	124 39.6%	130 41.5%

7d. They usually have 1 or 2 drinks at a cocktail party or 1 or 2 beers on the way home from work.

Response / Category	Agree	Disagree	Don't Know
1	96 40.3%	51 21.4%	91 38.2%
2	120 39.2%	84 27.5%	101 33.0%
3	91 42.1%	59 27.3%	66 30.6%
4	78 51.3%	36 23.7%	38 25.0%
5	44 25.0%	92 52.3%	40 22.7%
Country	95 46.8%	43 21.2%	65 32.0%
Small Town	49 38.6%	35 27.6%	43 33.9%
Suburbs	107 39.9%	67 25.0%	94 35.1%
City	134 42.8%	85 27.2%	94 30.0%

The propositions in Question 7 are designed to measure public reaction to certain often voiced generalizations about the drinking driver, and then to compare the results to available scientific evidence.

Questions 7 (a) and 7 (b) are structured to determine if there is a consensus amongst the public as to who the DWI offender is — social drinker or alcoholic. Apparently, there is no such consensus. Some who indicate that they thought the DWI was an alcoholic in 7 (a), readily agreed that he was a social drinker in 7 (b). Amongst the general public (Categories 1 - 4) a good many responded "don't know" to both questions. Category 5 more often indicated a definite opinion; however, the result was that these responses indicated even greater ambivalence. This result is perhaps predictable, since the commentators are often in disagreement as to who is likely to be the DWI offender. (According to Dr. William E. Tarrants, one prevalent highway traffic safety myth is that the typical "social drinker" contributes to the bulk of the DWI problem. He states: "There is increasing evidence, however, that the 'solid citizen' normal driver who limits his drinking to social occasions is not involved in most of the arrests for drunk driving."[19])

The researchers are in basic agreement with Dr. Tarrants, but feel that the distinction between social drinkers and alcoholics is often but a matter of definition. The distinction is frequently based on the degree of observable socioeconomic deterioration, rather than upon an analysis of the underlying causes of the drinking. Therefore the classifications are not mutually exclusive, and, in terms of the need for effective enforcement, the distinction is highly questionable. Apparently, many feel that the drunken driver who is only a social drinker should escape conviction, but if the DWI can be labeled an alcoholic, he should be severely punished. However, any motorist, social drinker or alcoholic, whose BAC reaches the 0.10% level represents such a substantial risk to the motoring public that his apprehension is fully warranted. From the standpoint of highway safety, both are "problem drinkers".

This view does not deny the relevance of the distinction between social drinker and alcoholic to post hoc rehabilitative aspects of the DWI problem. The offender's personality traits govern whether his conduct is amenable to correction, and, if so, what sanctions or treatment will be effective in rechanneling his behavior along lines involving less risk to others. The objection is to structuring the law so as to avoid apprehension of the social drinker and thereby ignoring his risk to the motoring public.

The notable aspect of the responses to 7 (c) is that while there was more disagreement than agreement with the proposition that many convicted DWIs have definite psychiatric disorders, the greatest percentage of agreement was amongst Category 4 (the convicted DWIs themselves.)

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19. William E. Tarrants, "Myths and Misconceptions in Traffic Safety," 31 Highway Research News (1968) p. 54.

This is a particularly interesting fact in light of a study conducted at Baylor University[20] comparing 25 driver fatalities in the Houston area with a randomly selected control group of similar number. When both groups were subjected to psychiatric scrutiny, it was discovered that 80% of the fatalities were maladjusted in that they were either alcoholics or had personality disorders or both. Characteristic of this group was a preexisting personality defect which made the individual particularly vulnerable to stress. A stressful situation coupled with alcohol was often the precipitating factor in the fatality producing accident.

On the other hand, only 12% of the control group were adjudged to show psychiatrically disturbed personalities. The comparison is illustrated in Figure 2.

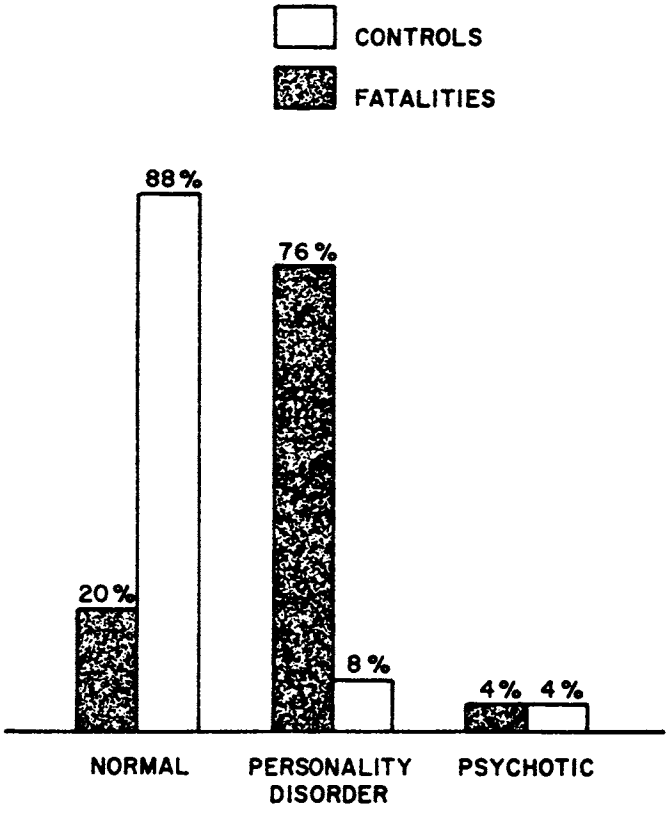

Figure 2. Basic personality patterns. (From Brown, op. cit., p. 36.)

20. Stuart L. Brown, et al., Alcohol Safety Study, "Drivers Who Die", (Baylor University, 1968).

The responses to the questionnaire together with the Baylor study indicate that DWI offenders do not represent a normal cross section of the driving population. This distinction becomes important in ascertaining what types of deterrent measures will be effective. Given the high incidence of maladjusted personality behavior occurring in the DWI offender group, it may well be that present sanctions are largely ineffective in rechanneling the behavior of many of these individuals.

Finally, in 7 (d) the proposition was tested that the DWI is merely the person who has 1 or 2 beers on the way home. Apparently the illusion persists with 39.2% to 51.3% of the public that the person who has one or two for the road is a likely candidate for a DWI conviction. This is simply not true. The BAC of an individual having 1 or 2 beers is generally going to fall around 0.05% or less, where the legal presumption is that he is sober. Additionally, he is unlikely to be so affected as to drive in an erratic manner, and thus be apprehended. This groundless fear perhaps explains much of the reluctance to lowering the legal presumptive level to a more realistic figure. Funds devoted to public education on this matter would be well spent. At the same time, the idea is not to show the public that they can drink more with legal impunity. The line is a thin one, but an experienced public relations man should be able to structure his presentation in such a manner that the desired conclusion emerges in the mind of the listener.

Indicate the phrase which most accurately describes your knowledge of the offense of IMPAIRED DRIVING.

8. a. I have never heard of it.
   b. I have heard of it but don't know anything about it.
   c. I have some knowledge of it.
   d. I have general knowledge of this offense.
   e. I am well informed on this subject.

Response / Category	a.	b.	c.	d.	e.
1	43 18.1%	66 27.8%	73 30.8%	48 20.3%	7 3.0%
2	54 17.8%	68 22.4%	92 30.3%	74 24.3%	17 5.6%
3	45 20.8%	42 19.4%	58 26.9%	56 25.9%	15 6.9%
4	27 17.9%	32 21.2%	37 24.5%	43 28.5%	12 7.9%
5	4 2.3%	2 1.1%	5 2.8%	29 16.5%	136 77.3%
Country	38 18.8%	55 27.2%	56 21.8%	44 21.8%	9 4.5%
Small Town	23 18.1%	36 28.3%	28 22.0%	26 20.5%	14 11.0%
Suburbs	52 19.5%	59 22.1%	79 29.6%	67 25.1%	10 3.7%
City	54 17.4%	58 18.6%	97 31.2%	84 27.0%	18 5.8%

Note: Questions 8 and 9 will be discussed concurrently.

Indicate your opinion of the following statements about the offense of IMPAIRED DRIVING.

9a. It provides the accused with the opportunity to plead guilty to a lesser offense than driving under the influence of intoxicating beverages in hopes that he will receive a lesser penalty.

Response / Category	Agree	Disagree	Don't Know
1	65 25.5%	41 17.2%	136 57.1%
2	130 35.9%	57 18.6%	139 45.4%
3	78 33.8%	38 17.6%	105 48.6%
4	56 36.3%	29 19.1%	67 44.1%
5	92 52.3%	47 26.7%	36 20.5%
Country	76 37.4%	31 15.3%	96 47.3%
Small Town	34 25.2%	26 29.5%	69 54.3%
Suburbs	90 38.6%	37 13.8%	141 52.6%
City	101 32.3%	71 22.7%	141 45.0%

9b. It enables judges to exercise some discretion by providing a lower penalty than that used for driving under the influence of alcohol.

Response / Category	Agree	Disagree	Don't Know
1	95 35.7%	27 11.3%	126 52.9%
2	143 46.1%	35 11.4%	130 42.5%
3	102 47.2%	18 8.3%	96 44.4%
4	67 44.1%	26 13.2%	65 42.8%
5	135 76.7%	22 12.5%	20 11.4%
Country	75 36.9%	28 13.8%	100 49.3%
Small Town	48 36.6%	13 10.2%	65 51.2%
Suburbs	121 45.1%	18 6.7%	129 48.1%
City	150 47.9%	40 12.8%	123 39.3%

9c. It will keep some people from driving after drinking.

Response / Category	Agree	Disagree	Don't Know
1	63 26.5%	67 28.2%	108 45.4%
2	87 28.4%	103 33.7%	116 37.9%
3	47 21.8%	92 42.6%	77 35.6%
4	52 34.2%	42 27.6%	58 38.2%
5	49 27.8%	86 48.9%	41 23.3%
Country	61 30.0%	66 32.5%	76 37.4%
Small Town	40 31.5%	38 29.9%	49 38.6%
Suburbs	61 22.8%	89 33.2%	118 44.0%
City	87 27.8%	111 35.5%	115 36.7%

9d. It has little or no value in keeping people from driving after drinking.

Response / Category	Agree	Disagree	Don't Know
1	73 30.7%	52 21.8%	113 47.5%
2	112 36.6%	76 24.8%	118 38.6%
3	91 42.1%	47 21.8%	78 36.1%
4	46 30.3%	46 30.3%	60 39.5%
5	79 44.9%	57 32.4%	40 22.7%
Country	73 36.0%	49 24.1%	81 39.9%
Small Town	42 33.1%	32 25.2%	53 4.17%
Suburbs	95 34.5%	54 20.1%	119 44.4%
City	111 35.5%	86 27.5%	116 37.1%

The offense of "impaired driving" is detailed in Va. Code Ann. § 18.1-56.1. The responses to Question 8 indicate that the offense is one of low public visibility. Indeed, the lack of knowledge of the existence or details of this offense is a natural consequence of the fact that the offense per se is not initially charged, but is to be regarded as a "lesser included offense of a prosecution for violation of § 18.1-54 or of any similar ordinances of any county, city, or town."

The impaired driving offense is often raised as an alternative to lowering the presumptive level to 0.10% for definition of DWI on the premise that there already exists an appropriate sanction for those with a blood-alcohol level between 0.10% and 0.15%. But the point is that 0.15% still represents the applicable level in terms of initial enforcement. The legislative intent was to ensure that no arrest, prosecution, or conviction would emanate from an original charge of imparied driving, independent of and separate from a charge of driving under the influence. Bass v. Commonwealth 209 Va. 422, 164 S. E. 2d 667 (1968).

Question 9 (a) is designed to confirm, via the judges and commonwealth's attorneys, the use of the impaired driving offense as a plea-bargaining device. The majority agreement (52.3%) by that category with the proposition appears to support the assumption.

DWI charges are frequently reduced to impaired driving at or prior to trial and occasionally upon appeal from a conviction under § 18.1-54.

The judicial responses to Question 9 (b) confirm that § 18.1-56.1 provides a certain degree of flexibility by enabling judges (and prosecutors) to exercise some discretion in providing a lower penalty than that used for driving under the influence of alcohol. If the accused is convicted of DWI, the 12 month license revocation is mandatory; yet, the court can exert some influence on the revocation period by lowering the charge to impaired driving. A first offense conviction of the latter offense carries only a 6 month license suspension. Thus, discretion can be utilized in a circuitous fashion where direct exercise of judicial discretion is precluded by the mandatory nature of the license suspension.

If the state of Virginia were to lower the presumptive level to 0.10%, the offense of impaired driving would, of course, be eliminated. Concurrently, the judiciary would lose this source of discretion with respect to the license revocation. If one accepts the premise that a certain degree of judicial discretion is desirable, then it would seem that lowering the presumptive level would also necessitate an alteration of the existing sanction. Specific recommendations in this area will be developed elsewhere in the report.

Questions 9 (c) and (d) are concerned with the effect of the offense of impaired driving on primary conduct. The responses indicate that the offense, by itself, has little influence on motorists. The result is predictable, since knowledge of the offense is not widespread, nor are violators initially charged with such. The beneficial aspects of the offense thus appear to be three:

(1) It gives the judiciary a certain degree of discretion,

(2) it serves to expedite the disposition of cases as a plea-bargaining device, and

(3) it enables the state to continue its prosecution even though the evidence is insufficient to sustain the greater charge of driving under the influence.

10a. Do you feel that some courts in Virginia are hesitant to convict a person for a FIRST OFFENSE of driving under the influence of alcoholic beverages?

Response / Category	Yes	No	Don't Know
1	91 32.2%	25 10.5%	122 51.3%
2	129 42.2%	46 15.0%	131 42.8%
3	87 40.3%	51 23.6%	78 34.1%
4	50 32.9%	66 43.4%	36 23.7%
5	90 51.4%	57 32.6%	28 16.0%
Country	77 37.9%	52 25.6%	74 36.5%
Small Town	56 44.1%	28 22.0%	43 33.9%
Suburbs	106 39.6%	37 13.8%	125 13.8%
City	117 37.4%	71 22.7%	125 39.9%

Indicate your opinion about the following statements regarding a FIRST OFFENSE conviction of drunken driving.

10b. Courts do not want to take a man's license because they believe it may affect his job.

Response / Category	Yes	No	Don't Know
1	112 47.1%	46 19.3%	80 33.6%
2	133 43.5%	86 28.1%	87 28.4%
3	108 50.0%	64 29.6%	44 20.4%
4	52 34.2%	76 50.0%	24 15.8%
5	84 47.7%	68 38.6%	24 13.6%
Country	86 42.4%	68 33.5%	49 24.1%
Small Town	54 42.5%	44 34.6%	29 22.8%
Suburbs	124 46.3%	65 24.3%	79 29.5%
City	141 45.0%	94 30.0%	78 24.9%

10c. Courts desire more DISCRETION to fit punishment on a case by case basis.

Response / Category	Agree	Disagree	Don't Know
1	128 53.8%	16 6.7%	94 39.5%
2	189 61.8%	27 8.8%	90 29.4%
3	125 57.9%	25 11.6%	66 30.6%
4	70 46.1%	28 18.4%	54 35.5%
5	84 47.7%	66 37.5%	26 14.8%
Country	92 45.3%	27 13.3%	84 41.4%
Small Town	76 59.8%	13 10.2%	38 29.9%
Suburbs	168 62.7%	18 6.7%	82 30.6%
City	175 55.9%	38 12.1%	100 31.9%

10d. Courts feel that a one year MANDATORY (automatic) loss of license is too harsh for a first offense.

Response / Category	Agree	Disagree	Don't Know
1	81 34.0%	49 20.6%	108 45.4%
2	121 39.5%	63 20.6%	122 39.9%
3	84 38.9%	56 25.9%	76 35.2%
4	47 30.9%	71 46.7%	34 22.4%
5	56 31.8%	92 52.3%	28 15.9%
Country	60 29.6%	69 34.0%	74 36.5%
Small Town	42 33.1%	40 31.5%	45 35.4%
Suburbs	110 41.0%	40 14.9%	118 44.0%
City	120 38.3%	90 28.8%	103 32.9%

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The propositions in Question 10 are concerned with determining whether there is an operative "rebound effect" in the state of Virginia. The concept is defined by Professor Roger C. Cramton[21] in the following manner:

> Overly severe penalties also encounter a rebound effect which reduces deterrence by lowering the conviction rate: enforcement officials, judges, and juries are reluctant to prosecute or convict if the punishment is regarded as too severe for the offense involved.[22]

Question 10 (a) indicates substantial reluctance on the part of the judiciary to convict first offenders, apparently far more than the general public realizes. The responses do not reveal the extent to which this reluctance actually influences the apprehension rate, conduct of trials, or disposition of offenders, etc. However, one must surmise that this unwillingness manifests itself in some manner and degree, and thus results in a lowered conviction rate. Additionally, one must hypothesize that this same disinclination to convict affects the local police, whose practices are no doubt influenced by the judiciary's disposition of those whom they have apprehended, and who themselves may share this same disinclination toward apprehension or conviction of the first offender.

Question 10 (b) is an attempt to delineate the underlying basis for this reluctance to convict. It is submitted that the focal point of the DWI sanction impact is the 12 month, mandatory, self-executing license revocation. According to Va. Code Ann. §18.1-59:

> The judgement of conviction, or finding of not innocent in the case of a juvenile, if for a first offense under §18.1-54, or for a similar offense under any county, city or town ordinance, shall of itself operate to deprive the person so convicted or found not innocent of the right to drive or operate any such vehicle, conveyance, engine or train in this State for a period of one year from the date of such judgement....

Additionally, according to §18.1-58, a fine of $200 - $1,000 and a jail confinement of 1 month — 6 months, either or both, can be imposed in the discretion of the jury or the court trying the case without a jury. However, as previously stated, the jail sentence is rarely imposed in the case of first offenders, and the fine is at least surmountable. The latter observation is particularly applicable in the higher income areas of the state. Therefore, it is the loss of driving privileges that has the greatest deterrence, and, at the same time, probably accounts for the bulk of the reluctance.

In some states, provision is made for "hardship" licenses limited to occupational transportation. While eliminating some problems, such limited licenses generate others. The near impossibility of restricting the offender's driving to occupational transportation militates against the use of this approach if an alternate means of reducing the rebound effect exists.

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21. Roger Cramton, J. D., is professor of law at the University of Michigan, Ann Arbor.

22. Cramton, op. cit., p. 186.

The alternative is to allow the courts some discretion in imposing sanctions. According to the responses to 10 (c), some 47.7% of the judiciary desired greater discretion in this area, whereas 37.5% disagreed. Since the courts already have considerable discretion with respect to the imposition of the fine and jail sentence, the desire for greater discretion must be read in light of the license revocation. The opinion of those members of the bench who do feel that greater discretion is warranted is illustrated by a letter from Judge Quin S. Elson (See Appendix D), expressing an unwillingness to serve as a "rubber stamp or a machine automatically handing out one year revocations in much the same nature as a Circuit Court Judge would if he were obligated to sentence everyone to the electric chair for murder". A lack of discretion on the part of the party whose responsibility it is to impose sentence tends to channel the judge's alternatives along undesirable lines, i.e., his only alternative is total nonconviction for DWI when he feels that the mandatory sentence is too harsh in light of all of the circumstances.

On first impression, it would seem that the Category 5 responses to 10 (d) are contradictory to those expressed in 10 (c). Only 31.8% of Category 5 agreed with the proposition that a one year mandatory license was too harsh for a first offense, whereas 52.3% disagreed with the proposition. Yet the seemingly contradictory viewpoints can be reconciled if one adopts the view that while discretion is desirable, greater discretion would not necessarily result in the imposition of a lesser sanction than is presently utilized. Indeed, in light of the attitudes indicated herein, one must estimate that the 12 month license suspension would continue to be imposed in the majority of instances. The premise is that offenders who are presently escaping conviction for DWI would no longer do so if the judiciary were given sufficient discretion so that they no longer felt constrained to impose penalties which, in their opinion, are excessive in light of all the circumstances.

An even greater benefit of adding some flexibility to the system is that it would facilitate the use of rehabilitative approaches to the DWI problem. While the retributive concept of punishment has not wholly succumbed, the better view is that the purpose of traffic sanctions is to prevent the recurrence of behavior involving substantial risk of harm to others. It could be argued that the judge already has sufficient discretion with respect to the fine and jail sentence so as to give offenders an incentive to participate in judicially-recommended rehabilitative programs. On the other hand, it would seem that if the judge already views the 12 month license revocation as excessive, he is unlikely to impose additional burdens on the defendant even though he views a rehabilitative approach as desirable.

Experience demonstrates that there is an operative rebound effect in certain areas of the state. For example, in a study by Greenberg,[23] certain portions of the Northern Virginia area were found to have a conviction rate substantially lower than would have been estimated based on the population of those areas and the average conviction rate of the state. See Table 1.

Nor is the rebound effect necessarily limited to Northern Virginia. In a recent confidential study conducted in another major metropolitan Virginia area, the researchers observed that the general feeling amongst police officers was that an arrest for DWI was

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23. David I. Greenberg, The Enforcement of Mandatory Sanctions in Virginia Traffic Courts (Virginia Highway Research Council, May 1968).

a "waste of time". Of those actually arrested and charged for DWI, only 51.4% were actually convicted. The remaining charges were reduced to impaired driving (9.6%), reduced to reckless driving (21.3%), or dismissed, nol prossed, etc.

TABLE 1

A COMPARISON OF THE ACTUAL NUMBER OF CONVICTIONS FOR DWI WITH THE EXPECTED NUMBER OF CONVICTIONS BASED ON STATEWIDE DISTRIBUTION OF POPULATION
(Taken from Greenberg, op. cit.)

	Year	Number Convicted	Expected Number*
Fairfax County	1966	26	357
	1967	15	257
Falls Church	1966	0	9
	1967	0	9
Fairfax City	1966	7	19
	1967	12	19
Vienna	1966	1	N/A
	1967	1	N/A
Arlington	1966	13	155
	1967	8	156
Alexandria	1966	52	97
	1967	59	97
Totals (2 Years)		193	1,275

* The expected number is based on statewide distribution of population.

11a. Indicate which type of license revocation you would prefer that the courts utilize.

(1) Completely Mandatory (2) Completely Discretionary (3) Discretion within specified minimum and maximum limits on the revocation period

Response / Category	Completely Mandatory	Completely Discretionary	Discretion within minimum and maximum limits
1	64 30.2%	34 16.0%	114 53.8%
2	74 25.2%	60 20.4%	158 53.7%
3	57 28.1%	46 22.7%	100 49.3%
4	30 22.2%	29 21.5%	76 56.3%
5	80 47.6%	12 7.1%	76 45.2%
Country	67 36.8%	32 17.6%	82 45.1%
Small Town	28 24.6%	18 15.8%	68 59.6%
Suburbs	58 22.7%	57 22.3%	141 55.1%
City	72 24.7%	62 21.3%	157 54.0%

11b. Under a completely Mandatory system, please indicate the revocation period you believe appropriate for a FIRST OFFENSE.

(1) 1 month (4) 6 months (7) 15 months
(2) 2 months (5) 9 months (8) 18 months
(3) 3 months (6) 12 months (9) 21 months or greater

Response / Category	1 mo. (1)	2 mo. (2)	3 mo. (3)	6 mo. (4)	9 mo. (5)	12 mo. (6)	15 mo. (7)	18 mo. (8)	21 mo. (9)
1	32 15.0%	16 7.5%	35 16.4%	67 31.3%	3 1.4%	53 24.8%		1 0.5%	7 3.3%
2	53 17.9%	19 6.4%	77 26.0%	82 27.7%	7 2.4%	53 17.9%		3 1.0%	4 1.4%
3	36 17.1%	20 9.5%	43 20.4%	57 27.0%	5 2.4%	41 19.4%		3 1.4%	6 2.8%
4	17 1.6%	9 6.2%	26 13.7%	54 37.0%	2 1.4%	42 28.8%			2 1.4%
5	12 7.6%	8 5.1%	13 8.2%	29 18.4%	2 1.3%	92 58.2%			2 1.3%
Country	27 13.9%	15 7.7%	30 15.5%	54 27.8%	1 0.5%	60 30.9%		2 1.0%	6 3.1%
Small Town	12 10.3%	7 6.0%	18 15.4%	45 38.5%	3 2.6%	27 23.1%		2 1.7%	3 2.6%
Suburbs	42 16.4%	18 7.0%	67 26.2%	80 31.3%	7 2.7%	38 14.8%		1 0.4%	3 1.2%
City	57 19.1%	24 8.0%	59 19.7%	81 27.1%	6 2.0%	63 21.1%		2 0.7%	7 2.3%

11c. Under a completely Discretionary system, please indicate the revocation period you believe to be appropriate for a FIRST OFFENSE: (CIRCLE ONE)

(1) 0-1 month (4) 6 months (7) 0-15 months
(2) 2 months (5) 0-9 months (8) 0-18 months
(3) 0-3 months (6) 0-12 months (9) 0-21 months or greater

Response / Category	0-1 mo. (1)	0-2 mo. (2)	0-3 mo. (3)	0-6 mo. (4)	0-9 mo. (5)	0-12 mo. (6)	0-15 mo. (7)	0-18 mo. (8)	0-21 mo. (9)
1	24 11.6%	12 5.8%	24 11.6%	56 27.1%	7 3.4%	65 31.4%	2 1.0%	2 1.0%	15 7.2%
2	33 11.3%	18 6.1%	53 18.1%	71 24.2%	7 2.4%	77 26.3%	4 1.4%	11 3.8%	19 6.5%
3	26 12.4%	15 7.2%	25 12.0%	59 28.2%	5 2.4%	62 29.7%		4 1.9%	13 6.2%
4	12 8.3%	6 4.1%	18 12.4%	54 37.2%	4 2.8%	43 29.7%		1 0.7%	7 4.8%
5	3 1.9%	6 3.9%	11 7.1%	24 15.6%		75 48.7%	1 0.6%	12 7.8%	22 14.3%
Country	23 12.1%	12 6.3%	15 7.9%	55 28.9%	4 2.1%	63 33.2%	1 0.5%	7 3.7%	10 5.3%
Small Town	13 11.0%	5 4.2%	15 12.7%	41 34.7%	2 1.7%	29 24.6%	2 1.7%	3 2.5%	8 6.8%
Suburbs	25 10.0%	13 5.2%	46 18.3%	62 24.7%	7 2.8%	74 29.5%	3 1.2%	4 1.6%	17 6.8%
City	34 11.6%	21 7.1%	44 15.0%	82 27.9%	10 3.4%	80 27.2%		4 1.4%	19 6.5%

Under a discretionary system which combines minimum and maximum limits, please indicate the lower and upper limits you believe to be appropriate for a FIRST OFFENSE.

d. LOWER LIMIT

11d.

(1) 1 month
(2) 2 months
(3) 3 months
(4) 6 months
(5) 9 months
(6) 12 months

Response / Category	1 mo. (1)	2 mo. (2)	3 mo. (3)	6 mo. (4)	9 mo. (5)	12 mo. (6)
1	69 33.3%	11 5.3%	44 21.3%	54 26.1%	6 2.9%	23 11.1%
2	116 39.7%	29 9.9%	55 18.8%	66 22.6%	4 1.4%	22 7.5%
3	70 34.3%	22 10.8%	43 21.1%	40 19.6%	3 1.5%	26 12.7%
4	35 24.3%	7 4.9%	25 17.4%	53 36.8%	2 1.4%	22 15.3%
5	45 28.8%	10 6.4%	27 17.3%	47 30.1%	2 1.3%	25 16.0%
Country	58 31.2%	12 6.5%	24 12.9%	57 30.6%	2 1.1%	33 17.7%
Small Town	28 23.1%	8 6.6%	32 26.4%	37 30.6%	1 0.8%	15 12.4%
Suburbs	101 40.7%	18 7.3%	66 24.2%	47 19.0%	6 2.4%	16 6.5%
City	103 35.3%	31 10.6%	51 17.5%	72 24.7%	6 2.1%	29 9.9%

e. UPPER LIMIT

11e.

(1) 3 months
(2) 6 months
(3) 9 months
(4) 12 months
(5) 18 months
(6) 24 months or more

Response / Category	3 mo. (1)	6 mo. (2)	9 mo. (3)	12 mo. (4)	18 mo. (5)	24 mo. (6)
1	32 15.5%	42 20.4%	10 4.9%	82 39.8%	11 5.3%	29 14.1%
2	45 15.6%	65 22.6%	13 4.5%	106 36.8%	18 6.3%	41 14.2%
3	29 14.4%	44 21.8%	5 2.5%	88 43.6%	7 3.5%	29 14.4%
4	21 16.2%	38 29.2%	3 2.3%	52 40.0%	2 1.5%	14 10.8%
5	5 3.2%	11 7.1%	3 1.9%	85 54.5%	11 7.1%	41 26.3%
Country	26 14.8%	39 22.2%	7 4.0%	65 36.9%	12 6.8%	27 15.3%
Small Town	9 7.7%	29 24.8%	4 3.4%	54 46.2%	7 6.0%	14 12.0%
Suburbs	39 15.9%	55 22.4%	10 4.1%	91 37.1%	12 4.9%	38 15.5%
City	52 18.1%	66 23.0%	10 3.5%	118 41.1%	7 2.4%	34 11.8%

There are essentially three types of license revocations: (1) Completely mandatory revocation for a fixed period of time. This is the sanction currently utilized in the state of Virginia. A conviction of driving under the influence automatically results in a loss of license for a stated duration of time (12 months in Virginia); (2) completely discretionary: the judge may revoke the offender's license for any period of time from 0 days up to some stated maximum limit; (3) discretion between minimum and maximum limits: the judge must revoke for a certain minimum period of time and, in addition, may suspend the offender's license for an additional period if the circumstances so warrant.

According to the responses to Question 11 (a), a majority of the public support a revision of the present system in favor of giving some discretion to the judge or trier of fact. Of course, it can always be argued that unlearned public opinion should be discounted, since the public is often unaware of the countervailing considerations. However, this same criticism cannot be made of the judiciary's responses (Category 5) since they may be presumed to have a fairly realistic view of the problem. While it is a close issue, 52.3% of the judges and commonwealth's attorneys favor allowing a greater measure of discretion, while 47.6% opt for the status quo. Of those advocating greater discretion, nearly all favored the middle ground approach of judicial discretion between stated minimum and maximum limits.

In Question 11 (b), the respondents were asked to indicate what revocation period they deemed appropriate for a first offense under a completely mandatory system. Of the general public, Category 2 was inclined to be the most lenient, with 78.0% specifying 6 months or less as an appropriate suspension period. Surprisingly, Category 4 (convicted DWIs) was inclined to be most severe of the general public, with only 58.5% specifying 6 months or less. Category 5 (the judiciary) was the most severe, with only 39.3% specifying 6 months or less. 58.2% of this group specified exactly 12 months (the current duration of suspension) as the best figure.

There was also an observable urban-rural split with the suburbs-city group inclined to be slightly more lenient than the country-small town group.

Question 11 (c) is concerned with the appropriate duration of license revocation under a completely discretionary system. Here, Category 4 was the most lenient, with 62.0% specifying 0-6 months or less as the appropriate range. The various categories were closely clustered, with Category 1 being the least lenient amongst the public. Of this category, 56.1% specified 0-6 months or less. Contrarily, only 28.5% of the judiciary specified 0-6 months as appropriate. However 77.2% of Category 5 fell within the 0-12 months or less range.

Finally, in Questions 11 (d) and 11 (e), one comes to the system which appears to represent an optimal alteration of present law: discretion between stated minimum and maximum limits. As shall be shown, 6 months and 12 months as the respective minimum and maximum limits appear to be a statistically well-supported interval.

Percent of responses recommending 6 months or less as an appropriate minimum limit on the revocation period

Category	Cumulative Percent
1	85.0
2	91.0
3	85.8
4	83.4
5	82.6

Percent of responses recommending 12 months or less as an appropriate maximum limit on the revocation period

Category	Cumulative Percent
1	80.6
2	79.5
3	82.3
4	87.7
5	66.7

While the figures indicate that a shorter revocation period would still have been acceptable to a majority of the public, the more conservative 6-12 month range was chosen for two reasons: (2) it is submitted that traffic law sanctions, since they tend to have a wide scale impact on primary conduct, should be structured so as to be acceptable to more than just a simple majority of the public; (b) since the concern is with a revision of existing law, the more conservative approach is perhaps the more politically feasible one. The demographic breakdown also shows strong support for the 6-12 month range, with the urban areas, as usual, showing a greater tendency toward leniency.

The advantage of adopting this type of system is twofold: (a) Those judges who feel that the 12 months revocation is appropriate can continue to impose it. The study indicates that many do feel that 12 months is proper, which militates against the argument that revision of the law would automatically result in "going soft" on the drunken driver. (b) Those judges who feel that a 12 month license suspension is excessive in some circumstances are, at present, faced with an undesirable set of alternatives. The tension can be alleviated by allowance of discretion.

It is sometimes argued that license suspension is not intended to be a criminal sanction, but only to make the roads safe for others. Therefore, the argument goes, there is no need for discretion in the imposition of non-penalties. This bit of rhetoric is rejected in toto. First, the applicable code sections are placed under the general heading of "crimes and offenses", thus indicating a generalized legislative intent to regard license revocation as a penalty. Secondly, and perhaps most importantly, whatever one chooses to label the license revocation, its effect is certainly punitive and it should be considered in this light.

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Please indicate whether you agree or disagree with the following statements concerning a proposal to lower the presumptive level of blood alcohol content to 0.10%.

12a. There is no scientific basis for lowering the presumptive level to 0.10%.

Response / Category	Agree	Disagree	Don't Know
1	29 12.2%	52 21.8%	157 66.0%
2	60 19.6%	67 21.9%	179 58.5%
3	46 21.3%	50 23.1%	120 55.6%
4	49 32.2%	31 20.4%	72 47.7%
5	16 9.1%	121 68.8%	38 21.6%
Country	47 23.2%	34 16.7%	122 60.1%
Small Town	30 23.6%	29 22.8%	68 53.5%
Suburbs	43 16.0%	51 19.0%	174 64.9%
City	64 20.4%	85 27.2%	164 52.4%

12b. The 0.10% level will cause greater apprehension of the "social drinker", but will not catch the problem drinker/alcoholic.

Response / Category	Agree	Disagree	Don't Know
1	72 30.3%	46 19.3%	120 50.4%
2	116 37.9%	72 23.5%	118 38.6%
3	88 40.7%	52 24.1%	76 35.2%
4	63 41.4%	35 23.0%	54 35.5%
5	48 27.3%	94 53.4%	35 19.9%
Country	68 33.5%	42 20.7%	93 45.8%
Small Town	44 34.6%	30 23.6%	53 41.7%
Suburbs	108 40.3%	50 18.7%	110 41.0%
City	119 38.0%	82 26.2%	112 35.8%

12c. The 0.10% level is too high and a more accurate level is 0.08%.

Response / Category	Agree	Disagree	Don't Know
1	22 9.2%	77 32.4%	139 58.4%
2	28 9.2%	120 39.2%	158 51.6%
3	25 11.6%	89 41.2%	102 47.2%
4	21 13.8%	72 47.4%	59 38.8%
5	29 16.5%	104 59.1%	43 24.4%
Country	22 10.8%	78 38.4%	103 50.7%
Small Town	13 10.2%	64 50.4%	50 39.4%
Suburbs	27 10.1%	86 32.1%	155 57.8%
City	33 10.5%	130 41.5%	150 47.9%

12d. The present level of 0.15% is sufficient.

Response / Category	Agree	Disagree	Don't Know
1	57 23.9%	55 23.1%	126 52.9%
2	101 33.0%	83 27.1%	122 39.9%
3	74 34.3%	57 26.4%	85 39.4%
4	80 52.6%	30 19.7%	42 27.6%
5	62 35.2%	95 54.0%	19 10.8%
Country	77 37.9%	38 18.7%	88 43.3%
Small Town	52 40.9%	29 22.8%	46 36.2%
Suburbs	77 28.7%	63 23.5%	128 47.8%
City	105 33.5%	95 30.4%	113 36.1%

12e. Statistics show that a person is 7 times more likely to have an accident at a blood-alcohol level of 0.10% than he is if he were sober.

Response / Category	Agree	Disagree	Don't Know
1	63 26.5%	15 6.3%	160 67.2%
2	91 29.7%	22 7.2%	193 63.1%
3	72 33.3%	22 10.2%	122 56.5%
4	67 44.1%	21 13.8%	64 42.1%
5	65 36.9%	9 5.1%	102 58.0%
Country	85 41.9%	17 8.4%	101 49.8%
Small Town	42 33.1%	19 15.0%	66 52.0%
Suburbs	62 23.1%	17 6.3%	189 70.5%
City	103 32.9%	27 8.6%	183 58.5%

12f. A blood alcohol level of 0.10% will aid in the detection of the problem drinker/alcoholic.

Response / Category	Agree	Disagree	Don't Know
1	58 24.4%	47 19.7%	133 55.9%
2	80 26.1%	91 29.7%	135 44.1%
3	58 26.9%	70 32.4%	88 40.7%
4	51 33.6%	43 28.3%	58 38.2%
5	51 29.0%	67 38.1%	58 33.0%
Country	64 31.5%	43 21.2%	96 47.3%
Small Town	33 26.0%	42 33.1%	52 40.9%
Suburbs	61 22.8%	71 26.5%	136 50.7%
City	89 28.4%	94 30.0%	130 41.5%

12g. A blood alcohol level of 0.10% should not be adopted unless the mandatory license suspension of 12 months is reduced to a lesser penalty.

Response / Category	Agree	Disagree	Don't Know
1	66 27.7%	55 23.1%	117 49.2%
2	120 39.2%	71 23.2%	115 37.6%
3	101 46.8%	45 20.8%	70 32.4%
4	72 47.4%	37 24.3%	43 28.3%
5	66 37.5%	85 48.3%	25 14.2%
Country	62 30.5%	56 27.6%	85 41.9%
Small Town	60 47.2%	23 18.1%	44 34.6%
Suburbs	105 39.2%	48 17.9%	115 42.9%
City	132 42.2%	81 25.9%	100 31.9%

The propositions in Question 12 concern the relationship between current legal presumptions based on BACs and the actual effect on driving performance of the ingestion of the quantities of alcohol represented by those BAC levels. Va. Code Ann. §18.1-57 details these presumptions:

(1) 0.05% or less by weight of alcohol in the accused's blood: "It shall be presumed that the accused was not under the influence of alcoholic intoxicants."

(2) 0.05% to less than 0.10%: no presumption "... but such facts may be considered with other competent evidence in determining the guilt or innocence of the accused."

(3) 0.10% to less than 0.15%: Presumed that the ability of the accused was "impaired" within the meaning of §18.1-56.1.

(4) 0.15% or more: "It shall be presumed that the accused was under the influence of alcoholic intoxicants".

The aforementioned presumptions make it clear that driving under the influence is one of that class of "traffic offenses in which the condition of the driver or operator is the principal element."[24] Additionally, it is important to note that it is not the absolute quantity of alcohol ingested that is important, but the quantity in relation to the volume of blood. As Donigan stated in Chemical Tests and the Law:

> Medical science, through years of research and experimentation, has established that it is not the amount of alcohol consumed by a person which affects driving ability but the amount of alcohol absorbed into the blood and thus circulated through the body, which affects the brain and other nerve centers and, correspondingly, the mental and/or physical faculties.[25]

The BAC resulting from a given quantity of alcohol is dependent on a variety of factors, e.g., the weight of the individual, the time elapsed since ingestion, and whether the stomach is full or empty. Appendix E will give a reasonably accurate approximation of the BAC resulting from a stated quantity of alcohol, given the individual's weight and elapsed time since beginning drinking. Translating the aforementioned presumptive levels into actual bottles of beer consumed by a 160 lb. man who is tested 1 hour after beginning to drink reveals the following:

0.05% = 3 bottles of beer
0.10% = 5 bottles of beer
0.15% = 7 bottles of beer

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24. Edward C. Fisher, Vehicle Traffic Law, (Traffic Institute, Northwestern University 1961), p. 268.

25. Robert L. Donigan, Chemical Tests and the Law, (Traffic Institute, Northwestern University 1966), p. 11.

Before discussing changes in the current presumptive levels, it is important to understand the historical development of DWI statutory presumptions. According to Donigan, there arose considerable interest in the 1930s in chemical tests to determine the degree of alcoholic influence. Then, as well as today, the need for such corroborative chemical test evidence arose from the inadequacy of visual observation as a diagnostic tool. Such opinion evidence commonly consists of signs like the following: faulty or slurred speech, unsteadiness, odor of liquor on the motorist's breath, bloodshot or watery eyes, flushed face, unusual walk, disorderly conduct, sleepiness, dizziness or nausea, and shaky hands.

The problem with such evidence is, as Donigan observed:

> Authorities in this field recognize that the most skilled physician would have difficulty in arriving at an accurate diagnosis of alcoholic influence or intoxication simply by observing outward indications — clinical symptoms.[26]

Furthermore, a diagnosis based on these pathological symptoms may be fallacious due to the fact that such manifestations may be caused by physical conditions other than alcohol intoxication. The role of the doctor and scientist was thus to recommend a BAC level at which driving performance is so impaired by alcoholic influence that motoring should be legally prohibited as beyond an acceptable level of risk.

The extensive experimentation in the 1930s led to several recommendations. Many advocated the 0.10% level and others the slightly higher BAC of 0.12%. Nevertheless, the 0.15% level was eventually adopted. The underlying rationale is explained in this excerpt:

> They realized that little was known generally by the people in this country about chemical tests of this nature. Hence it was obvious that their concerned associations would be confronted with a most difficult sales task in convincing the public of the value of such a new weapon with which to combat the drinking driver. Likewise it was clear that this would be particularly true of legislators, police administrators, prosecutors, judges, and other public officials, no matter what presumptive level was eventually recommended. Therefore, these scientists, in their efforts to be absolutely fair and in order to gain initial and official acceptance, finally agreed to recommend the most liberal figure of 0.15 percent as the wisest course in the initial stages.[27]

Thus, it is clear that the adoption of the 0.15% level was largely a political decision. The 0.15% level was eventually advocated by the National Committee on Uniform Traffic Laws and Ordinances in the Uniform Vehicle Code and the House of

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26. Ibid., p. 286.

27. Ibid., p. 22.

Delegates of the American Medical Association. Additionally, the 0.15% level was put into practice by the pioneer states. Nevertheless, most psychophysical studies since that time have tended to confirm the conclusion that the 0.15% level is far too liberal.

The responses to Questions 12 (a) and (d) indicate the following:

(1) A frequent response was "don't know", which indicates that little is known by the public about the scientific basis for presumptive levels or the sufficiency of the 0.15% level. Chances are that the level of public awareness of the underlying scientific basis for presumptive levels has not risen appreciably since the 1930s. However, the acceptance of the validity of presumptive levels as a redefinition of intoxication is fairly ingrained, even though its underlying foundation is little understood.

(2) Only Category 4 shows strong aversion to lowering the presumptive level, with 32.2% asserting that there is no scientific basis for lowering the level to 0.10% and 52.6% maintaining that the 0.15% level is sufficient. This is perhaps to be expected since the 0.15% level was, in the case of Category 4 drivers, sufficient to convict them.

(3) Categories 1, 2, and 3 are fairly evenly divided over whether there is a scientific basis for lowering the presumptive level, although Categories 2 and 3 do show a slight preference for retaining the 0.15% BAC in Question 12 (d).

(4) Category 5, consisting of the judges and commonwealth's attorneys, strongly agrees (68.8%) that there is a scientific basis for lowering the presumptive level to 0.10% and a majority (54.0%) find the present 0.15% level insufficient.

Despite the public's lack of acquaintance with the subject, there is overwhelming scientific evidence to support the 0.10% level. For example, the Committee on Medicolegal Problems of the American Medical Association reviewed a total of 57 studies in the field, representing the work of numerous outstanding scientists and covering the time period from 1934 to 1965. Their analysis led them to conclude:

> In viewing all of this experimental data, and evaluating the epidemiological findings, there is no evidence presented that alcohol improves driving or that it does not decrease driving skills in all individuals. The levels at which these occur vary somewhat with drinking habits, driving skills and other personal attributes. There is no evidence, however, to indicate that at levels of 0.10% w/v (100mg/100ml) and above there is not a severe, significant and dangerous deterioration in driving abilities.[28]

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28. Committee on Medicolegal Problems, American Medical Association, Alcohol and the Impaired Driver (1968), p. 59 (hereinafter cited as AMA Medicolegal Committee).

Many of the studies were summarized by the AMA, and the following are reproduced as being particularly relevant:

A 1948 epidemiological study of drinking drivers by Thelin[29] found that an altered driving pattern occurs between 0.05% and 0.10%, with evidence of gross intoxication beginning at 0.10%.

Norville[30] in a 1950 study of the effect of alcohol as measured in road tests, concluded that driving skills were definitely impaired at 0.10% and that at BACs of 0.15% and higher, driving skill is so affected that only performance of absolutely automatic actions is possible.

Loomis and West[31] determined that the 0.15% level was too lenient, as persons at this BAC level could not respond to emergency stimuli with normal efficiency. This inefficiency is partly due to a slowing of the reaction time. The reaction time to optic and acoustical stimuli is reportedly impaired at levels as low as 0.08%, although such changes are negligible below the 0.10% level.[32] Mueller[33], however, did find that at the 0.10% level, 80% of his test subjects demonstrated prolongation of reaction time.

Gruner[34], in a 1955 study of ten subjects, tested the influence of alcohol on the sort of attention believed necessary for safe automobile operation. He found average total impairment was 75% at the 0.10% level, and that all subjects were so substantially influenced at 0.10% that they could not be considered as having sufficient attention to operate an automobile safely despite having the will power to do so.

A later epidemiological study of some 3,000 drivers by Gruner and Werner[35] concluded that the 0.15% used in defining intoxication should be lowered. They found that all drivers showed an increase in unsafety at 0.07% - 0.08%. The danger factor was threefold at 0.09%, rising to eighteenfold at 0.15%. It was their hypothesis that the reduction in safety was caused more by recklessness and a decreased feeling of social responsibility than by a loss of skill.

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29. M. H. Thelin, "Modalites Cliniques at Recherces de Laboratories dans les cas d' Ivresse Lomme Causes d'Accident de la Circulation", 1 Acts Med Lig Social (1968), p. 387.

30. F. Norville, R. Hermna, and R. DuPan, "Acute Alcoholic Intoxication and Automobile Accidents; Effects of Alcohol on Automobile Drivers", 76 Schwiez Med. Wschr (1946), p. 446.

31. T. A. Loomis, and I. C. West, "The Influence of Alcohol on Automobile Driving Skill," 19 Quant J. Stud Alcohol (1958), p. 30.

32. AMA Medicolegal Committee, op. cit., p. 29.

33. B. Mueller, "Ingestion of Alcohol and Ability to Drive: Report of Model Experiments," 47 Hefte a Unfallheilk (1954), p. 188.

34. O. Gruner, "Alcohol and Attention. Its Significance in Motorized Traffic," 44 Dtsch 2 Geo Gerichell Med (1955), p. 187.

35. O. Gruner, and W. Werner, "Investigation on the Danger Presented by the Driver Under the Influence of Alcohol, 53 Med Sachverst (1957), p. 73.

Studies such as the aforementioned caused the House of Delegates of the American Medical Association to repudiate the formerly advocated 0.15% level and adopt the following policy statement on November 30, 1960: "Blood alcohol of 0.10 percent be accepted as prima facie evidence of alcoholic intoxication, recognizing that many individuals are under the influence in the 0.05 percent to 0.10 percent range."[36]

Subsequently, in 1962, the presumptive level for definition of intoxication was lowered to 0.10% in the Uniform Vehicle Code.[37] Today, 11 states and the District of Columbia use the 0.15% level, 36 states use 0.10%, one state uses 0.12%, and two states use 0.08%.

Question 12 (e) was designed to be more educational than evocative of public opinion, with its proposition that the probability of accident involvement is 7 x at a BAC of 0.10%. There are several studies that have arrived at approximately this figure. For example, Holcomb,[38] in a 1938 inquiry into the role of alcohol consumption in accident causation, used 270 persons hospitalized in personal injury accidents and compared them with 1,750 drivers randomly selected from the same area. Data from the Holcomb study are summarized in Table 2.

More recently, Borkenstein[39] found that drivers with a 0.10% blood-alcohol level are from six to seven times as likely to cause an accident as ones with a 0.00% level.

The responses to Question 12 (c) indicate very little public support for the 0.08% level, despite the fact that the replies to Questions 3, 4, and 5 would seem to indicate an even lower level. The 0.10% figure seems to have become fixed in the public's mind, perhaps due to the publicity surrounding this particular BAC or through experience with other states. Nevertheless, despite the public's reluctance to accept the validity of the 0.08% level, there is considerable scientific evidence to support this presumptive level, as the AMA's review shows:

For example, Andresen[40], in 1947, compared the results of blood-alcohol analysis of 1,712 motorists involved in serious traffic accidents or charged with DWI with the results of a corresponding clinical examination. On careful examination, two-thirds of the drivers showed such marked signs of impairment at the 0.08% level that they were clinically diagnosed as intoxicated. The study further illustrated one of the advantages of chemical analysis — protection of the innocent. A few persons had been clinically diagnosed as intoxicated, but the subsequent chemical analysis revealed no alcohol in their blood. The test results helped prevent unjust conviction of those who had taken no alcohol.

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36. AMA Medicolegal Committee, op. cit., p. 146.

37. §11-902.

38. R. L. Holcomb, "Alcohol in Relation to Traffic Accidents," Journal of the American Medical Association, II (1938), p. 1,076.

39. Borkenstein, op. cit., p. 165.

40. P. H. Andresen, "Traffic and Alcohol," 18 Medico-Legal J. (1950), p. 104.

TABLE 2

RATIO OF DRIVERS INVOLVED IN ACCIDENTS TO CONTROL DRIVERS AT VARIOUS BLOOD-ALCOHOL CONCENTRATIONS

(From Holcomb, op. cit.)

Blood-Alcohol, % by Weight	Ratio
.14 and above	21.98
.12 — .13	13.03
.10 — .11	6.53
.08 — .09	1.78
.06 — .07	2.39
.04 — .05	0.48
.03 or less	2.93

A 1951 study of 12 moderate drinkers by Gelin and Wretmark[41] showed all drivers to be under the influence at 0.07%.

Coldwell[42], in 1958, administered road tests to 50 subjects of varying drinking habits. Statistically one-half showed signs of significant impairment at 0.08%.

Drew[43] assessed the effect of alcohol as measured in simulated driving tests. He found that all 40 subjects showed a decrease of driving skill at a BAC of 0.08% when measured by the Miles Motor Driving Trainer.

Finally, Borkenstein found that not only is the probability of accident involvement greater at the 0.08% level, but that "an accident-involved driver in the 0.08% and higher alcohol level class is almost twice as frequently involved in a fatal or serious accident as the driver in the 0.00% alcohol level class."[44]

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41. L. E. Gelin, and G. Wretmark, "Alcohol and Responsible Driving: Results of Practical Driving Test," 485 Svanski Lakarhidn (1951), p. 304.

42. B. B. Coldwell, et al., "Effect of Ingestion of Distilled Spirits on Automobile Driving," 19 Quart J. Stud. Alcohol (1968), p. 590.

43. G. C. Drew, et al., "Effect of Small Doses of Alcohol on a Skill Resembling Driving," Med. Res. Council Memorandum 38 (H. M. Stationery Office, London, England, 1959).

44. Borkenstein, op. cit., p. 177.

While only two states utilize the 0.08% level, the lower presumptive levels are in use in numerous foreign countries. In Europe, chemical tests were established earlier than in the U. S., and Europeans were educated to them over a longer period than were Americans. They were more familiar with the validity of such tests; consequently, stricter legislation was more acceptable. Today, Canada, Great Britain, Denmark, Switzerland, and Austria have presumptive levels of 0.08%. Norway and Sweden utilize the even lower 0.05% level, whereas the eastern European nations of Czechoslovakia, East Germany, and Bulgaria use 0.03%.[45]

The conclusion to emerge from this discussion is that the 0.15% level used in Virginia is the highest presumptive level in use where chemical tests of the blood are utilized in the detection of drunken driving.

The reluctance to accept the lower presumptive level as proof of unfitness to drive is perhaps partly explained by the vague fears defined in Questions 12 (b) and (f), i.e. that the 0.10% level would cause greater apprehension of the social drinker and uncertainty as to whether a 0.10% level would aid in the detection of the problem drinker/alcoholic.

Even if it is true that the 0.10% level might increase the apprehension of "social drinkers", such criticism is of questionable value once legislative recognition is given to the fact that drivers at 0.10% represent a substantial risk to life and property. It is reported that the one to four percent of the drivers on the road having a BAC of 0.10% or higher account for 50% to 55% of all fatal accidents involving single vehicles.[46] Since most available evidence indicates that any level above 0.10% is unsafe for driving, and that a driver possessing such a BAC is more likely to have an accident, the wisest course is to remove the threat from the highways and thereby reduce accident probabilities.

Additionally, there is evidence available to the effect that lowering the presumptive level to 0.10% would not appreciably affect what is loosely defined as the "social drinker." Birrel,[47] in a 1965 study of 1,175 suspect drunken drivers, determined that the mean blood-alcohol level for suspect DWIs was 0.22%. By extension, the mean amount of liquor consumed by the DWIs was considerably greater than that consumed in ordinary social drinking situations, where the BAC seldom exceeds 0.08%.

Question 12 (f) is basically a valid proposition: a lower blood-alcohol level should aid in the detection of the problem drinker/alcoholic, although the questionnaire responses reflect a good deal of doubt and uncertainty as to the truth of the assertion. Lowering the presumptive level would remove much of the grey area between 0.10% and 0.15%, where charge and/or prosecution could be attempted, but often is not.

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45. Minnesota Department of Public Safety, The Alcohol Impaired Driver and Highway Crashes (1970) p. 20.

46. South Dakota State Legislative Research Council, "Blood Alcohol Content and the Presumptive Level of Intoxication for Drivers," Staff Memorandum (Sept. 10, 1970) p. 9.

47. J. H. W. Birrell, "Blood Alcohol Levels in Drunk Drivers, Drunk and Disorderly Subjects and Moderate Social Drinkers," 2 Med. J. of Australia (1965), p. 949.

Under present law, the officer must often make his decision as to whether to charge DWI solely on the basis of observed clinical symptoms. As Prag[48] discovered in his 1953 study of 160 persons charged with DWI, impairment in driving ability occurs at BACs lower than those associated with gross evidence of intoxication.

Even more revealing was a 1953 study by Starck[49], in which 14 brewery workers with a high daily alcohol intake were tested for impairment of psychomotor and sensory functions by means of simulated driving tests. It was noted that those drivers who had become habituated to alcohol showed few signs of gross intoxication even though they experienced a marked loss of driving skill. Thus, lowering the presumptive level would enable the officer apprehending a suspect DWI to arrest upon a lesser showing of probable cause.

Finally, the responses to Question 12 (g) indicate that lowering the presumptive level without a corresponding diminution of the penalty would potentially cause an imbalance of the cost-benefit ratio. Only the judiciary show strong disagreement (48.3%) to the proposition although a substantial proportion of the judiciary (37.5%) do think that the 0.10% should not be adopted unless the mandatory license suspension of 12 months is lessened. It is submitted that the General Assembly reflected the feelings of the general public in rejecting the 1970 attempt to lower the presumptive level to 0.10%. Consequently, since the 0.10% level is a highly desirable reform and changing the license suspension period to 6 — 12 months would effect no change for those judges who think the 12 months revocation appropriate, such a trade-off would seem to be the wisest course.

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48. J. J. Prag, "The Alcoholic Intoxication: The Clinical Criteria for Intoxication and the Clinical Analysis of the Blood and the Urine. An Investigation of 100 Cases of Motor Vehicle Drivers Charged with Being Under the Influence of Alcohol," 1 J. Forensic Med. (1954), p. 360.

49. H. J. Starck, "Studies on the Traffic Safety of Drivers Habituated to Alcohol at Blood Alcohol Concentrations Around 1.5 per mil," 42 Dtsch 2 Ges Gerichtl Med (1953), p. 155.

712 Indicate whether you agree or disagree with the following statements concerning a proposal to allow the breath test to be used in Virginia.

13a. The breath test is as accurate as the blood test in determining blood alcohol content.

Response / Category	Agree	Disagree	Don't Know
1	25 10.5%	92 38.7%	121 50.8%
2	32 10.5%	124 40.5%	150 49.0%
3	32 14.8%	85 39.4%	99 45.8%
4	23 15.1%	67 44.1%	62 40.8%
5	52 29.5%	32 18.2%	92 52.3%
Country	27 13.3%	86 42.4%	90 44.3%
Small Town	20 15.7%	48 37.8%	59 46.5%
Suburbs	28 10.4%	101 37.7%	139 51.9%
City	37 11.8%	132 42.2%	144 46.0%

13b. The breath test should not be authorized because it will increase the number of drivers convicted of driving under the influence.

Response / Category	Agree	Disagree	Don't Know
1	43 18.1%	101 42.4%	94 39.5%
2	67 21.9%	135 44.1%	104 34.0%
3	52 24.1%	99 45.8%	65 30.1%
4	55 36.2%	46 30.3%	51 33.6%
5	7 4.0%	130 73.9%	39 22.2%
Country	53 26.1%	80 39.4%	70 34.5%
Small Town	30 23.6%	53 41.7%	44 34.6%
Suburbs	46 17.2%	119 44.4%	103 38.4%
City	88 28.1%	128 40.9%	97 31.0%

13c. The present blood test is sufficient and there is no need for an additional method to determine blood alcohol content.

Response / Category	Agree	Disagree	Don't Know
1	56 23.5%	74 31.1%	108 45.4%
2	92 30.1%	106 34.6%	108 35.3%
3	81 37.5%	73 33.8%	62 28.7%
4	73 48.0%	37 24.3%	42 27.6%
5	24 13.6%	122 69.3%	30 17.0%
Country	69 34.0%	61 30.0%	73 36.0%
Small Town	43 33.9%	42 33.1%	42 33.1%
Suburbs	74 27.6%	94 35.1%	100 37.3%
City	115 36.7%	93 29.7%	105 33.5%

13d. The breath test should be allowed because many people would prefer not to have a blood sample taken if the breath test is available.

Response / Category	Agree	Disagree	Don't Know
1	88 37.0%	54 22.7%	96 40.3%
2	131 42.8%	78 25.5%	97 31.7%
3	96 44.4%	54 25.0%	66 30.6%
4	58 38.2%	50 32.9%	44 28.9%
5	107 60.8%	23 13.1%	46 26.1%
Country	76 37.4%	52 25.6%	75 36.9%
Small Town	52 40.9%	34 26.8%	41 32.3%
Suburbs	119 44.4%	62 23.1%	87 32.5%
City	125 39.9%	88 28.1%	100 31.9%

Question 13 is concerned with the feasibility of the breath test as an alternative to the blood test. Va. Code Ann. § 18.1-54.1 provides for a pre-arrest breath analysis, however, its use is entirely voluntary on the part of the motorist, with no penalty for refusal. Additionally, the test results are inadmissible at trial. The manifest intent of the statute is to give the motorist suspected of DWI an opportunity to determine for himself the probable alcoholic content of his blood. However, one expected benefit of the statute in terms of detection is to remove some of the uncertainty on the part of the officer as to whether an arrest is warranted. Under current law, a quantitative blood test is administered only after an arrest for DWI has been made. Consequently, without the benefit of the pre-arrest breath analysis, the officer must make his decision on whether to charge solely on the basis of visual observation. If the motorist elects to take the breath test, he removes not only his own, but the police officer's doubt as to whether his blood-alcohol level falls within the presumptive level of intoxication.

The responses to Question 13 (a) indicate both a marked lack of public knowledge of breath tests in general and a substantial distrust of the breath test as an accurate alternative to the blood test.

Part of this distrust of the accuracy of breath test results may be due to the fact that the unit currently utilized in the screening analysis is the Alcolyzer. The unit is designed to give only a rough, semiquantitative approximation of the blood-alcohol level by means of a color change effected when the alcohol in the subject's breath is oxidized by a potassium dichromate reagent. Given its current function, a more elaborate analysis would be needlessly expensive. However, highly sophisticated and quantitatively accurate breath analysis equipment is available.

Intoxication is the result of the effect of alcohol on the central nervous system. The true measure of intoxication is the amount of alcohol in the brain tissue; however, since only an autopsy could reveal this, substitute measures are necessary. Therefore, all tests, whether they be of blood, breath, urine, saliva, etc., are but substitutes.

All breath tests are based essentially on an application of Henry's law. When a volatile substance is dissolved in a liquid, a predictable amount will escape into the still air which is in intimate contact with the liquid. If temperature and pressure stay constant, and within a certain range of solution strengths, the higher the strength of solution, the higher the concentration of the volatile substance in the enclosed atmosphere as a matter of direct proportion.[50]

The alcohol exchange is permitted to take place in the lower or alveolar portion of the lungs where the cell walls of the alveoli (air cells) are so thin that alcohol in the blood can easily penetrate to escape in the air in the lungs.

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50. L. Poindexter Watts, "Some Observations on Police-Administered Tests for Intoxication," 45 North Carolina Law Review (1966).

The partition ratio of alveolar breath is 2,100:1, meaning that 1 milliliter of blood contains the same quantity of alcohol as 2,100 milliliters of breath. If the entire exhalation of breath is measured, this ratio climbs to approximately 3,200:1.

One of the first accurate devices for the quantitative measurement of breath alcohol was the Breathalyzer. See Figure 3.

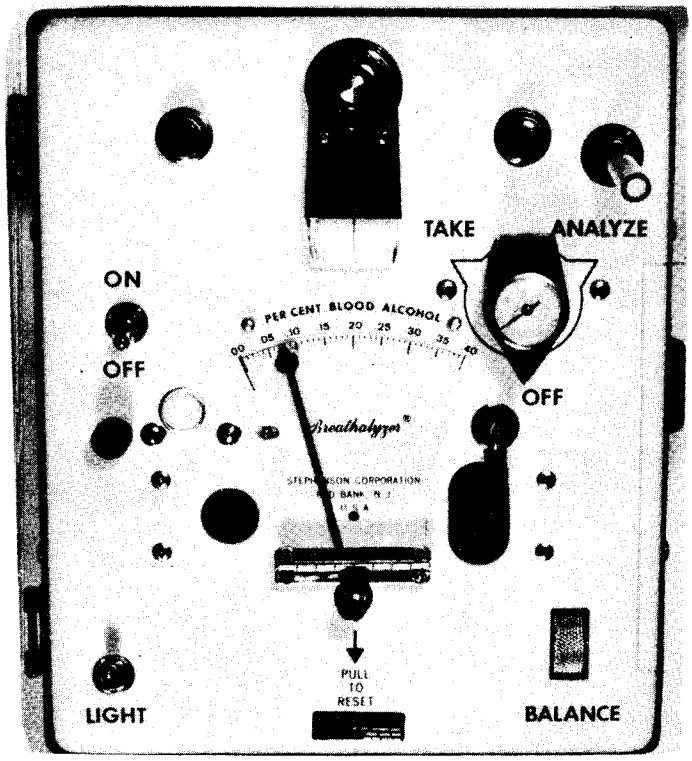

Figure 3. Breathalyzer unit.

The device is a semiautomatic console analyzer, utilizing potassium dichromate in a sulphuric acid solution as the reagent for oxidizing the alcohol in alveolar air. The subject blows into the device, which in turn wastes all but the last $52\frac{1}{2}$ cc of exhaled breath — thus utilizing only alveolar air. A piston then forces the air through an ampoule containing potassium dichromate in 50% by volume sulphuric acid. (This ampoule was previously balanced against another ampoule of identical composition when the machine was set at zero.) The oxidization process causes the alcohol-sensitive reagent to lose color in direct proportion to the amount of alcohol, which in turn allows a greater light transmittance. The resulting photometric imbalance is measured on a galvanometer scale calibrated in terms of the blood-alcohol concentration.

The device utilizes a so-called "fail safe" principle whereby mechanical defects or operator error will usually produce low rather than high readings, thereby affording maximum protection to the accused. There has been some criticism of the validity of test results below the 0.10% level, as well as breath analysis in general.[51] However, as the Watts article points out, the critical presumptive level is 0.10%, and the breath test results are still probably more accurate than the usual blood test administered.

Coldwell and Grant[52] conducted an extensive series of tests designed to test the accuracy of the device under varying conditions. Their results are summarized as follows:

(1) Varying the strength of the dichromate solution by ±40% does not affect the accuracy of the readings. There was no loss of sensitivity at the extreme range of dichromate concentrations.

(2) The acid concentration can vary by ±10% without significantly affecting the result.

(3) The Breathalyzer will give an excessively high estimate if the mouth contains traces of alcohol. These traces disappeared after 20 minutes if the subject engaged in conversation, or within 30 minutes if the mouth was kept closed.

(4) Temperature is not a critical factor. The researchers varied the temperature between 97 degrees F and 131 degrees F with no discernible effect.

(5) The volume of the solution in the ampoule does make a difference. A low volume will give a high reading and vice versa. This is due to the fact that the color change will be lesser or greater than normal and thus affect the galvanometer reading. Ampoules with a low meniscus should be discarded.

The Breathalyzer was tested on aqueous alcohol solutions of various known concentrations. Mean differences were never more than -0.004 although actual differences showed more variations at higher levels. The researchers continued: "In our experience, the difference between consecutive readings using the standard alcohol solution has never been more than 0.15% and most often not more than 0.10%."[53] They also reported that the variability in Breathalyzer readings obtained by trained police operators was within acceptable limits and compared favorably with those obtained under experimental conditions.

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51. H. J. Wells, and A. R. Braumlie, Drink, Drugs, and Driving (Sweet and Maxwell, London, England 1970) p. 35; L. P. Watts, "Some Observations on Police-Administered Tests for Intoxication, 45 North Carolina Law Review (1966) p. 67.

52. B. B. Coldwell, and G. L. Grant, "A Study of Some Factors Affecting the Accuracy of the Breathalyzer," 8 Journal of Forensic Science (1963) p. 149.

53. Ibid., p. 158. (The figures refer to the percent difference between successive readings and not absolute BAC levels.)

In the state of Virginia, the usual practice has been to refer devices of this nature to the State Department of Health for certification as to acceptability for the purpose in view.

Whatever breath testing device might be selected as an alternative to the blood test, the validity of such evidence often depends on certain criteria beyond mere legislative authorization as to evidential admissibility. The often cited case of State v. Baker, 56 Wash. 2d 846, 355 P. 2d 806 (1960), details the factors as follows:

(1) That the machine was properly checked and in proper working order at the time of conducting the test;

(2) that the chemicals employed were of the correct kind and compounded in the proper proportions;

(3) that the subject had nothing in his mouth at the time of the test and that he had taken no food or drink within fifteen minutes prior to taking the test; and

(4) that the test was given by a qualified operator and in the proper manner.

The notion of breath test results constituting admissible evidence in a trial for DWI is not an altogether new one. In 1953, the Supreme Court of Appeals of Virginia, in the case of Omohundro v. Arlington County, 194 Va. 773, 75 S. E. 2d 496 (1953), held that the admission of an officer's testimony respecting the results of a "drunk-o-meter" test administered to the accused was not prejudicial error, even though it had not been established that the arresting officer was qualified to operate the machine. The officer's testimony was confined to observations of the defendant's physical condition and the drunk-o-meter reading, on the meaning of which he expressed no opinion. The court professed not to reach the question of the admissibility of evidence obtained by means of a chemical test to determine intoxication. However, the failure to disallow the test results is perhaps meaningful. One questions how the court could have decided the issue of possible prejudice without, at the same time, reaching the issue of the admissibility of the results which are allegedly prejudicial. Nevertheless, it is submitted that admissibility of chemical test evidence in a trial for DWI is a much more settled question today than in 1953, and that a court faced with a similar question is likely to rule in the affirmative.

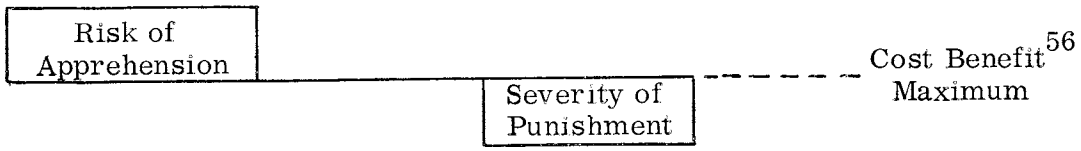
The responses to Question 13(b) indicate that a substantial minority object to adoption of the breath test because it would increase the conviction rate for DWI. This view perhaps is explained by the following excerpt:

> The prevention of needless death, injury, and loss is universally desired by rational men, and a reduction in the level of deaths, personal injuries, and economic loss resulting from widespread use of motor vehicles clearly is an appropriate objective of regulatory action. There is controversy only concerning the techniques that should be used and the level of societal effort that is appropriate. Some forms of control will work much better than others; and at some point countervailing

values, such as freedom in the use of one's vehicle, efficiency in transportation, the minimization of coercion, and the preservation of privacy and individual dignity, will outweigh the desire to make a further saving of life, limb, or property.[54]

Apart from general variables like personality, motivation, etc., the legitimacy of any standard and the effectiveness of its sanction are said to depend upon two fundamental factors: (1) The perceived risk of detection, apprehension and conviction, and (2) the severity of the penalty. The first is thought to be more significant than the second, although individual and class differences may cause the general conclusion to vary.[55]

The important feature is that there is a precise point, called the cost-benefit maximum, at which a further reduction in highway accidents is, in the conception of the legislature, no longer worth the costs that are entailed. This relationship is illustrated as follows:



[56]

Experience with the 1970 Virginia General Assembly suggests that the legislators thought that the cost-benefit point was already at a maximum with respect to two areas of the state's drunk driving laws. House Bill 69 and Senate Bill 76 both called for the lowering of the presumptive level for intoxication from 0.15% to 0.10% blood-alcohol ratio. This lower ratio would have increased the likelihood of apprehension and conviction for DWI for those who are currently being convicted of the lesser offense of impaired driving. The second measure, embodied in House Bills 181 and 446, and Senate Bill 15, was concerned with establishing the authority for law enforcement officers to use quantitative breath testing techniques in lieu of blood tests. Neither measure passed, despite the fact that both were for the laudatory purpose of making road use a safer activity. In one respect, there was no broadening of police powers with the institution of a breath test. The determination of blood-alcohol levels was already being performed by blood testing. However, it is noted that under current law there are operational pressures toward a conservative judgement of intoxication.[57] In the United States, generally a driver may not be stopped and asked to submit to a chemical test for

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54. Cramton, op. cit., pp. 181-182.

55. Ibid., p. 186.

56. William H. Heritage, "Legal Standards and Sanctions for Traffic Offenses and the Legislative Process," Virginia Traffic Law Commentary, Vol. 1, No. 1, pp. 2-3.

57. Cramton, op. cit., pp. 197-198.

intoxication unless he is driving in an observably deviant fashion. The combination of unrealistically high statutory presumptive levels, lack of easily accessible chemical test devices, and the energy the police must expend in bringing the suspect in, booking him and administering the blood test, constitute grounds for concluding that often only extreme cases of intoxication lead to a conviction of DWI.

"Effective deterrence requires a belief on the part of those involved that violations stand a good chance of being detected and, once detected, punished."[58] There are factors in the use of breath tests which were felt to have raised the likelihood of apprehension. The breath tests could be geographically more available than blood tests, they could be accessible at all hours, the evidentiary and chain of custody problems of the present blood test could be avoided, breath tests could be administered to persons who, for reasons of incurred injury, would not submit to blood testing, and there is usually less objection by the subject to submitting to the breath test as opposed to the blood test. In short, if the lower presumptive level and the breath test had been passed, it would have been easier to detect the drunken driver and a person could have fewer drinks before he reached an illegal blood-alcohol level for driving.[59]

While one must not discount entirely the fact that the General Assembly includes a large number of defense lawyers, it is submitted that at least part of the reason for the failure of the two measures was that the balance of the risk of apprehension and the severity of punishment would have been upset. The solution to such a legislative impasse is but a short syllogistic step away. By either statutorily decreasing the penalty or giving the judge the discretion to set the penalty within certain limits, the balance can be restored. Such a trade-off (increased apprehension against lower penalties) may very likely be a good bargain in terms of safety improvement. Better detection combined with more modest penalties may well increase the effectiveness of the sanction far more than will merely increasing the penalty alone. The researchers reject the so-called "silver bullet"[60] approach, i.e. that the best way to cut down on drunk driving is to increase the penalties. It seems a bit inconsistent to impose harsher sentences on those convicted; yet, at the same time, to do nothing toward apprehending the majority who continue to escape punishment. Such a hard line approach represents a rather simplistic answer to a rather complex social problem.

The responses to Question 13 (c) exhibit varying public attitudes toward the sufficiency of the blood test. They range from 31.1% of Category 1 disagreeing that the present blood test is sufficient to 48.0% of Category 4 agreeing that present provisions are adequate. A substantial number responded "don't know", indicating that this statute is another area of low public visibility. Only the judiciary shows any marked adherence to one position, with 69.3% of them indicating that they think the present statutory provisions regarding chemical testing are inadequate.

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58. Cramton, op. cit., p. 197.

59. Heritage, op. cit., p. 3.

60. Tarrants, op. cit., p. 58.

Va. Code Ann. § 18.1-55.1 prescribes in great detail the procedures to be followed in administering the test. Note that the statute is of the "implied consent" variety. In this respect, the statute substantially conforms with those of most other jurisdictions, which also employ this concept. Implied consent is premised on the theory that since driving is a privilege, the state may condition its exercise on prior consent to a chemical test for intoxication. It is submitted that the privilege-right dichotomy is but an exercise in semantics, often obscuring the need for commitment to rational thinking. The better view is that driving, if not a statutory entitlement, is, at the least, a very valuable asset and perhaps a necessity in this modern age. Consequently, its deprivation should not be without due process of law. Nevertheless, "implied consent" should be upheld as a valid exercise of the police power of the state in protecting the general public.

Note that the request to submit to a blood test is subsequent to an arrest for a violation of § 18.1-54. The U. S. Supreme Court has held that the blood test is not a violation of the 5th Amendment protection against self-incrimination, as that constitutional provision is said to be restricted to testimonial utterances.[61] Nor is the forced taking of a blood sample from one accused of DWI a violation of the 4th Amendment right to be free from unreasonable search and seizure. However, Schmerber rested on the assumption that the defendant was under lawful arrest at the time the test was taken, and there may be some constitutional objections to the admissibility of pre-arrest chemical test results.

Virginia law contains the following rather curious proviso: "The failure of an accused to permit a sample of his blood to be withdrawn for a chemical test to determine the alcoholic content thereof is not evidence and shall not be subject to comment at the trial of the case; nor shall the fact that a blood test had been offered the accused be evidence or the subject of comment."[62] An "unreasonable refusal" to submit to a blood test is a separate violation, for which a first offense conviction carries a mandatory 90 day license suspension.[63] There is no right to a conditional refusal under Virginia law. Deaner v. Commonwealth, 210 Va. 285, 170 S. E. 2d 199 (1969).

The inability of the prosecution to comment on the refusal to take the test is definitely a minority view, and seems rather at odds with the whole notion of implied consent.

> Reasons supporting the admissibility of the absolute refusal into evidence include: the refusal is not a statement which comes within the privilege against self-incrimination, and a manifest act which may be construed as demonstrating a consciousness of guilt is an act to be considered by the trier of fact in the ultimate determination of guilt or innocence.

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61. Schmerber v. California, 384 U. S. 757 (1966).

62. § 18.1-55.1 (i).

63. § 18.1-55.1 (n).

> When the arrested DWI absolutely refuses any chemical test, the prosecutor may reason that this refusal is analogous to situations where an arrested individual attempts to flee, conceal his identity, or escape from custody. Just as these acts are admissible in the individual's criminal trial for whatever weight the trier of fact wishes to accord them, so the refusal is admissible against the DWI.[64]

A number of justifications have been advanced for this type of provision, most of them of questionable validity. One theory is that since the implied consent statute recognizes the right of the accused to refuse (subject to other penalties), admission of the accused's refusal would penalize the exercise of this right.[65] However, this seems to be a rather groundless objection owing to the very fact that the state does penalize for an "unreasonable refusal" to submit. Since society does penalize, why draw the line as to the admissibility of such evidence?

Perhaps a more logical basis for the exclusion of such evidence is where the defendant has a good reason for refusal. However, there is no reason why the accused could not offer his reasonable grounds for refusal at the trial for DWI. There appear to be but two logical grounds for reasonable refusal: (1) Religious beliefs, and (2) medical reasons, such as the defendant being a hemophiliac. It is to be noted that neither ground would be relevant were the breath test to be instituted. The legislature might well consider deleting this provision, particularly if breath testing for evidential purposes is adopted.

The right of refusal coupled with the inadmissibility of such evidence at the trial for DWI has led to frequent refusals in some localities. While the accused subjects himself to a 90 day license suspension for unreasonable refusal, at the same time he may so substantially impair the Commonwealth's case due to the lack of corroborative chemical test evidence that a conviction for DWI is unlikely. Thus,he avoids the more severe 12 month license suspension, $200 -- $1,000 fine, and 1 -- 6 month(s) jail sentence. The continual high incidence of refusal in certain localities indicates that the gamble must often be worthwhile.

The blood test raises further doubts when test results are dissimilar. §18.1-55.1(d1) provides for withdrawing two vials of blood; one to be delivered to the Chief Medical Examiner and the other to be sent, at the direction of the accused, to an approved laboratory for analysis. To establish with certainty the percent by weight of alcohol in the accused's blood, it would be necessary to analyze without error his entire volume of blood. Since this is impossible, blood samples must be utilized, which leads to measurement errors. Such variations may be due to the inexperience of the lab technician performing the analysis, improper calibration of equipment, variations in test conditions between the labs, or the blood may not be homogeneous when taken from the vials for analysis.

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64. Institute for Research in Public Safety, The Problem Drinking Driver, A Legal Perspective (Indiana University 1970), p. 28.

65. Ibid., p. 29.

Such discrepancies not only generate a lack of confidence in the validity of this test, but lead to a statistical probability of error. For example, were the state's reading to be 0.20% and the independent test result 0.18%, the expected frequency of error would be 7.8/100. Consequently, were 100 defendants found guilty on the basis of the 0.15% presumptive level, 7.8 would, according to statistical probability, be innocent.[66]

Another problem has been the reluctance of private hospitals and medical personnel to withdraw blood because of fear of civil liability. This fear persists despite the presence of § 18.1-55.1(d), which provides in part: "No civil liability shall attach to any person authorized to withdraw blood as provided herein as a result of the act of withdrawing blood from any person submitting thereto; provided the blood was withdrawn according to recognized medical procedures; and provided further that the foregoing shall not relieve any such person from liability for negligence in the withdrawing of any blood sample." There is also perhaps a reticence to participating in the process when the individual who withdraws blood may subsequently be called on to testify at trial.

The use of the certificate of the Chief Medical Examiner is sharply circumscribed. It is admissible only in a trial for a violation of § 18.1-54 "or of a similar ordinance of any county, city, or town. . . ." Therefore it is not admissible in a prosecution for manslaughter or in civil cases.[67] The latter restriction was announced by Justice I'Anson in the case of Russell v. Hammond. The court reasoned that since the applicable statutes (§§ 18-75.1 to 75.3; modern counterparts are §§ 18.1-55.1, 18.1-56.1, 18.1-57) used language referring to "criminal prosecutions", and "the accused" throughout, the legislative intent must have been to restrict the admissibility of the blood test results solely to a trial for violation of the drunk driving laws. The construction seems to be a bit strained, since violations of traffic laws often serve as the basis for negligence per se actions. Therefore, it would seem that evidence going to prove such a violation would also be admissible in a negligence action based on the same conduct. Nevertheless, such is not the case under present case law.

The multiplicity of details not only makes the blood test burdensome to administer, but also increases the test results' vulnerability on cross-examination. Fruitless expenditure of energy in many instances has led many arresting officers to forego its use, preferring to base their case solely on observance of the defendant's physical condition. Such results were certainly not the intent of the legislature in enacting this statute. Adoption of the breath test as an alternative, rather than a replacement for the blood test, would seem to solve the majority of the problems heretofore discussed.

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66. Walter H. Carter, Jr., et al., "Statistics and the Virginia Blood Test Statute," 56 Virginia Law Review (1970) p. 351.

67. Manslaughter: Wade v. Commonwealth, 202 Va. 117, 116 S. E. 2d 99 (1960). Civil Cases: Russel v. Hammond, 200 Va. 600, 106 S. E. 2d 626 (1959); Brooks v. Hufham, 200 Va. 488, 106 S. E. 2d 631 (1959).

It is recommended that the blood test be retained even if the breath test is adopted for two reasons: (1) It has been accepted as a valid measure of intoxication levels and is of value to those localities who have learned to cope with or accept its deficiencies, and (2) with the increase in drug use and the consequent danger when combined with motoring, blood testing holds some slight promise as a means of drug detection.

Finally, the responses to Question 13 (d) indicate that a certain amount of support for breath testing is generated by plain, old-fashioned distaste for having one's skin pricked by a needle. A sizeable percent in each category indicated that this was sufficient reason to allow a breath test, although admittedly it would be presumptuous to assume that this was the sole factor in their decision.

Mere fear of extraction of blood samples for testing the degree of alcohol influence has been held not to be a sufficient ground for objection.

> The blood test procedure has become routine for those going into the military service as well as those applying for marriage licenses. Many colleges require such tests before permitting entrance and literally millions of us have voluntarily gone through the same, though a longer, routine in becoming blood donors. (Breithaupt v. Abram, 352 U. S. 432, 436, 1957.)

Nevertheless, the majority of people, given the choice between exhaling into a machine or having their skin pierced, however slightly, would opt for the former. The support generated by disclosure of this small advantage of breath testing is perhaps indicative of the potential public support that could be gained by a comprehensive public education program.

724 Indicate whether you agree or disagree with the following statements concerning license revocation for a first offense of driving under the influence of intoxicating beverages. (A mandatory revocation occurs automatically upon conviction of the offense; a discretionary suspension allows the judge or jury to determine the suspension period.)

14a. A DISCRETIONARY license revocation may subject a judge to political pressure.

Response / Category	Agree	Disagree	Don't Know
1	118 49.6%	55 23.1%	65 27.3%
2	156 51.0%	82 26.8%	68 22.2%
3	91 42.1%	76 35.2%	49 22.7%
4	68 44.7%	43 28.3%	41 27.0%
5	95 54.0%	68 38.6%	13 7.4%
Country	86 42.4%	42 20.7%	75 36.9%
Small Town	68 53.5%	31 24.4%	28 22.0%
Suburbs	131 48.9%	90 33.6%	47 17.5%
City	148 47.3%	92 29.4%	73 23.3%

14b. A DISCRETIONARY license revocation should be utilized because a judge needs some latitude to handle hardship cases.

Response / Category	Agree	Disagree	Don't Know
1	114 47.9%	70 29.4%	54 22.7%
2	185 60.5%	81 26.5%	40 13.1%
3	129 59.7%	52 24.1%	35 16.2%
4	89 58.6%	31 20.4%	32 21.1%
5	79 44.9%	85 48.3%	12 6.8%
Country	96 47.3%	54 26.6%	53 26.1%
Small Town	62 48.8%	36 28.3%	29 22.8%
Suburbs	172 64.2%	64 23.9%	32 11.9%
City	187 59.7%	79 25.2%	47 15.0%

14c. A DISCRETIONARY license revocation is needed to enable judges to fit the punishment according to the circumstances of the offense.

Response / Category	Agree	Disagree	Don't Know
1	137 57.6%	51 21.4%	50 21.0%
2	213 69.6%	57 18.6%	36 11.8%
3	153 70.8%	41 19.0%	22 10.2%
4	106 69.7%	18 11.8%	28 18.4%
5	83 47.2%	82 46.6%	11 6.3%
Country	123 60.6%	39 19.2%	41 20.2%
Small Town	80 63.0%	25 19.7%	22 17.3%
Suburbs	197 73.5%	43 16.0%	28 10.4%
City	208 66.5%	60 19.2%	45 14.4%

14d. A MANDATORY license suspension is needed because of the seriousness of the offense of drunk driving.

Response / Category	Agree	Disagree	Don't Know
1	106 44.5%	71 29.8%	61 25.6%
2	137 44.8%	133 43.5%	36 11.8%
3	93 43.1%	91 42.1%	32 14.8%
4	71 46.7%	57 37.5%	24 15.8%
5	101 57.4%	60 34.1%	15 8.5%
Country	108 53.2%	51 25.1%	44 21.7%
Small Town	64 50.4%	46 36.2%	17 13.4%
Suburbs	92 34.3%	133 49.6%	43 16.0%
City	143 45.7%	121 38.7%	49 15.7%

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14e. There should be no license suspension for a first offense of driving under the influence of intoxicating beverages.

Response / Category	Agree	Disagree	Don't Know
1	19 8.0%	172 72.3%	47 19.7%
2	46 15.0%	235 76.8%	25 8.2%
3	30 13.9%	161 74.5%	25 11.6%
4	33 21.7%	100 65.8%	19 12.5%
5	3 1.7%	165 93.8%	8 4.5%
Country	36 17.7%	131 64.5%	36 17.7%
Small Town	16 12.6%	95 74.8%	16 12.6%
Suburbs	29 10.8%	205 76.5%	34 12.7%
City	47 15.0%	237 75.7%	29 9.3%

14f. A DISCRETIONARY license suspension would be appropriate if the breath test and a presumptive level of 0.10% are introduced in Virginia.

Response / Category	Agree	Disagree	Don't Know
1	64 26.9%	50 21.0%	124 52.1%
2	128 41.8%	60 19.6%	118 38.6%
3	91 42.1%	49 22.7%	76 35.2%
4	64 42.1%	34 23.4%	54 35.5%
5	65 36.9%	81 46.0%	30 17.0%
Country	69 34.0%	44 21.7%	90 44.3%
Small Town	52 40.9%	32 25.2%	43 33.9%
Suburbs	98 36.6%	46 17.2%	124 46.3%
City	127 40.6%	71 22.7%	115 36.7%

Question 14 delineates some of the pros and cons of discretionary license revocation. Question 14 (a) raises the spectre of political pressure on the judge who has discretionary power to revoke the DWI offender's license. Apparently 54.0% of the judiciary feel that this is a substantial possibility. It is submitted that the potential for political pressure already exists under the present system, although the party more likely to experience such is the commonwealth's attorney rather than the judge. The commonwealth's attorney has the power to reduce the charge to a lesser offense, or to engage in plea-bargaining, whereas the judge's only statutory basis for the exercise of discretion is in the amount of the fine or the duration of the jail sentence.

It is questionable whether the possibility of political pressure is a substantial criticism. The potential for political pressure exists with respect to most offenses; yet the system operates on the assumption that the judicial personnel whose duty it is to administer the system are capable of rendering fair and impartial judgments despite such pressure. If this is not true, then perhaps one should reexamine the basic assumptions about the system rather than place the blame on a particular change in the law.

Question 14 (b) focuses on the hardship aspect of mandatory license revocation. Undoubtedly, driving has become a near-necessity in modern times. The loss of this privilege often entails considerable economic and social hardship. This is perhaps particularly true in areas where public transportation is nonexistent. The hardship attendant to the loss of the driver's license is a consequence of sufficient importance to 47.9% to 60.5% of the general public that they believe that a discretionary license revocation should be utilized to give the judge some latitude in handling hardship cases. With respect to the judiciary, disagreement with the proposition prevailed by a very slight (3.4%) margin.

The same near-even split occurs with respect to Question 14 (c), which contains the proposition that a discretionary license revocation is needed to enable judges to set the punishment according to the circumstances of the offense. This time agreement to the proposition prevailed, but only by a slim 0.6% with the judiciary. The public appears to be in much greater support of discretionary license revocation.

The seriousness of the offense is sufficient to warrant a mandatory license suspension according to the responses to 14 (d). For this reason, it is recommended that a mandatory license revocation be retained, although of shorter duration than is currently specified with additional suspension time at the discretion of the judge.

Notice that there is little support in 14 (e) for no license suspension, even for first offenders. Recognition of the deterrent value of license revocation perhaps accounts for this. As one writer has stated:

> Disqualification from driving is another penalty into the effect of which no substantial empirical research has been done. There is, however, total agreement amongst criminologists and those concerned with criminal matters that it has a great effect both upon the convicted person and upon those within his social circle insofar as they are aware of it.[68]

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68. Wolf Middendorff, The Effectiveness of Punishment, Especially in Relation to Traffic Offenses (Fred B. Rothman and Company 1968), p. 103.

Continuing, the author believed license revocation to be more effective than a jail sentence in deterring DWI:

> I myself have been a traffic judge for over 10 years and I have repeatedly found that accused persons resist disqualification from driving much more strongly than they do a prison sentence, and indeed prefer to go to prison rather than be for a time without a driver's license. If someone serves a prison sentence, those outside his immediate family need not know anything about it; but if he cannot drive a motor vehicle the fact is immediately apparent to a large number of people and particularly to his co-workers. The possession of a driver's license is simply a matter of considerable social prestige.[69]

Sufficient data are not available in Virginia to test this proposition, simply because the jail sentence is rarely imposed. Consequently, little basis for comparison exists. However, license revocation undeniably serves a major role in the current statutory scheme of DWI deterrence, and for that reason it should be closely examined so as to achieve maximum deterrent effect consistent with the nature and seriousness of the offense.

Finally, in 14 (f), the proposition is tested that a discretionary license suspension would be appropriate if the breath test and a presumptive level of 0.10% are introduced in Virginia. The public tended to agree to the trade-off, while the judiciary disagreed. The relationship between penalty and increased apprehension may be unclear from the proposition, and perhaps this lack of clarity accounts for the number responding "don't know". Furthermore, it may be that many who disagreed did so on the basis that the breath test and the 0.10% presumptive level were themselves desirable reforms, even without a change in the penalty structure.

However true this latter observation may be, a unilateral change on the apprehension side may not pass the General Assembly without a corresponding change in the penalty. It is submitted that the trade-off would be worthwhile in terms of deterrent value, if that is the only way that such a reform will pass. As was discovered in Austria, upon passage of a new traffic regulation lowering the limit of unfitness to drive to 0.08%, concentrated enforcement even with lesser sanctions can lower the number of offenses:

> This too corresponds to an old criminological experience, that a high probability of being found out and thereupon receiving a comparatively mild sentence has a much greater deterrent effect than the threat of a much more severe sentence which, however, the individual is not so certain of receiving.[70]

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69. Ibid., p. 104.

70. GUVU Kurzinformatienen (Freiburg) No. 6, 7, 8 (1968), as cited in Middendorf, op. cit., p. 72.

While the researchers would also support the breath test and 0.10% presumptive level as being desirable changes even without an alteration of the present license revocation system, such unilateral activity may be politically unfeasible and, furthermore, may hamper effective enforcement of the law by creating an even greater reluctance to enforce such measures in light of the harsh penalty.

(73)

Indicate whether you agree or disagree with the following statements concerning drivers who drink.

15a. Alcoholism is a sickness and screening procedures and treatment facilities for alcoholic drivers and problem drinkers who drive and violate traffic laws should be established by the state.

Response / Category	Agree	Disagree	Don't Know
1	161 67.6%	45 18.9%	32 13.4%
2	220 71.9%	57 18.6%	29 9.5%
3	165 76.4%	29 13.4%	22 10.2%
4	116 76.3%	19 12.5%	17 11.2%
5	119 67.6%	29 16.5%	28 15.9%
Country	146 71.9%	29 14.3%	28 13.8%
Small Town	90 70.9%	21 16.5%	16 12.6%
Suburbs	203 75.7%	49 18.3%	16 6.0%
City	223 71.2%	56 16.0%	40 12.8%

15b. Heavy social drinkers who drive do not present a problem to the motorists traveling on Virginia's highways.

Response / Category	Agree	Disagree	Don't Know
1	10 4.2%	214 89.9%	14 5.9%
2	16 5.2%	278 90.8%	12 3.9%
3	8 3.7%	197 91.2%	11 5.1%
4	11 7.2%	125 82.2%	16 10.5%
5	2 1.1%	160 90.9%	14 8.0%
Country	14 6.9%	175 86.2%	14 6.9%
Small Town	5 3.9%	115 90.6%	7 5.5%
Suburbs	8 3.0%	246 91.8%	14 5.2%
City	17 5.4%	278 88.8%	18 5.8%

15c. Taxpayers should be willing to pay for facilities for treatment and rehabilitation for alcoholics or problem drinkers.

Response / Category	Agree	Disagree	Don't Know
1	97 40.8%	99 41.6%	42 17.6%
2	136 44.4%	130 42.5%	40 13.1%
3	104 48.1%	90 41.7%	22 10.2%
4	71 46.7%	60 39.5%	21 13.8%
5	119 67.6%	24 13.6%	33 18.8%
Country	82 40.4%	84 41.4%	37 18.2%
Small Town	58 45.7%	54 42.5%	15 11.8%
Suburbs	145 54.1%	96 35.8%	27 10.1%
City	123 39.3%	144 46.0%	46 14.7%

15d. Most alcoholics are not a menace on the highways because they are derelicts, do not own cars, and do not drive while drinking.

Response / Category	Agree	Disagree	Don't Know
1	12 5.0%	196 82.4%	30 12.6%
2	30 9.8%	243 79.4%	33 10.8%
3	20 9.3%	166 76.9%	30 13.9%
4	46 26.3%	85 55.9%	27 17.8%
5	12 6.8%	141 80.1%	23 13.1%
Country	30 14.8%	139 68.5%	34 16.7%
Small Town	16 12.6%	95 74.8%	16 12.6%
Suburbs	13 4.9%	227 84.7%	28 10.4%
City	42 13.4%	229 73.2%	42 13.4%

15e. The heavy social drinker causes most of the accidents involving drunken drivers.

Response / Category	Agree	Disagree	Don't Know
1	104 43.7%	25 10.5%	109 45.8%
2	146 47.7%	46 15.0%	114 37.3%
3	110 50.9%	34 15.7%	72 33.3%
4	89 58.6%	27 17.8%	36 23.7%
5	67 38.1%	35 19.9%	74 42.0%
Country	102 50.2%	32 15.8%	69 34.0%
Small Town	67 52.8%	26 20.5%	34 26.8%
Suburbs	123 45.9%	34 12.7%	111 41.4%
City	157 50.2%	40 12.8%	116 37.1%

The propositions in Question 15 are concerned with the identification of DWI offender characteristics and the rehabilitative aspects of the problem. The responses to 15 (a) indicate a growing recognition that alcoholism is a disease and that the DWI problem cannot be solved solely by a legally-oriented approach. The response is somewhat refreshing; yet the theory that alcoholism is entirely a self-created incapacity remains strongly ingrained in many circles.

> The alcoholic is still strongly stigmatized. Despite recent court rulings calling alcoholism a "disease", despite public education efforts to overcome the historic view of the public that the alcoholic is a morally inferior person who willfully drinks abusively, the victims of this disorder continue to be despised by many people, and to receive extremely low priority within the social order.[71]

Coinciding with public acceptance of alcoholism as a disease is a growing recognition within the law that offenses induced by compulsive alcoholism warrant somewhat different treatment. For example, the 4th circuit case of Driver v. Hinnant[72] 356 F. 2d 761 (4th Cir. 1966) held that the imprisonment of a chronic alcoholic for violation of a public drunkenness statute constituted infliction of a "cruel and unusual punishment" within the meaning of the 8th and 14th Amendments. The court reasoned:

> Although his misdoing objectively comprises the physical elements of a crime, nevertheless no crime has been perpetrated because the conduct was neither actuated by an evil intent nor accompanied with a consciousness of wrongdoing, indispensable ingredients of a crime.[73]

The Driver rationale has not been applied to the DWI who is a chronic alcoholic; perhaps because there has yet to be demonstrated a sufficient nexus between the compulsion to drink and a subsequent compulsion to operate a motor vehicle. Nevertheless, since the primary characteristic of alcoholism is a loss of control, one may yet see a decision equating appearance in public with operating a motor vehicle, with the resulting exoneration of a chronically drunken defendant.

Whether or not the hypothetical construct is realistic, one must recognize that society has been slow and largely ineffectual in dealing with the problem of the drunken motorist. Most drunk driving legislation today is aimed solely at the social drunks who drive while intoxicated. The heavy fines, license revocation, and threat of jail sentence are probably of substantial deterrence to this element of the DWI population. The responses to 15 (b) indicate that the public thinks that the social drinker is a problem on

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71. R. M. Glasscote, et al., "The Treatment of Alcoholism, A Study of Programs and Problems," The Joint Information Service of the American Psychiatric Association and the National Association for Mental Health (1967), p. 2.

72. The U. S. Supreme Court declined to follow the Driver reasoning in the case of Powell v. Texas, 392 U. S. 514 (1968).

73. Driver v. Hinnant, p. 764.

the highway. This is undeniably true, and probably accounts for the laxity in seeking new solutions. The "There but for the grace of God go I" syndrome is quite prevalent. However, one must recognize that the average driver who occasionally combines drinking with driving is an unlikely candidate for a DWI conviction. The responses to 15 (d) and (e) reveal a good deal of confusion as to who is likely to be a convicted DWI — the social drinker, the heavy social drinker, or the alcoholic. Part of the confusion is due to the fact that there is no one satisfactory definition of an "alcoholic". Even medical experts disagree over the definition. One of the more functional definitions is the following:

> An alcoholic is a person who as the consequence of consuming excessive amounts of alcohol follows patterns of behavior that substantially impede his vocational, social, and psychological adjustment. His pathological use of alcohol may be and probably is the consequence of some other pathological condition.[74]

The importance of this view is that excessive consumption alone is not the cause, but only a behavior condition that is almost invariably a symptom of underlying psychopathological problems.

A study by Selzer, Payne, Westerwelt, and Quinn[75] examined the relationship between alcoholic drivers' responsibility for traffic accidents and certain personality factors. Fifty alcoholic male automobile drivers were compared with a similar number of nonalcoholics. The 50 alcoholics were found to be responsible for approximately twice the number of traffic accidents and twice the number of violations as their nonalcoholic counterparts. Furthermore, the significant differences between the groups were due to traffic events occurring when the alcoholics had been drinking.[76]

Data obtained from the 50 alcoholic drivers were used to determine the degree of correlation between traffic accidents and a series of 31 psychopathologic variables. Several variables emerged as possessing particularly high correlation coefficients. Surprisingly, the highest correlation was that of "paranoid ideation;" however, "paranoid thoughts are often the precursor of angry and impulsive actions which, even if transient, may result in highway disaster."[77] Other significant variables included feelings of sadness and despondency, chronic or frequently recurrent rage or resentment toward others, destructive or aggressive behavior when drunk, and a history of serious suicidal preoccupation or attempts.

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74. Glasscote, op. cit., p. 8.

75. Melvin L. Selzer, et al., "Automobile Accidents as an Expression of Psychopathology in an Alcoholic Population," 28 Quarterly Journal of Studies on Alcohol (1967) p. 505.

76. Ibid., p. 507.

77. Ibid., p. 513.

The findings led the researchers to conclude:

> Traffic accidents caused by alcoholic drivers should be regarded as the outcome of the interplay between certain deleterious personality traits which are liberated when the alcoholic becomes intoxicated and the impairment in driving caused by alcohol intoxication. Given these prior circumstances the resultant traffic events can be regarded as "inevitabilities" rather than "accidents."[78]

The important point to emerge from this discussion is that a large number of the DWI population consists of alcoholics or problem-oriented drinkers on whom the present system of DWI sanctions probably has little or no effect. The public indicates some realization of this fact in 15 (a) when it agrees that alcoholism is a sickness. Unfortunately, support for rehabilitative treatment drops off by better than 25% in 15 (c) when the harsh economic fact emerges that the resources to fund such facilities must come from the taxpayer. Only the judiciary appeared to be aware of this facet of the problem, as their 67.6% agreement remained constant in both questions.

The ideal solution is to have such facilities financed out of fines collected from DWI offenders. This would probably satisfy those who look upon alcoholism as a self-inflicted malady. Unfortunately, such a solution is unrealistic due to both the widespread incidence of alcoholism and the chronic tenacity of the disease. Estimates of the incidence of alcoholism range from 4,000,000 to 30,000,000.[79] The predominant mode of treatment for those seeking aid is psychotherapy, which is long and expensive. The individual alcoholic is unlikely to have sufficient resources to sustain himself over an extended period of time, particularly if he has undergone the extensive socioeconomic deterioration which so often characterizes the disease.

Reluctant as society is to shoulder this cost, it is submitted that society is already bearing an even greater cost of alcoholism when it allows the continuance of alcohol-influenced highway accidents without making any substantial effort toward correction of the underlying causes. Those costs merely remain hidden. Apprehended DWIs represent an efficient method of identifying these alcoholics, and provide a basis for exerting societal pressure toward rehabilitation. Until the fact is accepted that driving under the influence is a combined medicolegal problem, little progress toward solution is likely.

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78. Ibid., p. 515.

79. Glasscote, op. cit., p. 11.

APPENDIX A

DRIVING UNDER THE INFLUENCE OF ALCOHOL: AN OPINION SURVEY
VIRGINIA HIGHWAY RESEARCH COUNCIL — VIRGINIA HIGHWAY SAFETY DIVISION

This questionnaire is Anonymous — please answer with Care and Candor.

(CIRCLE APPROPRIATE ANSWER)

1. a. **Sex:**

   (1) Male (2) Female

   b. **Age:**

   (1) 16-19 (2) 20-25 (3) 26-35 (4) 36-50 (5) 51-65 (6) 66 & over

   c. **Indicate the location of your present residence.** (CIRCLE ONE)

   (1) Southwest Virginia
   (2) Northern Virginia
   (3) Central Virginia
   (4) Northern Neck
   (5) Western Virginia (Shenandoah Valley and west)
   (6) Tidewater
   (7) Southside Virginia
   (8) Eastern Shore
   (9) Do not live in Virginia

   d. **Do you live in:**

   (1) the country (2) a small town (3) the suburbs (4) a city

   e. **What is your AVERAGE consumption of alcoholic beverages?** (CIRCLE ONE ANSWER)

   (1) Consume MORE THAN 24 bottles of beer (12 oz.) or 24 mixed drinks (1½ oz. of liquor) per week.

   (2) Consume MORE THAN 12 bottles of beer or 12 mixed drinks per week but LESS THAN 24 bottles of beer or 24 mixed drinks per week.

   (3) Consume MORE THAN 2 bottles of beer or 2 mixed drinks per week but LESS THAN 12 bottles of beer or 12 mixed drinks per week.

   (4) Consume 2 or less bottles of beer or 2 or less mixed drinks per week.

   (5) I am a non-drinker.

2. **Driving Record:**

   a. **Have you ever been CONVICTED of a moving traffic violation; for example, speeding, running a red light, reckless driving, failure to yield right-of-way, etc. ?**

   (1) yes (2) no

   b. **Have you ever been CHARGED with driving under the influence of alcohol?**

   (1) yes (2) no

   c. **Have you ever been CONVICTED of driving under the influence of alcohol?**

   (1) yes (2) no

   d. **Have you ever been CONVICTED of the offense of IMPAIRED DRIVING?**

   (1) yes (2) no

   e. **Have you ever been asked/told by the police to have a blood sample taken to determine your blood alcohol content?**

   (1) yes (2) no

   f. **Have you ever refused to have a blood sample taken after being asked/told to do so by the police?**

   (1) yes (2) no

   g. **Have you ever been CONVICTED of the offense of unreasonably refusing to have a blood sample taken?**

   (1) yes (2) no

APPENDIX A (Continued)

3. If you personally were going to drink, what is the largest amount you think you could drink in a four hour period without affecting your driving? (CIRCLE ONE ANSWER IN EACH COLUMN)

a. Bottles of Beer (12 oz. bottle)	b. Drinks of Whiskey (1½ oz. — 80 proof)
(1) None at all	(1) None at all
(2) 1 bottle	(2) 1 drink
(3) 2 bottles	(3) 2 drinks
(4) 3 bottles	(4) 3 drinks
(5) 4 bottles	(5) 4 drinks
(6) 5 bottles	(6) 5 drinks
(7) 6 bottles	(7) 6 drinks
(8) 7 bottles	(8) 7 drinks
(9) 8 or more bottles	(9) 8 or more drinks

4. What is the largest amount the average person can drink in a four hour period without affecting his driving? (CIRCLE ONE ANSWER IN EACH COLUMN)

a. Bottles of Beer (12 oz. bottle)	b. Drinks of Whiskey (1½ oz. — 80 proof)
(1) None at all	(1) None at all
(2) 1 bottle	(2) 1 drink
(3) 2 bottles	(3) 2 drinks
(4) 3 bottles	(4) 3 drinks
(5) 4 bottles	(5) 4 drinks
(6) 5 bottles	(6) 5 drinks
(7) 6 bottles	(7) 6 drinks
(8) 7 bottles	(8) 7 drinks
(9) 8 or more bottles	(9) 8 or more drinks

5. What is the largest amount the average person should legally be allowed to drink in a four hour period without fear of arrest for drunken driving?

a. Bottles of Beer (12 oz. bottles)	b. Drinks of Whiskey (1½ oz. — 80 proof)
(1) None at all	(1) None at all
(2) 1 bottle	(2) 1 drink
(3) 2 bottles	(3) 2 drinks
(4) 3 bottles	(4) 3 drinks
(5) 4 bottles	(5) 4 drinks
(6) 5 bottles	(6) 5 drinks
(7) 6 bottles	(7) 6 drinks
(8) 7 bottles	(8) 7 drinks
(9) 8 or more bottles	(9) 8 or more drinks

6. Indicate whether you agree or disagree with the following statements. (CIRCLE APPROPRIATE NUMBER)

	Agree	Disagree	Don't know
a. A person's ability to drive is affected by one drink (1 hour before driving).	1	2	3
b. There is no reason why you shouldn't drink as much as you like and still be able to drive.	1	2	3
c. People who drink to excess and drive should be disqualified from driving.	1	2	3
d. Even the experts disagree about effects of alcohol on driving.	1	2	3
e. Some people drive better after 1 or 2 drinks.	1	2	3
f. People who drink and drive should be sent to prison for First Offense.	1	2	3
g. Far too much fuss is made about dangers of drinking and driving.	1	2	3
h. People who drink before driving are reducing their ability as drivers.	1	2	3

APPENDIX A (Continued)

7. Indicate whether you agree or disagree with the following statements about individuals arrested for a first time violation of driving under the influence of alcohol in the Commonwealth of Virginia.

	Agree	Disagree	Don't Know
a. Many of them are alcoholics or problem drinkers.	1	2	3
b. They are usually heavy social drinkers.	1	2	3
c. Many of them have definite psychiatric disorders (suicidal tendencies, criminal records, over-agressive personality, etc.)	1	2	3
d. They usually have 1 or 2 drinks at a cocktail party or 1 or 2 beers on the way home from work.	1	2	3

8. Indicate the phrase which most accurately describes your knowledge of the offense of IMPAIRED DRIVING. (CIRCLE ONE ANSWER)

a. I have never heard of it.

b. I have heard of it but don't know anything about it.

c. I have some knowledge of it.

d. I have general knowledge of this offense.

e. I am well informed on this subject.

9. Indicate your opinion about the following statements about the offense of IMPAIRED DRIVING.

	Agree	Disagree	Don't Know
a. It provides the accused with the opportunity to plead guilty to a lesser offense than driving under the influence of intoxicating beverages in hopes that he will receive a lesser penalty.	1	2	3
b. It enables judges to exercise some discretion by providing a lower penalty than that used for driving under the influence of alcohol.	1	2	3
c. It will keep some people from driving after drinking.	1	2	3
d. It has little or no value in keeping people from driving after drinking.	1	2	3

The present penalties for a first offense of driving under the influence of intoxicating beverages are as follows:

a. 1 year suspension of driver's license (mandatory, will be suspended by Division of Motor Vehicles upon receipt of conviction report).

b. Fine of $200 - $1,000 and/or

c. 1 - 6 months confinement

For this questionnaire it is important for you to know the difference between a MANDATORY license revocation and a DISCRETIONARY license revocation. A MANDATORY license revocation is used in Virginia. This means that the Division of Motor Vehicles will AUTOMATICALLY revoke — for a one year period — the driver's license of a person convicted for a first offense of driving under the influence of intoxicating beverages. The revocation occurs upon receipt of the conviction report by the Division of Motor Vehicles.

Some states allow a DISCRETIONARY license revocation. This means that the period of license revocation may vary within specified limits. For example, if the license revocation period in state X is 6 - 12 months, the judge is required by law to impose a minimum revocation period of 6 months. However, the judge, at his DISCRETION, may impose a revocation period which varies from 6 - 12 months.

APPENDIX A (Continued)

10. a. Do you feel that some courts in Virginia are hesitant to convict a person for a FIRST OFFENSE of driving under the influence of alcoholic beverages?

(1) Yes (2) No (3) Don't know

Indicate your opinion about the following statements regarding a FIRST OFFENSE conviction of drunken driving.

	Agree	Disagree	Don't know
b. Courts do not want to take a man's license because they believe it may affect his job.	1	2	3
c. Courts desire more DISCRETION to fit punishment on a case by case basis.	1	2	3
d. Courts feel that a one year MANDATORY (automatic) loss of license is too harsh for a first offense.	1	2	3

11. a. Indicate which type of license revocation you would prefer that the courts utilize.

(1) Completely Mandatory (2) Completely Discretionary (3) Discretion within specified minimum and maximum limits on the revocation period.

b. Under a completely Mandatory system, please indicate the revocation period you believe to be appropriate for a FIRST OFFENSE: (CIRCLE ONE)

(1) 1 month (4) 6 months (7) 15 months

(2) 2 months (5) 9 months (8) 18 months

(3) 3 months (6) 12 months (9) 21 months or greater

c. Under a completely Discretionary system, please indicate the revocation period you believe to be appropriate for a FIRST OFFENSE: (CIRCLE ONE)

(1) 0 - 1 month (4) 0 - 6 months (7) 0 - 15 months

(2) 0 - 2 months (5) 0 - 9 months (8) 0 - 18 months

(3) 0 - 3 months (6) 0 - 12 months (9) 0 - 21 months or greater

Under a discretionary system which combines minimum and maximum limits, please indicate the lower and upper limits you believe to be appropriate for a FIRST OFFENSE:

(CIRCLE ONE IN EACH COLUMN)

d. LOWER LIMIT	e. UPPER LIMIT
(1) 1 month	(1) 3 months
(2) 2 months	(2) 6 months
(3) 3 months	(3) 9 months
(4) 6 months	(4) 12 months
(5) 9 months	(5) 18 months
(6) 12 months	(6) 24 months or more

12. Please indicate whether you agree or disagree with the following statements concerning a proposal to lower the presumptive level of blood alcohol content to 0.10%.

	Agree	Disagree	Don't know
a. There is no scientific basis for lowering the presumptive level to 0.10%.	1	2	3
b. The 0.10% level will cause greater apprehension of the "social drinker" but will not catch the problem drinker/alcoholic.	1	2	3
c. The 0.10% level is too high and a more accurate level is 0.08%.	1	2	3
d. The present level of 0.15% is sufficient.	1	2	3

APPENDIX A (Continued)

		Agree	Disagree	Don't know
12.	(Continued)			
	e. Statistics show that a person is 7 times more likely to have an accident at a blood-alcohol level of 0.10% than he is if he were sober.	1	2	3
	f. A blood alcohol level of 0.10% will aid in the detection of the problem drinker/alcoholic.	1	2	3
	g. A blood alcohol level of 0.10% should not be adopted unless the mandatory license suspension of 12 months is reduced to a lesser penalty.	1	2	3

THE BREATH TEST IS A CHEMICAL MEASURE OF INTOXICATION LEVELS EXPRESSED IN TERMS OF BLOOD-ALCOHOL CONCENTRATION.

13. Indicate whether you agree or disagree with the following statements concerning a proposal to allow the breath test to be used in Virginia.

	Agree	Disagree	Don't know
a. The breath test is as accurate as the blood test in determining blood alcohol content.	1	2	3
b. The breath test should not be authorized because it will increase the number of drivers convicted of driving under the influence.	1	2	3
c. The present blood test is sufficient and there is no need for an additional method to determine blood alcohol content.	1	2	3
d. The breath test should be allowed because many people would prefer not to have a blood sample taken if the breath test is available.	1	2	3

14. Indicate whether you agree or disagree with the following statements concerning license revocation for a first offense of driving under the influence of intoxicating beverages. (A mandatory revocation occurs automatically upon conviction of the offense; a discretionary suspension allows the judge or jury to determine the suspension period.)

	Agree	Disagree	Don't know
a. A DISCRETIONARY license revocation may subject a judge to political pressure.	1	2	3
b. A DISCRETIONARY license revocation should be utilized because a judge needs some latitude to handle hardship cases.	1	2	3
c. A DISCRETIONARY license revocation is needed to enable judges to fit the punishment according to the circumstances of the offense.	1	2	3
d. A MANDATORY license suspension is needed because of the seriousness of the offense of drunk driving.	1	2	3
e. There should be no license suspension for a first offense of driving under the influence of intoxicating beverages.	1	2	3
f. A DISCRETIONARY license suspension would be appropriate if the breath test and a presumptive level of 0.10% are introduced in Virginia.	1	2	3

APPENDIX A (Continued)

15. Indicate whether you agree or disagree with the following statements concerning drivers who drink.

	Agree	Disagree	Don't know
a. Alcoholism is a sickness and screening procedures and treatment facilities for alcoholic drivers and problem drinkers who drive and violate traffic laws should be established by the state.	1	2	3
b. Heavy social drinkers who drive do not present a problem to the motorists traveling on Virginia's highways.	1	2	3
c. Taxpayers should be willing to pay for facilities for treatment and rehabilitation for alcoholics or problem drinkers.	1	2	3
d. Most alcoholics are not a menace on the highways because they are derelicts, do not own cars, and do not drive while drinking.	1	2	3
e. The heavy social drinker causes most of the accidents involving drunk drivers.	1	2	3

APPENDIX B

JOHN T. HANNA
DIRECTOR
HIGHWAY SAFETY DIVISION

COMMONWEALTH OF VIRGINIA
OFFICE OF THE GOVERNOR

TELEPHONE NO.
272-1431, EXT. 74
P. O. BOX 1299
RICHMOND 23210

November 16, 1970

Dear Addressee:

This questionnaire is being circulated by the Virginia Highway Safety Division in order to determine public opinion regarding the drunken driving laws of the Commonwealth of Virginia.

Your name has been selected at random by computer from the records maintained by the Division of Motor Vehicles. Your reply will, of course, be completely anonymous and will be used solely for the purpose of determining public opinion.

I urge you to accurately and conscientiously fill out this questionnaire to the best of your knowledge. Your opinion, as well as the opinions of others participating in this survey, will be of major importance in determining whether any changes in the laws will be requested from the state legislature. A self-addressed, stamped envelope has been enclosed for your convenience.

We sincerely appreciate your cooperation and assistance.

APPENDIX B (Continued)

JOHN T. HANNA
DIRECTOR
HIGHWAY SAFETY DIVISION

COMMONWEALTH OF VIRGINIA
OFFICE OF THE GOVERNOR

TELEPHONE NO.
272-1431, EXT. 74
P. O. BOX 1299
RICHMOND 23210

November 16, 1970

Dear Sir:

As you are well aware, the offense of driving under the influence of intoxicating beverages presents our judicial system with many complex issues. In an effort to resolve these issues the Virginia Highway Research Council in Charlottesville has undertaken a research project for the Virginia Highway Safety Division which will examine the general public's knowledge of our drunken driving laws and the techniques used to enforce them.

Because of your experience within the judicial system, we are asking your cooperation in filling out the enclosed questionnaire so that we may receive knowledgeable answers to the questions contained therein. Since this questionnaire is an exact replica of one sent to the Commonwealth's driving public, please feel free to omit any questions you may feel are improper.

We earnestly request your assistance in this endeavor to improve our drunken driving laws. If you have any specific comments to make, please do so.

APPENDIX C

TABLE C-1

Cumulative Percent of Responses Falling Below Blood-Alcohol Concentrations (BACs) of 0.05% and 0.10%
(percent by weight of alcohol in the blood)

Response Category	BAC	Question 3a	Question 4a	Question 5a
1	< 0.05% < 0.10%	93.5% 99.5%	84.1% 100.0%	89.4% 95.5%
2	< 0.05% < 0.10%	76.8% 95.5%	79.2% 95.3%	82.1% 97.9%
3	< 0.05% < 0.10%	74.3% 94.7%	70.5% 95.6%	77.6% 97.0%
4	< 0.05% < 0.10%	67.0% 91.4%	68.7% 93.3%	74.1% 94.1%
5	< 0.05% < 0.10%	88.4% 98.6%	91.6% 100.0%	91.4% 99.3%
Country	< 0.05% < 0.10%	84.3% 94.8%	82.4% 95.6%	84.5% 97.3%
Small Town	< 0.05% < 0.10%	74.7% 94.8%	78.5% 95.5%	81.3% 97.3%
Suburbs	< 0.05% < 0.10%	79.9% 97.2%	77.3% 98.0%	81.5% 98.3%
City	< 0.05% < 0.10%	75.7% 95.2%	71.2% 95.3%	79.7% 96.9%

TABLE C-2

Cumulative Percent of Responses Falling Below Blood-Alcohol Concentrations (BACs) of 0.05%, 0.10% and 0.15% (percent by weight of alcohol in the blood)

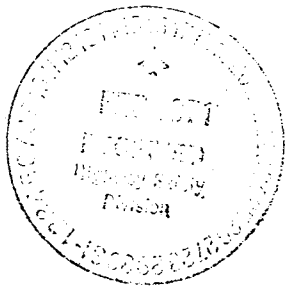
Response Category	BAC	Question 3b	Question 4b	Question 5b
1	< 0.05%	86.9%	82.0%	86.1%
	< 0.10%	98.3%	97.1%	98.5%
	< 0.15%	99.6%	100.0%	99.5%
2	< 0.05%	76.4%	72.5%	75.5%
	< 0.10%	93.5%	94.6%	94.5%
	< 0.15%	98.3%	98.2%	99.0%
3	< 0.05%	71.5%	69.0%	76.5%
	< 0.10%	92.9%	91.3%	86.5%
	< 0.15%	98.1%	99.5%	95.5%
4	< 0.05%	72.7%	73.8%	76.1%
	< 0.10%	93.6%	91.5%	91.5%
	< 0.15%	99.3%	96.9%	97.7%
5	< 0.05%	73.3%	76.8%	81.2%
	< 0.10%	95.8%	97.3%	96.6%
	< 0.15%	99.4%	100.0%	100.0%
Country	< 0.05%	85.3%	83.8%	84.8%
	< 0.10%	96.4%	95.1%	96.3%
	< 0.15%	99.0%	98.9%	98.4%
Small Town	< 0.05%	73.6%	76.8%	82.1%
	< 0.10%	93.0%	94.6%	98.2%
	< 0.15%	97.4%	97.3%	99.1%
Suburbs	< 0.05%	75.0%	72.1%	72.9%
	< 0.10%	95.7%	94.3%	94.6%
	< 0.15%	99.2%	100.0%	99.2%
City	< 0.05%	75.5%	68.8%	77.7%
	< 0.10%	93.0%	92.5%	94.1%
	< 0.15%	98.7%	98.2%	99.3%

CITY OF FAIRFAX

MUNICIPAL COURT

FAIRFAX, VIRGINIA 22030
PHONE (703) 273-7900

February 11, 1971



The Honorable John T. Hanna
Director of Highway Safety Division
Post Office Box 27472
Richmond, Virginia 23261

Dear John:

Enclosed herewith is a questionnaire which you sent recently regarding the problem of driving under the influence in this State.

As you know, I have been an outspoken critic of the present system for a variety of reasons. One of which is that there is a criminal sanction for operating a motor vehicle while under the influence of intoxicants; that is, a jail sentence and fine which could be imposed under the statute. There is also an alleged nonpenal type sentence which results from a conviction of driving under the influence which has been termed by our Court of Appeals and the United States Supreme Court more or less of an administrative remedy which is the loss of one's privilege to operate a motor vehicle on the highways for a period of 12 months upon conviction of this offense.

I have always found it difficult both as a prosecutor and as a judge to understand this sophisticated reasoning of both our Court of Appeals and the United States Supreme Court in indicating that the loss of one's operating privileges is not a criminal sanction or penalty which is imposed by virtue of a conviction of the offense of driving under the influence. If it is not a criminal sanction, then a judge should not be required to revoke a person's operating privileges and this should be left to the Division of Motor Vehicles at a hearing for such purposes provided by statute. If, however, the revocation of a person's privilege to operate is, in fact, a penalty which follows a conviction for a criminal offense then, in my estimation, a judge simply becomes a rubber stamp or a machine automatically handing out one year revocations in much the same nature as a Circuit Court Judge would if he were obligated to sentence everyone to the electric chair for murder.

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I am fully aware of the seriousness of the problem of persons who operate motor vehicles while under the influence of intoxicants and and feel that our present statute has done little, if anything, to correct the problem particularly in the highly urban areas and has been honored more in the breach than it has insofar as convictions are concerned making a mockery of the entire process of law. It seems to me that possibly convictions of driving while under the influence should carry with it some serious considerations of jail terms for the person involved whether it be on a week-end basis or it be straight time or simply serving one's nights in jail for several weeks to impress the individual as well as the community of the seriousness of the nature of the offense. This will also allow such a person to hopefully continue earning a living so that in the last analysis, it is the defendant who is penalized not those who are supported by him or her and will also be a concrete example to others in the community who would operate a motor vehicle after having indulged to excess in alcoholic beverages.

I am of the firm opinion that a judge should be given the discretion to sentence someone in accordance with the act committed and the effect the sentence will have both as a punitive measure for the safety of the community and as a rehabitation measure upon the defendant himself. When in fact the State Legislature binds a judge's hands by mandatory sentences they in effect do away with the need for a judge and the exercise by a judge of his discretion based upon his training, experience and background which is what the legislature and the founding fathers of the Commonwealth orginally planned when they set up our court system.

Further, it has been my experience in dealing with persons charged with such a crime in the last eleven years, both from a defense and prosecutors standpoint and finally in the position of judge, that the emphasis has been put in the wrong area insofar as the drinking driver is concerned. I firmly believe that it is not the so called "alcoholic" who is the major offender in this area. It is the average citizen, like you and I, who for one reason or another indulges in alcoholic beverages and then operates a motor vehicle upon a public highway. The use of alcohol in highly urban areas such as Northern Virginia is both widespread and complex and is a social factor which might be reckoned with when dealing with the overall problem of the drinking driver.

APPENDIX D (Continued)

In the more rural communities in this State, I have no doubt that probably the heavy drinker or the "alcoholic" is a major source of problems for the police and the users of the highways. However, to be absolutely frank and honest with you, it seems to me that in Northern Virginia such a person is in the distinct minority when it comes to being charged with and convicted of driving under the influence offenses.

I further feel, very strenuously, that there would be no more political pressure put on a traffic court judge than is put on a judge in any other case where a judge is required to exercise his discretion in sentencing. If anyone is worried about political pressure being put on judges, I can say for a fact that insofar as my experience as a judge is concerned, there has never been any political pressure or other pressures put upon me for a particular sentence one way or the other outside of the arguments within the courtroom. I am also sure that this is the case with my fellow judges of courts not of record here in this Commonwealth. The pressure comes, if at any point, upon the Commonwealth Attorney, who is an elected public official and who must account to not only the public but to his political supporters, be they financial or otherwise, for his actions before the Court and in cases in which such persons have an interest. This is where the pressure is put, it seems to me, and not upon the Court.

At any rate, I wish you all the success in your endeavors to make the highways safer for all of us and to let you know that our traffic improvement school here in the City of Fairfax is still an unqualified success and we are now handling the offenders in the Town of Vienna for Judge Brophy since they have been unable to obtain a school for themselves and they requested help in this area.

I look forward to seeing you here on your next trip north.

Sincerely,

QUIN S. ELSON
Judge

QSE:pes
Enclosure

APPENDIX E

BLOOD-ALCOHOL CHART

Showing Estimated % of Alcohol in the Blood
By No. of Drinks in Relation to Body Weight

BODY WEIGHT	DRINKS * 1	2	3	4	5	6	7	8	9	10	11	12
100lb.	.038	.075	.113	.150	.188	.225	.263	.300	.338	.375	.413	.450
120lb.	.031	.063	.094	.125	.156	.188	.219	.250	.281	.313	.344	.375
140lb.	.027	.054	.080	.107	.134	.161	.188	.214	.241	.288	.295	.321
160lb.	.023	.047	.070	.094	.117	.141	.164	.188	.211	.234	.258	.281
180lb.	.021	.042	.063	.083	.104	.125	.146	.167	.188	.208	.229	.250
200lb.	.019	.038	.056	.075	.094	.113	.131	.150	.169	.188	.206	.225
220lb.	.017	.034	.051	.068	.085	.102	.119	.136	.153	.170	.188	.205
240lb.	.016	.031	.047	.063	.078	.094	.109	.125	.141	.156	.172	.183

No. Hours Since 1st Drink	1	2	3	4	5	6
SUBTRACT	.015%	.030%	.045%	.060%	.075%	.090%

EXAMPLE — 180 lb. man — 8 drinks in 4 hours — .167% minus .060% = .107%

THIS REMAINDER IS AN ESTIMATE of the % of alcohol in your blood.

* 1 drink equalling 1 volume oz. of 100 proof alcohol or 1 12 oz. bottle beer.